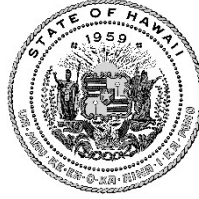


JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

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CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 1, 2024

Ms. Mary Alice Evans, Director
Office of Planning and Sustainable Development
c/o Environmental Review Program
235 South Beretania Street, 6th Floor
Honolulu, Hawaii 96813

**SUBJECT: Draft Environmental Impact Statement for Sanctuary Designation
Overlay at Marine National Monument**

Dear Ms. Evans:

The Department of Land and Natural Resources (DLNR) requests the Draft Environmental Impact Statement (DEIS) for the initiation of a national marine sanctuary designation overlay at Papahānaumokuākea Marine National Monument be published in the March 8, 2024 issue of the Environmental Review Program periodic bulletin, The Environmental Notice.

The proposed action is a continuation of the national marine sanctuary designation process, as directed by Congress, for the marine areas of Papahānaumokuākea, the Northwestern Hawaiian Islands. The project site falls under the Conservation Land Use District, (Resource and Protective Subzones), has no applicable Tax Map Keys, and is located within the Honolulu judicial district. Under the provisions of Act 172 (SLH 2012) and pursuant to Hawaii Revised Statutes § 343-5(e) and Hawaii Administrative Rules (HAR) § 11-200.1-14(d)(2), DLNR is authorized to conduct an environmental impact statement (EIS) level analysis in cooperation with the Office of Hawaiian Affairs (OHA), the National Oceanic and Atmospheric Association (NOAA) Office of National Marine Sanctuaries (ONMS), and the US Fish and Wildlife service (FWS), in accordance with the 2017 Memorandum of Agreement (MOA) between the Co-Trustees for Promoting Coordinated Management of the Papahānaumokuākea Marine National Monument. A single, joint DEIS was prepared to also meet the National Environmental Policy Act (NEPA) requirements as allowed under HAR § 11-200.1-31. The required publication forms and files, including the completed ERP publication form and an electronic copy of the DEIS, have been provided via the ERP online submission platform. Publication of the DEIS in The Environmental Notice initiates a public comment period for parties to provide comments regarding potential effects of the proposed action. As this is a joint state/federal DEIS, to better align the HRS Chapter 343 and NEPA public comment periods, DLNR intends to resubmit the DEIS for publication in the March 23, 2024 The Environmental Notice.

Through the analysis in the DEIS, the agencies have found that the preferred alternative would provide numerous beneficial impacts, including increased protection and conservation of resources, and improved coordination of conservation and management. The agencies also considered the potential adverse impacts of the preferred alternative and anticipates that there would be no significant adverse impacts to biological and physical resources, cultural and historic resources, or socioeconomic resources. Identification of Alternative 1 as the preferred alternative is based on the need for additional resource protection, scientific research, and public education in areas that would be excluded by selecting the boundaries of Alternatives 2 or 3. Alternative 1 includes the Monument Expansion Area, an area which would benefit from the establishment of a NOAA permitting process, and the promulgation of sanctuary regulations to protect resources. Alternative 1 also includes the waters of Midway Atoll and Hawaiian Islands National Wildlife Refuges, which are the areas of the proposed sanctuary subject to the highest level of human activity.

Public comments will be collected through the Federal Register where the federal documents will be published on February 29, 2024. The documents may be viewed at <https://www.federalregister.gov/> and public comments will be collected through May 7, 2024. ONMS and DLNR will hold several meetings during the public comment period to solicit comments. Should you have any questions about the DEIS, you may contact Ryan Okano, Program Manager, ryan.ly.okano@hawaii.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'DAWN N.S. CHANG', with a long horizontal line extending to the right.

DAWN N.S. CHANG
Chairperson
Board of Land and Natural Resources

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Friday, March 1, 2024 11:46:59 AM

Action Name

Proposed Papahānaumokuākea National Marine Sanctuary

Type of Document/Determination

Draft environmental impact statement (DEIS)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds
- (2) Propose any use within any land classified as a conservation district
- (3) Propose any use within a shoreline area
- (4) Propose any use within any historic site as designated in the National Register or Hawai'i Register

Judicial district

Honolulu, O'ahu

Tax Map Key(s) (TMK(s))

N/A

Action type

Agency

Proposing/determining agency

Department of Land and Natural Resources

Agency contact name

Ryan Okano

Agency contact email (for info about the action)

ryan.ly.okano@hawaii.gov

Agency contact phone

(808) 587-0100

Agency address

1151 Punchbowl Street #330
Honolulu, Hawaii 96813
United States
[Map It](#)

Accepting authority

Office of the Governor, State of Hawai'i

Accepting authority contact name

Josh Green

Accepting authority contact email or URL

<https://governor.hawaii.gov/contact-us/contact-the-governor/>

Accepting authority contact phone

(808) 586-0034

Accepting authority address

415 South Beretania Street
Honolulu, Hawaii 96813
United States
[Map It](#)

Is there a consultant for this action?

No

Action summary

NOAA proposes to designate marine portions of Papahānaumokuākea Marine National Monument (Monument) as Papahānaumokuākea National Marine Sanctuary to protect nationally significant biological, cultural, and historical resources. The State of Hawai'i (the State) through the Department of Land and Natural Resources Division of Aquatic Resources proposes to include all State waters. The purpose of this action is to provide comprehensive and coordinated management of the marine areas of Papahānaumokuākea to protect nationally significant biological, cultural, and historical resources. The proposed action would supplement the existing provisions for management of the Monument and further protect resources in the Northwest Hawaiian Islands. The DEIS describes the purpose and need for the proposed action of designating a national marine sanctuary, identifies a range of alternatives including the preferred alternative, provides an assessment of resources and uses in the area, and evaluates the

Attached documents (signed agency letter & EA/EIS)

- [20211208_Scoping-Meeting_Transcript.pdf](#)
- [20211211_Scoping-Meeting_Transcript.pdf](#)
- [20211214_Scoping-Meeting_Transcript.pdf](#)
- [20211216_Scoping-Meeting_Transcript.pdf](#)
- [Sanctuary-Designation-Final-Combined-DEIS-3.1.24.pdf](#)
- [PMNM-Sanctuary-Designation-DEIS-Letter-to-ERP.pdf](#)

Shapefile

- The location map for this Draft EIS is the same as the location map for the associated EIS Preparation Notice.

Action location map

- [Action_Location_02272024.zip](#)

Authorized individual

Kelli Ann Kobayashi

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

Preamble

By Kekuewa Kikiloi, Nohopapa Hawai‘i

From the research that has been completed over the past several decades, no one can dispute that Native Hawaiians have historical connections to all parts of our homeland, including the Northwestern Hawaiian Islands, encompassing all the islands, atolls, shoals, coral reefs and submerged sea mounts, as well as the ocean waters that surround them. This region is rooted in Native Hawaiian creation and origin, as a cosmological place where all life began, and returns to after death.

While the islands themselves were focal points for landfalls and destinations for travel, the ocean and open waters were equally important and must be acknowledged as carrying a multitude of values that are sometimes not as obvious. A traditional understanding of the ocean as a cultural seascape is essential to understanding the need for designation of the marine portions of Papahānaumokuākea Marine National Monument as a National Marine Sanctuary. The ocean was not perceived as an unknown empty space, a meaningless void, or obstacle on a map that kept our island communities isolated and marginalized but, rather, it was conceived as a viable pathway of movement, an access point of mobility, and one that minimized risk in the most uncertain of environments that exist on the planet. The ocean, therefore, will always be an integral part of our identity, our being, and an essential dimension to our cognitive understanding of the world.

It is indeed not an empty space, but a living entity—a godly deity imbued with cultural meaning—and a home for a host of marine and avian life that continue to be connected to us in a genealogical web of ecological kinship. It is our duty to protect these bio-cultural resources and all the places which they inhabit and call home, including adjacent unprotected sea mounts and open ocean areas. The ocean must be understood in the context of its boundless nature; one that must be managed and protected in its totality and not limited by the current narrow management boundaries and delineations. It is in this context that we must champion Hawaiian values and become *kia‘i kai*, or guardians of the ocean. The ocean is a metaphor for a glorious ancestral past and holds the key to understanding the depths of our potential as a people.

“An identity that is grounded in something as vast as the sea should exercise our minds and rekindle in us the spirit that sent our ancestors to explore the oceanic unknown and make it their home, our home.”

— Epele Hau‘ofa, “The Ocean In Us”

Native Hawaiians share a deep concern for Oceania and the growing need to return to a traditional understanding of our ocean waters as a key part of our distinctive identity and heritage. The proposed designation of the marine portions of Papahānaumokuākea Marine National Monument as a National Marine Sanctuary is a scale of protection that is urgently needed in the eyes of our generation.

The push towards greater global marine protection is a movement that seeks to address the vanishing biological and cultural diversity in our world and the cumulative anthropogenic

impacts that are altering and affecting our ocean waters. Hawai‘i and its indigenous people have a key role to play helping to reverse these trends through the adoption of important customary values and the application of generational knowledge passed down from our ancestors to address the complex challenges of restoring eco-cultural health to our islands. These solutions are to the benefit of all of our collective interests, as they will protect the ocean for the general good and ensure a degree of marine integrity in the face of an uncertain global future.

Continuing down the current global path of resource extraction is pushing the ocean toward a point at which it will no longer provide life sustaining services. Currently, less than 8.17 percent of the planet’s oceans are covered by marine protected areas.¹ We must increase the number and scale of marine protected areas to meet the global coverage target of at least 30 percent if we are to ensure that the ocean will survive past this century. As Native Hawaiians, we see the establishment of the sanctuary as a critical contribution Hawai‘i can make to this goal, however, we also need to recognize that both natural and social dimensions also need to be addressed. In a Hawaiian worldview, man and nature are not separate entities but rather related parts of a unified whole. The health of one is intrinsically related to the health of the other. For us to achieve this holistic relationship again, the entire region must be protected and Native Hawaiians, as the indigenous people of this land, must be allowed to take on our rightful role as *kia‘i kai*, or ocean guardians, once again.

The push towards more robust ocean protection in the Northwestern Hawaiian Islands was, in part, spurred on through the Hawaiian movement—a social-political movement in Hawai‘i towards social justice for Native Hawaiians, the protection of their resources, and the return of their national lands and sovereignty. Over the past 15 years, the Hawaiian community has been one of the key voices fighting for marine protection. This call to action has been met with unprecedented success: from the establishment of the Coral Reef Ecosystem Reserve in 2000, to the State Marine Refuge in 2005, the Marine National Monument in 2006 and, finally, the inscription of this region as a World Heritage Site in 2010.

The traditional double-hulled voyaging canoe *Hōkūle‘a* has played a significant role in this movement as it has transitioned from the period of the Hawaiian Renaissance to one of modern cultural resurgence. From voyaging around the Pacific to reconnect with regional pathways and related communities, *Hōkūle‘a*'s voyages took an introspective turn in the early 2000s with key trips extending to the far ends of our homeland: the Northwestern Hawaiian Islands (2003, 2004, 2005). Under the slogan "Navigating Change," the voyaging canoe became an ambassador for ocean protection, advocating for the people of Hawai‘i to "navigate change" and using the Northwestern Hawaiian Islands as a beacon of hope for what our home ocean waters in the main Hawaiian Islands could be if taken care of. *Hōkūle‘a* continues to be critical in the establishment

¹ A calculation based on the United Nations Environment Program (UNEP) - World Conservation Monitoring Center (WCMC), and prefaced by less than to account for error. IUCN, UNEP-WCMC 2015. The World Database on Protected Areas (WDPA). Cambridge (UK): UNEP World Conservation Monitoring Centre. Methodology at URL <https://www.protectedplanet.net/en/resources/calculating-protected-area-coverage>. The Marine Conservation Institute

of layers of protection for Papahānaumokuākea. Currently, the message that is being spread by this remarkable canoe as it travels around the world is one of “Moananuiākea: A Voyage for Earth,” which advocates a:

...move from exploration and understanding to mālama, or caring, and kuleana, or taking responsibility. With those values, we must move discovery toward choices and actions that we believe will help build a future good enough for our children. This is our most difficult voyage yet because the destination is not ours. It will be the most difficult island yet to find, because it is the future of island earth. [Polynesian Voyaging Society 2023²]

Our canoe Hōkūle‘a sends a powerful global message in regards to ocean advocacy. The proposed designation of the marine portions of Papahānaumokuākea Marine National Monument as a National Marine Sanctuary works in tandem with the message of Hōkūle‘a because it stands out as a model for large-scale marine protected areas around the world, helping to spread the message of protection to another 15–20 countries, many in Oceania, that have now established similar provisions over vast areas of previously unmanaged ocean territories.

Native Hawaiians have used the term “He Pu‘uhonua no Hawai‘i” as the banner term for this protection movement (literally “a sanctuary for our ocean protection”). This term is used in honor of the late Uncle Buzzy Agard who always used this phrase when talking about the importance of the region. Uncle Buzzy was a Hawaiian fisherman who later dedicated his life to ocean protection, and one of the primary founders of the movement to protect the Northwestern Hawaiian Islands. While Hōkūle‘a has done its part in solidifying global commitments for the ocean, what better way to demonstrate Hawai‘i’s continued commitment to this vision than by declaring this region - the largest protected area anywhere on the face on the earth – a National Marine Sanctuary?

Long distance voyaging and wayfinding is one of the most unique and valuable traditional practices we have, as indigenous peoples, to offer the world. It is an ancient way of interacting with the ocean that can inspire and create social change. Seen in this context, the sanctuary designation of Papahānaumokuākea is even more critical because it is the only intact cultural voyaging seascape left in our islands. This expansive ocean environment was the setting for ancient Hawaiian chiefs to voyage back and forth between the main Hawaiian Islands and the Northwestern Islands over the course of a 400-year period in traditional times. In addition, smaller communities from Ni‘ihau, Kaua‘i, and O‘ahu in the post-contact period have been documented making continued voyages into this region well into the 20th century. Today, with the rebirth of traditional Hawaiian voyaging, this region is a critical training ground for the ongoing survival of Hawaiian voyaging and wayfinding.

Hawaiian voyaging and wayfinding evolved from a system of non-instrument navigation used by our Polynesian predecessors to make long distant voyages across thousands of miles of open-

² “Moananuiākea: A Voyage for Earth”. Polynesian Voyaging Society. Online resource. <https://hokulea.com/moananuiakea/>. Accessed 8-30-23.

ocean. This traditional science relied upon observations of the natural environment, often missed by modern sailors, including: the position of the sun and the stars rising and setting along known pathways; the movement of cloud clusters, wind direction, ocean swells or wave pilots; biological indicators of island targets such as migratory seabirds; and, sea marks—distinctive natural occurrences at predictable places along sea routes, like regions where certain fish species leap above the water’s surface, or a zone of innumerable marine or avian life. There is no other place in Hawai‘i where islands are remote enough to simulate these target conditions for young navigating apprentices. This practice requires protection of the entire marine environment, not just the target islands, because only then will the full use of biological signs and natural phenomenon that help train navigators be available to them.

The proposed designation of the marine portions of Papahānaumokuākea Marine National Monument as a National Marine Sanctuary enhances one of the most important cultural and conservation initiatives of our generation – the protection and recognition of Papahānaumokuākea alongside the unique opportunity to protect and actively steward a very large part of Hawai‘i. Viewing and understanding this vast ocean region as a living cultural seascape acknowledges the importance of places like Papahānaumokuākea, for both natural and cultural dimensions, and helps maintain a core aspect of our identity as ocean people.

The ocean is our beginning and our end, and in the chaos of today's world, the ocean helps to quiet our minds, center our perceptions, and intuitively understand what we need to do in order to live in a healthy world again. To save our ocean we must acknowledge its power, its boundless nature, and its importance as a driving force that shapes all aspects of our natural world and, in turn, our well-being. We must all reaffirm our commitment to the global movement dedicated to protecting our oceans by creating large-scale protected areas for future generations. Likewise, we must all support the agency and authority of Native Hawaiians and the other Indigenous people of Oceania in their ancestral role of *kia‘i kai* once again.



Proposed Papahānaumokuākea National Marine Sanctuary

Draft Environmental Impact Statement



U.S. Department of Commerce
Gina Raimondo, Secretary

National Oceanic and Atmospheric Administration
Richard W. Spinrad, Ph.D., Under Secretary of Commerce for Oceans and Atmosphere and
NOAA Administrator

National Ocean Service
Nicole LeBoeuf, Assistant Administrator

Office of National Marine Sanctuaries
John Armor, Director



**NATIONAL
MARINE
SANCTUARIES**

Cover photo: NOAA diver investigates whaling shipwreck; native fish swim on a coral reef; Hawaiian voyaging canoe sails in Papahānaumokuākea; Hawaiian monk seal and ulua swim over the seafloor. Photos: NOAA

About This Document

This draft environmental impact statement (EIS) and draft sanctuary management plan (Appendix A) provide detailed information and analysis of a range of reasonable alternatives for the proposed designation of marine portions of Papahānaumokuākea Marine National Monument and the Monument Expansion Area (collectively called the Monument) as a national marine sanctuary. This proposed action is being forwarded by the National Oceanic and Atmospheric Administration’s (NOAA) Office of National Marine Sanctuaries (ONMS) and the State of Hawai‘i (State).

The State and NOAA prepared this draft EIS in accordance with the Hawai‘i Environmental Policy Act (HEPA, Chapter 343 HRS, HAR Chapter 11-200.1); the National Environmental Policy Act, as amended (NEPA, 42 U.S.C. 4321 *et seq.*); NOAA Administrative Order 216-6A, which describes NOAA requirements, policies, and procedures for implementing NEPA; and the National Marine Sanctuaries Act (NMSA, 16 U.S.C. 1431 *et seq.*), which requires preparation of an environmental impact statement for all sanctuary designations. Because this NEPA process began after September 14, 2020, this draft EIS relies on the Council on Environmental Quality’s (CEQ) 2020 NEPA regulations (40 CFR 1500 *et seq.*, “Phase I”). See 40 CFR § 1506.13.

Scoping included a 74-day public review and comment period (November 19, 2021–January 31, 2022) during which NOAA solicited public comments related to the scale and scope of the proposed sanctuary. In addition, NOAA hosted four public meetings (December 8, 11, 14, and 16, 2021), and accepted comments through the regulations.gov web-based portal and by traditional mail until January 31, 2022. During the scoping period, 73 individuals and groups provided written input. About 165 people attended the four scoping meetings, with nine people providing oral comments. In general, comments were strongly supportive of the goals of sanctuary designation, including protecting Papahānaumokuākea’s nationally significant and fostering education and science programs.

NOAA is the lead agency for this proposed action. NOAA’s Office of National Marine Sanctuaries (ONMS) is the implementing office for this proposed action. Cooperating agencies include U.S. Fish and Wildlife Service, the State of Hawai‘i, and the Department of Defense.

A note on terminology: The term Papahānaumokuākea, when used alone, refers to the place, also historically known as the Northwestern Hawaiian Islands, including the land and all waters to 200 nmi from shore. Papahānaumokuākea Marine National Monument or PMNM refers to the area designated as a monument via Presidential Proclamations 8031 and 8112, extending 50 nmi from all islands and emergent lands of the Northwestern Hawaiian Islands. The Papahānaumokuākea Marine National Monument Expansion Area or MEA refers to waters from 50 to 200 nmi designated as a monument in 2016 by Presidential Proclamation 9478. PMNM and the MEA are referred to collectively as the monument. A glossary of Hawaiian terms and place names is found after chapter 6.

Most of the islets, atolls, and reefs have both Hawaiian and English names. Names used in this document are (from Southeast to Northwest): Nihoa, Mokumanamana (Necker), Lalo (French Frigate Shoals), ‘Ōnūnui and ‘Ōnuiki (Gardner Pinnacles), Kamokuokamohoali‘i (Maro Reef), Kamole (Laysan Island), Kapou (Lisianski Island), Manawai (Pearl and Hermes Atoll),



Kuaihelani (Midway Atoll), and Hōlanikū (Kure Atoll). Other banks, shoals, and seamounts within Papahānaumokuākea may also have Hawaiian and English names.

Recommended Citation

Office of National Marine Sanctuaries. 2024. Proposed Papahānaumokuākea National Marine Sanctuary Draft Environmental Impact Statement. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, Maryland 20910

Dear Reviewer:

In accordance with the National Environmental Policy Act (NEPA), we enclose for your review the National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries draft environmental impact statement (EIS) for the proposal to designate marine portions of Papahānaumokuākea Marine National Monument and the Monument Expansion Area as Papahānaumokuākea National Marine Sanctuary.

NOAA prepared this document to assess the environmental impacts of designating a national marine sanctuary under the National Marine Sanctuaries Act (NMSA). The NMSA requires that an EIS be prepared for designation of a national marine sanctuary regardless of the significance of the impacts of the proposed action.

This document announces the availability of the draft EIS for public comment. NOAA is also publishing a notice of proposed rulemaking and draft management plan for public comment along with the draft EIS. Comments will be accepted until May 7, 2024 and should be submitted electronically via the Federal eRulemaking Portal. To submit a comment electronically, go to www.regulations.gov and search for docket NOAA-NOS-2021-0114. For those wishing to comment orally at a public comment meeting, please find details at <https://sanctuaries.noaa.gov/papahanaumokuakea/>. Written comments may also be directed to the sanctuary official identified below.

Sanctuary official: Eric Roberts, Superintendent
Papahānaumokuākea Marine National Monument
1845 Wasp Blvd., Bldg 176, Honolulu, HI 96818

Sincerely,



John Armor
Director



Table of Contents

About This Document	i
Table of Contents	iv
Acknowledgements	vi
Abbreviations and Acronyms	vi
Executive Summary	viii
Introduction	viii
Project Location and Characteristics	viii
Protection Actions.....	ix
Sanctuary Designation	x
Purpose and Need for a Sanctuary	x
Public Involvement and Interagency Coordination	xi
Proposed Action and Alternatives.....	xi
Summary of Impacts for the Preferred Alternative	xvii
Chapter 1: Introduction	1
1.1 National Marine Sanctuary System	1
1.2 Background on the Process to Designate a National Marine Sanctuary Within Papahānaumokuākea	3
1.3 Sanctuary Designation and Environmental Review Process.....	9
1.4 Scope of the Environmental Review	11
1.5 Organization of This Draft Environmental Impact Statement.....	12
1.6 Public Review of the Draft EIS	12
Chapter 2: Purpose and Need for Action	14
2.1 Purpose of the Proposed Action	14
2.2 Need for the Proposed Action	14
2.3 State of Hawai‘i Designation Responsibility.....	16
Chapter 3: Alternatives	19
3.1 Development of Alternatives	20
3.2 No-Action Alternative	22
3.3 Elements Common to All Action Alternatives	23
3.4 Action Alternative 1	31
3.5 Action Alternative 2.....	34
3.6 Action Alternative 3.....	36
3.7 Alternatives Considered but Eliminated From Detailed Study.....	39
Chapter 4: Affected Environment	42
4.1 Introduction: Scope of Affected Environment	42
4.2 Laws and Existing Management of the Action Area	43
4.3 Physical Environment	57
4.4 Biological Environment.....	61
4.5 Cultural and Historical Resources	71
4.6 Socioeconomic Resources, Human Uses, and Environmental Justice.....	77
Chapter 5: Environmental Consequences	88
5.1 Approach to Impact Analysis.....	88
5.2 Impacts of the No-Action Alternative	94


5.3 Impacts of Alternative 1.....	97
5.4 Impacts of Alternative 2	109
5.5 Impacts of Alternative 3	113
5.6 Cumulative Impact Analysis.....	118
Chapter 6: Conclusions	126
6.1 Comparison of Impacts of the Alternatives	126
6.2 Unavoidable Adverse Impacts.....	127
6.3 Relationship of Short-Term Use and Long-Term Productivity	127
6.4 Irreversible and Irrecoverable Commitment to Resources	127
6.5 Environmentally Preferable Alternative	128
Glossary	129
References	131
Appendix A: Proposed Papahānaumokuākea National Marine Sanctuary Draft Management Plan.....	143
Section 1: Foundations	144
Section 2: Purpose of the Management Plan	149
Section 3: Sanctuary Management Plan	151
Section 4: Success Indicators and Measures.....	164
Section 5: Funding	167
Glossary	168
Acknowledgements	170
References	171
Appendix A1: Terms of Designation and Proposed Regulations	172
Appendix B: Field Activities Table and Best Management Practices	173
Appendix C: Compliance with Additional Regulatory Requirements	175
Appendix D: Biological Species Associated with Consultations.....	236
Appendix E: Analysis of Relevant Federal and State Statutes.....	244
Appendix F: Summary of Scoping Input on Notice of Intent and EIS Preparation Notice, and State of Hawai‘i Responses to Public Scoping Comments	264
Appendix G: Heritage and Historic Resources Supplemental Information	349
Appendix H: Agencies, Organizations, and Persons Consulted in Preparing the EIS	365
Appendix I: EIS Distribution List.....	367
Appendix J: List of Document Preparers	370

Acknowledgements

This document was prepared by NOAA’s Office of National Marine Sanctuaries, with assistance from the State of Hawai‘i Department of Land and Natural Resources. A full list of preparers is in Appendix J.

Abbreviations and Acronyms

BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIA	Cultural Impact Assessment
Co-trustees	Term used in this document to refer to the State of Hawai‘i, the U.S. Department of Commerce, the U.S. Department of the Interior, and the Office of Hawaiian Affairs
CWG	Papahānaumokuākea Native Hawaiian Cultural Working Group
CZMA	Coastal Zone Management
DLNR	Hawai‘i Department of Land and Natural Resources
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FWS	U.S. Fish and Wildlife Service
HAR	Hawai‘i Administrative Rules
HEPA	Hawai‘i Environmental Policy Act
HRS	Hawai‘i Revised Statutes
IMO	International Maritime Organization
MEA	Papahānaumokuākea Marine National Monument Expansion Area
MMB	Monument Management Board
MMP	Monument Management Plan
Monument	Term used in this document to refer to the PMNM and MEA collectively
NCCOS	National Centers for Coastal and Ocean Sciences
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
nmi	nautical miles



NMFS	National Marine Fisheries Service
NMSA	National Marine Sanctuary Act
NOAA	National Oceanic and Atmospheric Administration
NWHI	Northwestern Hawaiian Islands
NWR	National Wildlife Refuge
OHA	Office of Hawaiian Affairs
OLE	Office of Law Enforcement
ONMS	Office of National Marine Sanctuaries
OSZ	Outer Sanctuary Zone
PMNM	Papahānaumokuākea Marine National Monument (Original Area)
PSSA	Particularly Sensitive Sea Area
RAC	Reserve Advisory Council
Reserve	Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve
SHPD	State of Hawaii Historic Preservation Division
SMCA	Sunken Military Craft Act
SMP	Sanctuary Management Plan
State	State of Hawai'i
USCG	U.S. Coast Guard
VMS	Vessel Monitoring System
WPRFMC	Western Pacific Regional Fishery Management Council

Executive Summary

Introduction

The National Oceanic and Atmospheric Administration (NOAA) proposes to designate the waters surrounding the Northwestern Hawaiian Islands as Papahānaumokuākea National Marine Sanctuary to protect nationally significant biological, cultural, and historical resources and to manage this special place as part of the National Marine Sanctuary System. Partnerships with Native Hawaiian practitioners, scientific organizations, educational institutions, and others will ensure that future generations continue to discover the cultural, historical, and scientific significance of the area and its connection to the greater Pacific. This draft environmental impact statement (EIS) analyzes the impacts on the human environment of the proposed action and a range of alternatives for sanctuary designation, including proposed regulations for managing the new sanctuary. A draft sanctuary management plan, which includes information about the proposed sanctuary's priority management goals and actions proposed to address those goals over the next five years, is being published concurrently with this draft EIS. A proposed rule identifying proposed regulations for the new sanctuary will also be published concurrently with this draft EIS.

Project Location and Characteristics

The proposed sanctuary area extends 1,200 miles across the northwestern region of the Hawaiian archipelago, starting approximately 140 miles from the main Hawaiian islands, and roughly 3,000 miles from the nearest continental land mass. This vast ecosystem is one of the largest wild, pristine marine sites in the world, encompassing 582,578 square miles of the Pacific Ocean.

This vast coral reef ecosystem supports 98% of the breeding population of the threatened honu (Hawaiian green turtle), more than half of the population of the endangered 'īlioholoikauaua (Hawaiian monk seal), 14 million seabirds representing 21 species, and large populations of sharks, jacks, and other apex predators missing or significantly depleted from reef habitats around the world. Papahānaumokuākea¹ is an endemic (species found nowhere else) hotspot, a critical feature with the decline in global marine biodiversity.

The area of the proposed 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 60–80 military vessels and hundreds of aircraft are scattered across the seafloor. In addition to Navy steamers and aircraft, there are whaling ships, Japanese junks, Hawaiian fishing sampans, Pacific colliers, and other vessels from the 19th and 20th centuries.

¹ The term Papahānaumokuākea, when used alone, refers to the place, also historically known as the Northwestern Hawaiian Islands, including the land and all waters to 200 nmi from shore. Papahānaumokuākea Marine National Monument or PMNM refers to the area designated as a monument via Presidential Proclamations 8031 and 8112, extending 50 nmi from all islands and emergent lands of the Northwestern Hawaiian Islands. The Papahānaumokuākea Marine National Monument Expansion Area or MEA refers to waters from 50 to 200 nmi designated as a monument in 2016 by Presidential Proclamation 9478. PMNM and the MEA are referred to collectively as the Monument.

Papahānaumokuākea is also a sacred place to Kānaka ‘Ōiwi (Native Hawaiians), who regard the islands and wildlife as kūpuna, or ancestors. The region holds deep cosmological and traditional significance to Kānaka ‘Ōiwi, who continue to weave knowledge, values, and practices from the past into the present to guide the co-management of Papahānaumokuākea into the future. Regarded by Kānaka ‘Ōiwi as an ‘Āina Akua, or realm of the gods and ancestors, this special biocultural land and seascape is deeply rooted in ‘Ōiwi creation and settlement stories and contains a host of intact and significant archaeological sites. Since nature and culture are considered to be one and the same, the protection of one of the last nearly pristine, natural, marine ecosystems in the archipelago is akin to preserving the living culture.

Protection Actions

Protection of the area began in 1909 when President Theodore Roosevelt designated the Hawaiian Islands Reservation, stretching from Nihoa to Hōlanikū (Kure Atoll), as a preserve and breeding ground for native birds. This designation, as well as the transfer of Midway Atoll from the U.S. Navy to the Department of the Interior, became the Midway Atoll and Hawaiian Islands national wildlife refuges.

On December 4, 2000, President William Clinton issued Executive Order 13178, designating the waters from 3 to 50 nautical miles (nmi) from Nihoa to Hōlanikū as the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (Reserve), and directed the secretaries of Commerce and Interior and the governor of Hawai‘i to coordinate management of the Reserve. In 2005, the State of Hawai‘i established the Northwestern Hawaiian Islands Marine Refuge, with waters extending three miles seaward of any coastline from Nihoa Island to Hōlanikū, excluding Kuaihelani (Midway Atoll). In 2006, via Presidential Proclamations 8031 and 8112, President George W. Bush designated the land and waters of Papahānaumokuākea as a marine national monument, extending protection to include the land and nearshore State and national wildlife refuge waters extending out 50 nmi around the Northwestern Hawaiian Islands. The Papahānaumokuākea Marine National Monument (PMNM) designation included the prohibition of commercial fishing, creation of access restrictions, and led to regulations that codified a permitting system with application criteria, prohibitions, and regulated activities (50 CFR Part 404). In 2008, the International Maritime Organization (IMO) designated the waters from shoreline to 50 nmi as a Particularly Sensitive Sea Area (PSSA). The *Associated Protective Measures* for this PSSA include: 1) Areas to be Avoided depicted on international nautical charts, directing ships away from coral reefs; and 2) a ship reporting system upon entering and exiting the PSSA. In 2016, via Presidential Proclamation 9478, President Barack Obama created the Papahānaumokuākea Marine National Monument Expansion Area, extending from the 50 nmi boundary of the Papahānaumokuākea National Marine Monument to 200 nmi, the limit of the U.S. Exclusive Economic Zone. Combined, these two marine national monuments provide protections for 582,570 square miles of land, nearshore, and open ocean in the Northwestern Hawaiian Islands.

Sanctuary Designation

Three presidents (Clinton, Bush, and Obama) and Congress have directed NOAA over the years to work toward designating Papahānaumokuākea as a national marine sanctuary, recognizing the potential value such a designation would have to complement the historical conservation and management that has been in place for more than a century. Consideration of this area for designation as a national marine sanctuary began when Executive Orders 13178 and 13196 directed the Secretary of Commerce to initiate the process to designate the Reserve as a national marine sanctuary. NOAA initiated the process to designate the Reserve as a national marine sanctuary by issuing a notice of intent on January 19, 2001 (66 FR 5509). In 2016, Presidential Proclamation 9478 called for the Secretary of Commerce to consider initiating the process to designate the Monument Expansion Area and the Monument seaward of the Hawaiian Islands and Midway Atoll National Wildlife Refuges as a national marine sanctuary. Finally, in 2020, the Joint Explanatory Statement accompanying the Consolidated Appropriations Act directed NOAA to initiate the sanctuary designation process to “supplement and complement, rather than supplant, existing authorities.” NOAA published a Notice of Intent (NOI) to initiate the sanctuary designation process on November 19, 2021. The State of Hawai‘i published its EIS preparation notice on December 8, 2021. This proposed sanctuary designation is being conducted in consultation with all Papahānaumokuākea Marine National Monument co-managers. The State of Hawai‘i co-developed the draft EIS and would co-manage the proposed sanctuary.

Purpose and Need for a Sanctuary

The purpose of this proposed action is to provide comprehensive and coordinated management of the marine areas of Papahānaumokuākea to protect nationally significant biological, cultural, and historical resources through a sanctuary designation. Threats to these resources, including impacts from outside the proposed sanctuary’s boundary, remain an ongoing concern.

If NOAA designated this area as a national marine sanctuary, NOAA would implement regulations to complement and supplement existing authorities under the Antiquities Act; Presidential Proclamations 8031, 8112, and 9478; Executive Orders 13178 and 13196; 50 CFR 404; and existing federal and State statutes designed to protect marine resources. Sanctuary designation would provide the opportunity to develop a comprehensive and cohesive set of regulations that maintains and enhances existing resource protection. The regulations would adopt measures from the Monument, and in some places, add to those measures to allow for consistency in management and address discrepancies and gaps in prohibitions, regulated activities, and permit criteria. Through sanctuary designation, the National Marine Sanctuaries Act (NMSA) would provide additional regulatory tools for management and protection of Monument resources. Sanctuary designation also provides additional non-regulatory tools to further manage and protect Monument resources. As co-managers of the Monument for more than 20 years, NOAA has maintained robust and effective programs for conservation science; the weaving of Kānaka ‘Ōiwi (Native Hawaiians), heritage, knowledge, values, and practices into co-management; maritime heritage; and education, providing services and expertise that can be leveraged to support resource protection across the Monument and proposed sanctuary.

Public Involvement and Interagency Coordination

An important component of the sanctuary designation and environmental review process includes public involvement. During the 74-day public scoping period, NOAA hosted four public meetings to solicit public comment related to the scale and scope of the proposed sanctuary. NOAA also considered information received through cooperating agency review, coordination with the Monument Management Board, and coordination with the Reserve Advisory Council. NOAA also consulted with the Western Pacific Regional Fishery Management Council as required under NMSA.

Proposed Action and Alternatives

The proposed action is the establishment of a sanctuary at Papahānaumokuākea, with terms of designation, regulations, and a sanctuary management plan. NOAA developed a reasonable range of alternatives for the proposed action as required by the Council on Environmental Quality NEPA regulations. The alternatives include a No Action Alternative and three action alternatives that vary by the proposed sanctuary boundaries. NOAA is proposing the same regulatory concepts and sanctuary management plan to manage the sanctuary under all alternatives. NOAA would ensure that the protections described in the Presidential Proclamations and regulations governing PMNM are the foundation of sanctuary management, and a sanctuary designation would only supplement and complement rather than supplant these protections.

Proposed Boundaries

Alternative 1 is coextensive with the marine portions of the Monument. The boundary includes the marine environment surrounding the Northwestern Hawaiian Islands from the shoreline of the islands and atolls seaward to 200 nmi, including all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai‘i Northwestern Hawaiian Islands Marine Refuge. The area encompassed in Alternative 1 is approximately 582,570 square miles (439,910 square nmi) (Figure E.1). Within the area considered under Alternative 1, there are five known whaling vessels lost between 1822 and 1842, five merchant ships dating between 1886 and 1957, 60–80 military vessels, and hundreds of aircraft primarily from the Battle of Midway. This alternative includes all shallow-water coral reef habitats most vulnerable to both human and natural threats, including impacts from marine debris, invasive species, and climate change. As the entirety of Papahānaumokuākea is sacred to Kānaka ‘Oiwi, this alternative ensures that the tangible resources and intangible values of Native Hawaiian culture are considered.

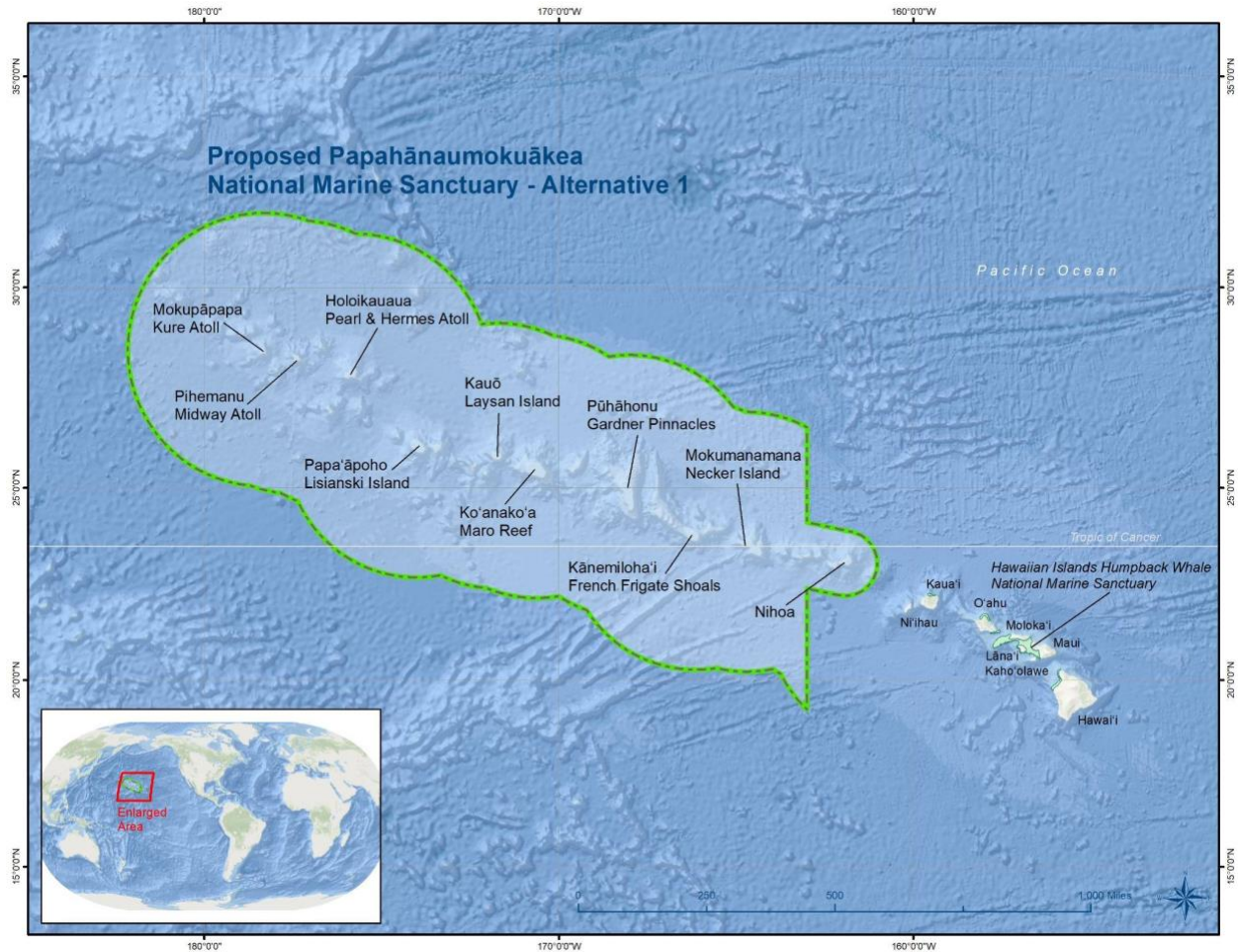


Figure E.1. Geographic boundary of Alternative 1. Source: NOAA

Alternative 2 includes the marine environment from the shoreline of the islands and atolls seaward to 50 nmi. This alternative includes all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai‘i Northwestern Hawaiian Islands Marine Refuge. This alternative does not include the MEA, 50–200 nmi west of 163° West longitude. The area encompassed in Alternative 2 is approximately 139,782 square miles (105,552 square nmi).

The Alternative 2 boundary includes the same shallow water biocultural and maritime heritage resources included in Alternative 1, but would not include the open ocean and deep-water resources of the MEA, including seamounts supporting rare oases of life in this primarily pelagic and deep-ocean environment and maritime heritage resources from the Battle of Midway.

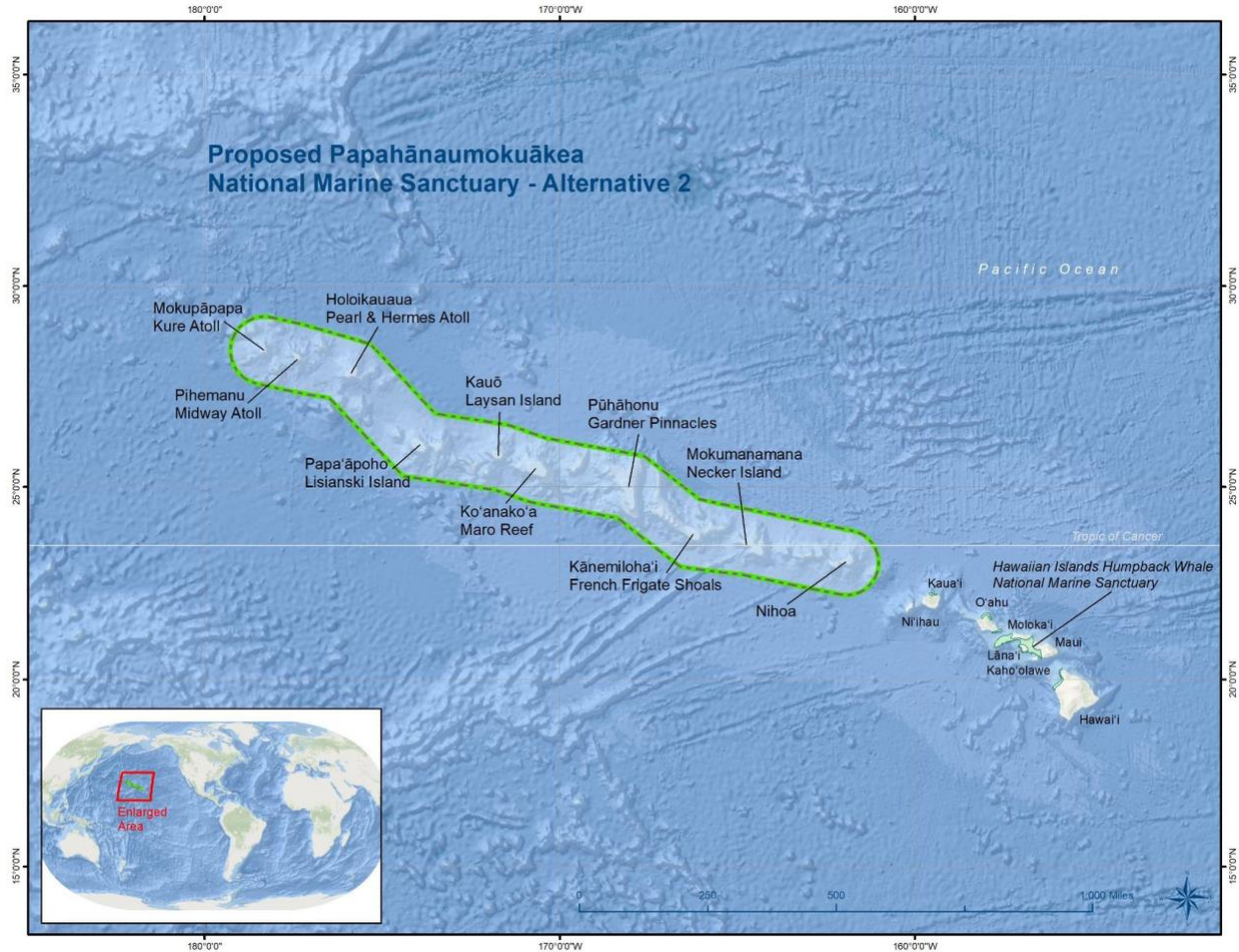


Figure E.2. Geographic boundary of Alternative 2. Source: NOAA

Alternative 3 has the same boundaries as Alternative 1, excluding waters within the Midway Atoll and Hawaiian Islands National Wildlife Refuges. The area encompassed in Alternative 3 is approximately 581,263 square miles (438,923 square nmi). Alternative 3 excludes vulnerable, shallow reef waters, where impacts from land-based legacy pollutants, relatively higher human presence, and potential vessel groundings, marine debris, and invasive species introduction pose a threat. Many of the known maritime heritage resources also occur in these waters.

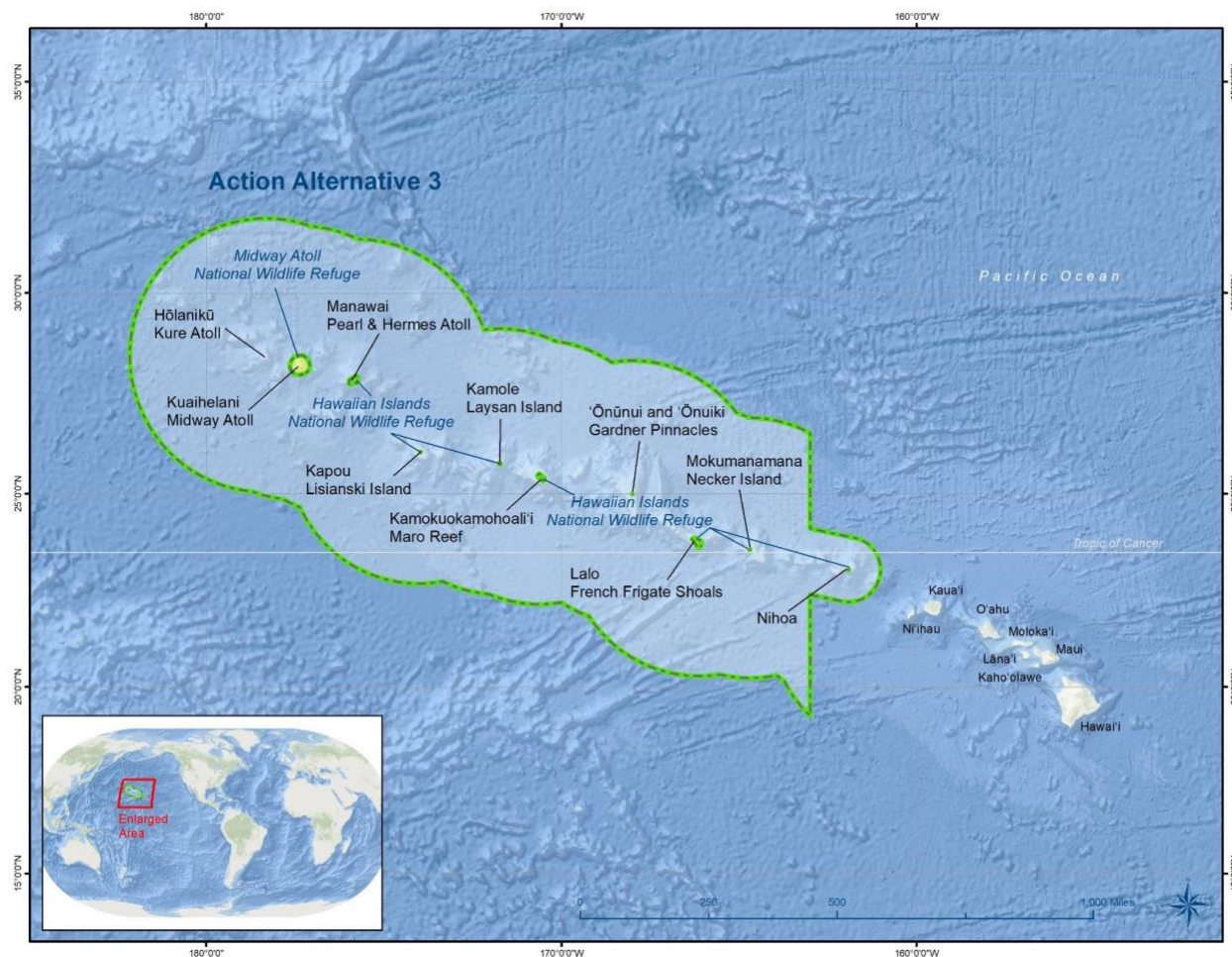


Figure E.3. Geographic boundary of alternative 3. Source: NOAA

Proposed Regulations

The purpose and need for the sanctuary provides the overarching basis for developing the proposed regulations. NOAA is proposing to supplement and complement existing management of this area by proposing prohibited or otherwise regulated activities to protect sanctuary resources and qualities. Presidential Proclamations 8031, 8112, and 9478 and regulations implementing Presidential Proclamations 8031 and 8112 at 50 CFR part 404 provide the foundation for the proposed prohibitions. Minor changes in management are proposed so as to remove discrepancies and gaps in prohibitions and regulated activities between PMNM and the MEA in order to allow for consistency in management across the proposed sanctuary.

NOAA is proposing the following regulations under all alternatives to manage and protect the resources in the proposed sanctuary.

Access

Access to the sanctuary would be prohibited and thus unlawful except under the following circumstances: for emergency response actions, law enforcement activities, and activities and exercises of the Armed Forces; activities pursuant to a sanctuary permit; when conducting non-commercial fishing activities in the outer sanctuary zone (OSZ) authorized under the

Magnuson-Stevens Fishery Conservation and Management Act provided that no sale of harvested fish occurs; and when passing through the sanctuary without interruption.

A vessel may pass without interruption through the sanctuary without requiring a permit as long as the vessel does not stop, anchor, or engage in prohibited activities within the sanctuary, and vessel discharges are limited to the following:

- Vessel engine cooling water, weather deck runoff, and vessel engine exhaust within a Special Preservation Areas or the Midway Atoll Special Management Area; and
- Discharge incidental to vessel operations such as deck wash, approved marine sanitation device effluent, cooling water, and engine exhaust in areas other than Special Preservation Areas or the Midway Atoll Special Management Area.

NOAA also proposes regulations to implement the ship reporting system (CORAL SHIPREP) adopted by the IMO, which would require entrance and exit notifications for vessels that pass without interruption through the sanctuary areas contained within a reporting area, which would be defined as “the area of the proposed sanctuary that extends outward ten nautical miles from the PSSA [Particularly Sensitive Sea Area] boundary, as designated by the IMO, and excludes the ATBAs [Areas to be Avoided] that fall within the PSSA boundary.” The ship reporting requirements would not apply to vessels conducting activities pursuant to a sanctuary permit or vessels conducting non-commercial fishing activities in the OSZ, authorized under the Magnuson-Stevens Fishery Conservation and Management Act. NOAA also proposes exemptions for emergency response and law enforcement purposes, and for activities and exercises of the Armed Forces.

Prohibited or Otherwise Regulated Activities

To supplement and complement existing management of this area, the following are proposed as prohibited or otherwise regulated activities:

- Exploring for, developing, or producing oil, gas, or minerals, or any energy development activities;
- Using or attempting to use poisons, electrical charges, or explosives in the collection or harvest of a sanctuary resource;
- Introducing or otherwise releasing an introduced species from within or into the sanctuary;
- Deserting a vessel;
- Anchoring on or having a vessel anchored on any living or dead coral with an anchor, anchor chain, or anchor rope;
- Commercial fishing and possessing commercial fishing gear except when stowed and not available for immediate use;
- Non-commercial fishing and possessing non-commercial fishing gear except when stowed and not available for immediate use;
- Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands;

- 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;
- Attracting any living sanctuary resource;
- Touching coral, living, or dead;
- Swimming, snorkeling, or closed or open circuit scuba diving;
- Discharging or depositing any material or other matter into the sanctuary, or discharging or depositing any material or other matter outside of the sanctuary that subsequently enters the sanctuary and injures or has the potential to injure any resources of the sanctuary, except for vessel passage without interruption; or
- Anchoring a vessel.

Exemptions and Exceptions

Consistent with existing management of this area, the access restriction and proposed prohibitions would not apply to the following activities:

- Activities necessary to respond to emergencies that threaten life, property, or the environment;
- Activities necessary for law enforcement purposes;
- Activities and exercises of the U.S. Armed Forces including those carried out by the U.S. Coast Guard (USCG);
- Non-commercial fishing in the area of the proposed sanctuary that overlaps with the MEA, the OSZ, authorized under Magnuson-Stevens Fishery Conservation and Management Act regulations is exempt from prohibitions 7–14, provided that no sale of harvested fish occurs; and
- Scientific exploration or research activities by or for the Secretary of Commerce and/or the Secretary of the Interior in the area of the proposed sanctuary that overlaps with the MEA.

Sanctuary General Permits

The proposed sanctuary regulations would include authority to issue sanctuary general permits pursuant to 15 CFR 922.30 to allow certain activities that would otherwise violate prohibitions in the proposed sanctuary's regulations. Three categories of national marine sanctuary general permits, Research, Education, and Management, would apply to this proposed sanctuary. NOAA is proposing to add two additional permit categories to 15 CFR 922.30, Native Hawaiian Practices and Recreation, to be consistent with the types of activities permitted for PMNM under regulations at 50 CFR part 404. The general regulations in 15 CFR 922, subpart D relating to the permit application process, review procedures, amendments, and other permitting stipulations would apply. These national permitting regulations include a list of factors NOAA considers in deciding whether or not to issue the permit, such as whether the activity must be conducted within the sanctuary, and whether the activity will be compatible with the primary objective of protection of sanctuary resources and qualities. NOAA would be able to impose specific terms and conditions through a permit as appropriate.

Special Use Permits

The proposed sanctuary regulations would include authority to issue special use permits (SUPs) pursuant to 15 CFR 922 subpart D to authorize the conduct of specific activities in a national marine sanctuary under certain circumstances.

Terms of Designation

Section 304(a)(4) of the NMSA requires that the terms of designation for national marine sanctuaries include (1) the geographic area included within the sanctuary; (2) the characteristics of the area that give it conservation, recreational, ecological, historical, research, educational, or esthetic value; and (3) the types of activities subject to regulation by NOAA to protect those characteristics. See the accompanying proposed rule for the full text of the proposed terms of designation.

Draft Sanctuary Management Plan

NOAA is proposing to implement the same draft sanctuary management plan under all alternatives. Management plans are sanctuary specific planning and management documents used by all national marine sanctuaries. Management plans reflect the best available science and input from the public to identify immediate, mid-range, and long-term challenges and opportunities and to outline management priorities, programs, and potential partners. A management plan describes goals for resource protection, research, education, stewardship, and accompanying sanctuary management actions. This plan would chart the course for the proposed sanctuary over the next five to 10 years (See Appendix A for the draft sanctuary management plan).

The draft sanctuary management plan was developed in coordination with the Monument's co-managers and is intended to function as a companion document to the Monument Management Plan. At the heart of the draft sanctuary management plan are five *kūkulu* (pillars of management):

- Resource Protection and Conservation
- Research and Monitoring
- Governance and Operations
- Partnerships and Constituent Engagement
- Education, Interpretation, and Mentoring.

Each *kūkulu* includes a goal and five to 13 strategies. The *kūkulu* do not describe explicit activities, which are to be developed as needed within separate tactical or operational plans.

Summary of Impacts for the Preferred Alternative

NOAA evaluated the impacts of its alternatives on the existing laws and management, physical resources, biological resources, cultural and maritime heritage resources, human uses and socioeconomic resources. Because of the existing protection summarized in History of Management (Section 1.2.2) and the current access limitations of PMNM, this proposed sanctuary designation primarily supplements existing resource protections and imparts few minor adverse impacts. Sanctuary designation would not remove the Monument designation or

accompanying regulations. Rather, it would give NOAA the authority to provide additional protection. Beneficial impacts of the proposed action would include stronger incentives for compliance through enhanced enforcement, as well as new authorities to respond to and hold financially liable those responsible for destruction, loss of, or injury to sanctuary resources. The proposed sanctuary includes a permitting system modeled after the existing Monument permitting system, with minor changes proposed. The proposed permitting system would not supplant the joint permitting system for PMNM, and was developed to ensure a continued joint permitting system administered by Monument co-managers that incorporates the authorities provided through the NMSA.

Impacts to Laws and Management. Sanctuary designation would allow NOAA to apply National Marine Sanctuary Program Regulations (15 CFR 922) to supplement existing authorities, in part through: 1) emergency regulations; 2) penalties; and 3) authorities to respond to and hold financially liable those responsible for destruction or loss of, or injury to, sanctuary resources. The proposed site-specific regulations would address discrepancies and gaps in prohibitions, regulated activities, and permitting across the area. Alternative 1 would provide NOAA with the authority to issue permits in the OSZ, for area of the proposed sanctuary that overlaps with the MEA, and vessels wishing to operate within the OSZ would be required to obtain a permit and adhere to all regulations and permit conditions, including installing a Vessel Monitoring System (VMS) that remains on and working when in sanctuary waters. These additional authorities provide NOAA with new tools to improve management and compliance, and address impacts to sanctuary resources.

Impacts to Physical Resources. Sanctuary designation would provide moderate benefits and no adverse impacts to physical resources (e.g., water quality, benthic habitat). Regulations promulgated for the area of the proposed sanctuary that overlaps with the MEA would provide additional protection through permitting requirements, as well as prohibitions related to seafloor disturbance and vessel discharge, both for permitted vessels and those conducting passage without interruption through the sanctuary.

Impacts to Biological Resources. The authorities afforded by sanctuary designation provides new and effective deterrents to permit and regulatory violations, as well as providing a mechanism to conduct damage assessments and hold a permittee or vessel liable for response costs and damages resulting from destruction, loss, or injury of a sanctuary resource. Codified regulations in the area of the proposed sanctuary that overlaps with the MEA provides NOAA's Office of Law Enforcement the option to impose civil penalties, deterring illegal fishing and other prohibited activities, and protecting fish stocks and fragile benthic ecosystems from exploitation on seamounts and on the seafloor. These additional authorities provide enhanced protection and response mechanisms, benefiting biological resources from accidental or intentional loss or damage to sanctuary resources, particularly due to ship groundings in the shallow coral reef ecosystem.

Impacts to Cultural and Maritime Heritage Resources. Cultural heritage is a primary focus of current management, indicated through the use of appropriate protocols, assigning biocultural resource monitors on permitted activities, and employing numerous other measures to protect tangible and intangible cultural resources. These efforts would be expanded to the area of the

proposed sanctuary that overlaps with the MEA under sanctuary designation, imparting minor benefits to cultural resources. Sanctuary designation provides new protections for the maritime heritage resources described above, particularly in the OSZ. Permitting authority and new prohibitions, including disturbance of the seafloor and access regulations, would complement existing federal and State regulations for all underwater maritime resources throughout the sanctuary.

Impacts to Socioeconomic Resources. Sanctuary designation would provide alternative sources of funding to support education initiatives and programs in Hawai‘i (outside the waters of the proposed sanctuary), including from Friends Groups, the National Marine Sanctuary Foundation, and other non-profit organizations. Additional funding sources provide opportunities to strengthen the public’s appreciation of this area.

NOAA determined that sanctuary designation of the preferred alternative (Alternative 1) would have **direct, long-term, moderate beneficial impacts** for laws and management, physical, biological, and maritime heritage resources, **direct, long-term, minor beneficial impacts** for cultural resources, and **indirect, long-term, minor adverse impacts** for socioeconomic resources for the largest proposed sanctuary area of the three alternatives.

Chapter 1: Introduction

The National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries (ONMS) proposes to designate marine areas of Papahānaumokuākea Marine National Monument (PMNM) and the Monument Expansion Area (MEA) as a national marine sanctuary. When referring to these two areas together, as a combined entity, the term Monument is used in this document. This draft environmental impact statement (EIS), prepared in coordination with the State of Hawai‘i (State), analyzes the environmental impacts of a range of alternatives associated with the proposed sanctuary designation and meets the requirements of both the National Environmental Policy Act (NEPA, 40 CFR 1500-1508) and the Hawai‘i Environmental Policy Act (HEPA, Chapter 343 HRS, HAR Chapter 11-200.1). This document is also a resource assessment detailing present and future uses of the areas identified for potential designation and includes a draft sanctuary management plan (SMP) that describes goals and strategies for managing sanctuary resources.

1.1 National Marine Sanctuary System

The NOAA ONMS serves as the trustee for a network of underwater parks encompassing more than 620,000 square miles of marine and Great Lakes waters from Washington to the Florida Keys and from New England to American Samoa. The network currently includes a system of 15 national marine sanctuaries and two marine national monuments (Figure 1.1).

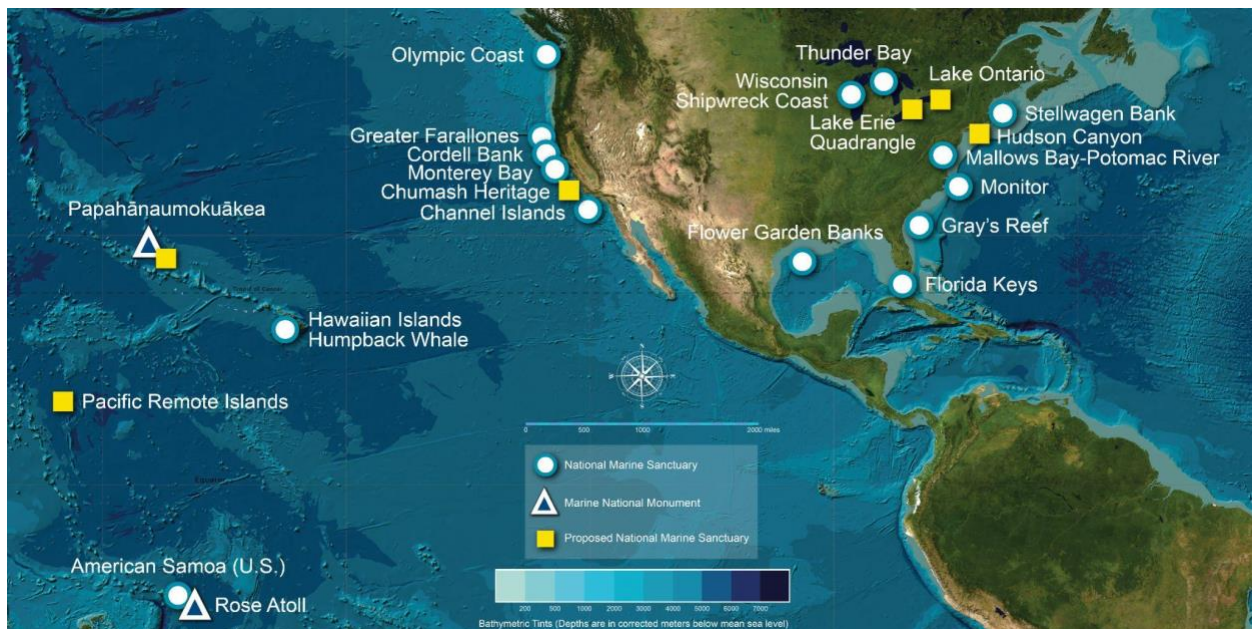


Figure 1.1. A map of the National Marine Sanctuary System. Image: NOAA

National marine sanctuaries are special areas set aside for long-term protection, conservation, and management, and are part of our nation's legacy to future generations. They contain deep ocean habitats of resplendent marine life, kelp forests, coral reefs, whale migration corridors, deep-sea canyons, historically significant shipwrecks, and other important underwater

archaeological sites. Each sanctuary is a unique place worthy of special protection. Because they serve as natural classrooms, cherished recreational spots, and places for valuable commercial activities, national marine sanctuaries represent many things to many people.

ONMS works with diverse partners and stakeholders to promote responsible, sustainable ocean and Great Lakes uses that ensure the health of our most valued places. A healthy ocean and Great Lakes are also the basis for thriving recreation, tourism, and commercial activities that drive coastal economies.

1.1.1 National Marine Sanctuaries Act of 1972

The [National Marine Sanctuaries Act](#) (NMSA; 16 U.S.C. § 1431 *et seq.*) is the legislation governing the National Marine Sanctuary System. The NMSA authorizes the Secretary of Commerce to identify and designate as a national marine sanctuary any discrete area of the marine environment that is of special national, and in some cases international, significance, and to manage these areas as the National Marine Sanctuary System. Day-to-day management of national marine sanctuaries is delegated by the Secretary of Commerce to ONMS.

Congress first passed the NMSA into law in 1972. Since then, Congress amended and reauthorized the statute in 1980, 1984, 1988, 1992, 1996, and 2000. The purposes and policies of the NMSA are:

- To identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System;
- To provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities;
- To maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations and ecological processes;
- To enhance public awareness, understanding, appreciation and wise and sustainable use of the marine environment, and the natural, historical, cultural, and archeological resources of the National Marine Sanctuary System;
- To support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas;
- To facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities;
- To develop and implement coordinated plans for the protection and management of these areas with appropriate federal agencies, State and local governments, Native American tribes and organizations², international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;

² Terminology from the National Marine Sanctuaries Act

- To create models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and
- To cooperate with global programs encouraging conservation of marine resources.

1.1.2 Comprehensive Management of the National Marine Sanctuary System

The NMSA includes a finding by Congress that the National Marine Sanctuary System will “improve the conservation, understanding, management, and wise and sustainable use of marine resources” (16 U.S.C. § 1431(a)(4)(A)). The NMSA further recognizes that “while the need to control the effects of particular activities has led to enactment of resource-specific legislation, these laws cannot in all cases provide a coordinated and comprehensive approach to the sanctuaration and management of special areas of the marine environment” (16 U.S.C. § 1431(a)(3)). Accordingly, ONMS promotes partnerships among resource management agencies, the scientific community, stakeholders, and the public-at-large to realize the coordination and program integration that the NMSA calls for in order to comprehensively manage national marine sanctuaries.

1.2 Background on the Process to Designate a National Marine Sanctuary Within Papahānaumokuākea

1.2.1 Significance of the Area and Rationale for Proposed Sanctuary Designation

The area that encompasses Papahānaumokuākea includes a globally significant marine ecosystem, as well as maritime, historic, and cultural resources. While human activity, including resource exploitation and habitat destruction, marked much of the 19th and 20th centuries, these islands, surrounding reefs, and oceanic habitat continue to be among the last of the planet’s wild places.

Papahānaumokuākea is a place of unique environmental resources that provide large-scale ecosystem services for the region and the world. As one of Earth’s few healthy, large-scale marine protected areas, it provides a window into the complex food web and overall dynamics of the sub-tropical Pacific Ocean. The marine habitat includes several interconnected ecosystems, including coral islands surrounded by shallow reef; deeper reef habitats characterized by seamounts, banks, and shoals scattered across Papahānaumokuākea; mesophotic reefs with extensive algal beds; pelagic waters connected to the greater North Pacific Ocean; and

National Marine Sanctuaries Act Designation Standards

The area is of special national significance for:

Its conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or esthetic qualities

The communities of living resources it harbors

Its resource or human-use values

Existing state and federal authorities are inadequate or should be supplemented to ensure coordinated and comprehensive management

The area is of a size and nature that will permit comprehensive and coordinated management

deep-water habitats and abyssal plains 5,000 meters below sea level. These ecosystems are connected as essential habitats for rare species such as the threatened honu (Hawaiian green turtle) and the critically endangered ʻīlioholoikauaua (Hawaiian monk seal), as well as over 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 (ESA). The importance of these waters to the humpback whale is only recently becoming understood. At least a quarter of the nearly 7,000 known marine species found in the region are found nowhere else on Earth.

The area of the proposed sanctuary also includes the location of the Battle of Midway, a turning point in World War II for the Allies in the Pacific Theater. While management and preservation of land-based historic properties at Kuaihelani is well established, research indicates 60–80 military vessels and hundreds of aircraft are scattered across the seafloor. In addition to Navy steamers and aircraft, there are whaling ships, Japanese junks, Hawaiian fishing sampans, Pacific colliers, and other vessels from the 19th and 20th centuries. Of these, the locations of more than 30 vessel wreck sites have been confirmed by diving or bathymetric surveys, with only a handful of those identified (by vessel name) or otherwise evaluated. Nevertheless, the research that has been conducted has provided books, films, and websites with information that fascinates history and military enthusiasts and the general public alike.

Papahānaumokuākea is also a sacred place to Kānaka ʻŌiwi (Native Hawaiians), who regard the islands and wildlife as kūpuna, or ancestors. The region holds deep cosmological and traditional significance to living Native Hawaiian culture and contains a host of intact and significant archaeological sites found on the islands of Nihoa and Mokumanamana (Necker), both of which are on the National and State Register for Historic Places. Papahānaumokuākea is as much a spiritual as a physical geography, rooted deep in Native Hawaiian creation and settlement stories. Since nature and culture are considered to be one and the same, the protection of one of the last nearly pristine, natural, marine ecosystems in the archipelago is akin to preserving the living culture of Hawaiʻi.

On July 30, 2010, Papahānaumokuākea was inscribed as a mixed (natural and cultural) World Heritage site by the United Nations Educational, Scientific, and Cultural Organization. It is the only mixed World Heritage site in the U.S., and the second World Heritage site in Hawaiʻi. With a specific aim to protect the natural and cultural heritage of the vast area, Papahānaumokuākea has become a globally recognized, best practice model for the governance and management of remote marine ecosystems, honoring the inextricable link between nature and culture. Importantly, Papahānaumokuākea has, in a sense, reunited the entire archipelago and renewed a sense of pride in the natural environment and understanding of ʻāina momona (healthy and productive communities of people and place based on reciprocal relationships).

1.2.2 History of Management of the Proposed Papahānaumokuākea National Marine Sanctuary

Portions of the area now known as Papahānaumokuākea have been federally protected in some form since 1903, when President Theodore Roosevelt first placed Midway Atoll under control of the Navy in response to reports of large numbers of seabirds being slaughtered for feathers and eggs, and later in 1909, when he designated the islands from Nihoa to Kure as the Hawaiian Islands Reservation as a preserve and breeding ground for native birds. In 1940, President Franklin D. Roosevelt renamed the Reservation the Hawaiian Islands National Wildlife Refuge (NWR), and the purposes were broadened to protect all wildlife.

Domestic fishery management of the area began with the passage of the Magnuson-Stevens Fishery Conservation and Management Act of 1976. NOAA and the Western Pacific Regional Fishery Management Council (WPRFMC) developed four fishery management plans, with two of the plans (Crustaceans and Bottomfish) focused almost exclusively on resource management in the Northwestern Hawaiian Islands. In 1991, in response to interactions with endangered ʻilioholoikauaua (Hawaiian monk seals), NOAA and the WPRFMC created the Protected Species Zone, prohibiting commercial longline fishing within 50 nautical miles (nmi) of these islands.

In the 1980s and 1990s, Presidents Ronald Reagan and William Clinton transferred management of Midway Atoll from the Navy to the U.S. Fish and Wildlife Service (FWS), and the State of Hawaiʻi designated Kure Atoll State Wildlife Sanctuary (HAR 13-126).

On December 4, 2000, President William Clinton established the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (Reserve) via Executive Order 13178. The Reserve is managed by NOAA. The Reserve boundary overlaps the Protected Species Zone and is adjacent to State waters and the Midway Atoll NWR. Executive Order 13178 established conservation measures limiting fishing, and prohibiting certain activities (e.g., discharging or depositing materials, anchoring, and drilling). The Executive Order directed the Secretary of Commerce to develop a Reserve Operations Plan in consultation with the Secretary of the Interior and the governor of Hawaiʻi. In 2005, the State of Hawaiʻi established the Northwestern Hawaiian Islands Marine Refuge, with waters extending three miles seaward of any coastline from Nihoa Island to Kure Atoll, excluding Midway Atoll (HRS 188-37, [HAR 13-60.5](#)).

The PMNM management structure was created by Presidential Proclamation 8031 (June 15, 2006) as modified by Presidential Proclamation 8112³ (February 28, 2007), designating 139,793 square miles of emergent and submerged lands and waters as Papahānaumokuākea Marine National Monument, overlaying the Reserve, Midway Atoll NWR, Hawaiian Islands NWR, Battle of Midway National Memorial, Kure Atoll State Wildlife Sanctuary, and State Northwestern Hawaiian Islands Marine Refuge. Designated under the Antiquities Act of 1906 (54 U.S.C. §§ 320301 *et seq.*), PMNM became the country's first large scale marine protected area, promoting coordinated management among the State, NOAA through the Department of Commerce, and FWS through the Department of Interior. Regulations implementing the

³ Presidential Proclamation 8031 initially established the area as the Northwestern Hawaiian Islands Marine National Monument. Presidential Proclamation 8112 renamed it the Papahānaumokuākea Marine National Monument.

Presidential Proclamations 8031 and 8112 were promulgated in the Code of Federal Regulations (CFR) under 50 CFR Part 404.

On December 8, 2006, the State, U.S. Department of Commerce, and U.S. Department of Interior (collectively referred to as the co-trustees) signed a memorandum of agreement to carry out coordinated resource management for the long-term comprehensive conservation and protection of PMNM. The memorandum of agreement established functional relationships to effectively coordinate management actions in PMNM among co-trustees and included the Monument's Vision, Mission, and Guiding Principles. The co-trustees developed a stringent permitting process in which permits must adhere to terms and conditions that satisfy Presidential Proclamations 8031 and 8112, 50 CFR part 404, and relevant federal and State agency mandates and policies.

In 2008, the International Maritime Organization (IMO) designated PMNM as a Particularly Sensitive Sea Area (PSSA). As part of the PSSA designation process, the IMO adopted U.S. proposals for associated protective measures consisting of (1) expanding and consolidating the six existing recommendatory Areas To Be Avoided (established in 1981) in the Monument into four larger areas and expanding the class of vessels to which they apply; and (2) establishing a reporting system for vessels transiting PMNM, which is mandatory for some ships and recommended for other ships (50 CFR 404).

On August 26, 2016, President Barack Obama issued Presidential Proclamation 9478, which established the MEA to include the waters and submerged lands to the extent of the seaward limit of the United States Exclusive Economic Zone (EEZ) west of 163° West longitude. The MEA covers 442,781 square miles. Combined, and for brevity, PMNM and the MEA are “the Monument” in this document, but as described in Chapter 4, were established separately and contain variations in the findings made within and the requirements imposed by their establishing proclamations. In 2017, the memorandum of agreement between the State, U.S. Department of Commerce, and U.S. Department of the Interior was amended to include management direction for the MEA and implement the request of the governor of Hawai'i that the Office of Hawaiian Affairs (OHA) be added as a co-trustee, to support the protection of cultural and natural resources in a manner aligned with Native Hawaiian resource management best practices.

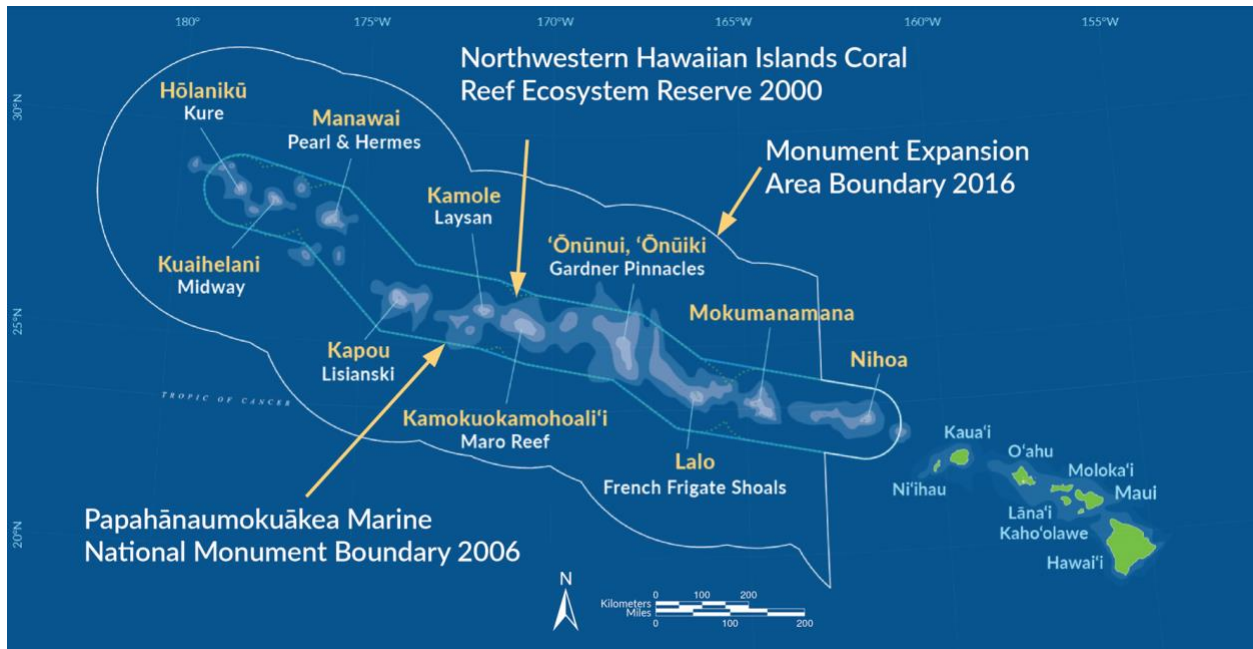


Figure 1.2. Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, Papahānaumokuākea Marine National Monument, and Monument Expansion Area. Image: NOAA

As one of the largest, most remote places on Earth, one of the Monument's goals is to bring the place to the people. This is achieved in multiple ways that include virtual visits (e.g., Google Street Views at Kuaihelani, Manawai [Pearl and Hermes Atoll], and Lalo [French Frigate Shoals]), as well as a host of activities and exhibits at museums, aquariums, and learning centers throughout Hawai'i, including the Monument's [Mokupāpapa Discovery Center](#) managed by NOAA, Kaua'i Ocean Discovery, Waikīkī Aquarium, and the Bernice Pauahi Bishop Museum. Monument managers continue to prioritize investment in educational strategies and partnerships to build the next generation of ecologically- and culturally-grounded managers and leaders.

1.2.3 Actions Leading to Proposed Sanctuary Designation

The numerous conservation and management measures described in the previous section emphasize the value and need for protection of this unique ecosystem. Deliberate actions for comprehensive protection of the area proposed for sanctuary designation began on June 11, 1998, when President William Clinton signed Executive Order 13089–Coral Reef Protection. This Executive Order created the U.S. Coral Reef Task Force, headed by the Secretaries of Commerce and the Interior, fostering cooperation for the protection of marine resources between these two agencies. On May 26, 2000, President William Clinton issued Executive Order 13158–Marine Protected Areas, directing the Departments of Commerce and the Interior to develop a national system of marine protected areas (MPAs). This Executive Order included a *Memorandum on Protection of U.S. Coral Reefs in the Northwest Hawaiian Islands*. The Memorandum directed the Secretaries to “provide for culturally significant uses of the Northwest Hawaiian Islands’ marine resources by Native Hawaiians.” Kānaka ‘Ōiwi with decades of first-hand knowledge of the ecosystem’s fragility and dangers of over-exploitation gave testimony and support for greater protection of this area.

The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve was established on December 4, 2000 (Executive Order 13178) and is managed by the U.S. Department of Commerce through NOAA. Executive Order 13178 also established a Reserve Advisory Council (RAC) to provide advice and recommendations on the Reserve Operations Plan and designation and management of any sanctuary. The Executive Order stated “[t]he Secretary shall initiate the process to designate the Reserve as a national marine sanctuary pursuant to sections 303 and 304 of the National Marine Sanctuaries Act.”

On January 19, 2001, NOAA issued a notice of intent to designate the Reserve as a national marine sanctuary (66 FR 5509). NOAA engaged the Kānaka ʻŌiwi community, scientific community, educators, businesses, fishers, interagency partners, and other stakeholders to seek input and gather information toward developing a unified plan for Reserve operations and the proposed sanctuary. Ten public scoping meetings were hosted in Hawai‘i and Washington, D.C., with more than 13,000 comments received during the initial scoping period. Additional input was collected from the public, stakeholder groups, and interagency partners via workshops (Gittings et al., 2004), focus group discussions (Sustainable Resources Group, 2004), and RAC and associated subcommittee meetings. The Reserve Operations Plan was finalized with extensive consultation with partner agencies and the RAC (NOAA, 2004) and served as the foundation for the draft SMP. In total, more than 100 meetings and close to 52,000 public comments guided development of a draft SMP. In addition, the State of the Reserve Report (NOAA, 2006) provided a comprehensive summary of the previous five years of Reserve operations. The draft SMP included several companion documents packaged into the draft sanctuary designation proposal, including a draft EIS and a proposed rule.

The sanctuary designation process was curtailed when the area was designated a Marine National Monument on June 15, 2006. Presidential Proclamation 8031 recognized the extensive public input, the relevancy of the public process and draft sanctuary documents, and directed the Secretary of Commerce, in consultation with the Secretary of the Interior and the State of Hawai‘i, to modify, as appropriate, the draft SMP in developing a plan to manage PMNM and to provide for public review of that plan. The Papahānaumokuākea Marine National Monument Management Plan (MMP, December 2008) and associated environmental assessment extensively reflect the draft sanctuary documents.

In 2016, Presidential Proclamation 9478 expanded the seaward extent of the Monument boundaries from 50 to 200 nmi from shore.⁴ The proclamation described objects of historic and scientific interest including geological and biological resources that are part of a highly pristine deep sea and open ocean ecosystem with unique biodiversity and that constitute a sacred cultural, physical, and spiritual place for the Kānaka ʻŌiwi community. Presidential Proclamation 9478 directed the Secretary of Commerce to “consider initiating the process under the National Marine Sanctuaries Act (16 U.S.C. 1431 §§ *et seq.*) to designate the Monument Expansion Area and the Monument seaward of the Hawaiian Islands National Wildlife Refuge and Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial as a National Marine Sanctuary to supplement and complement existing authorities.”

⁴ 200 nmi is the limit of U.S. sovereign waters, beyond which is international water or the “high seas.”

In 2020, the Joint Explanatory Statement accompanying the Consolidated Appropriations Act directed NOAA to initiate the process under the NMSA to designate Papahānaumokuākea as a national marine sanctuary “to supplement and complement, rather than supplant, existing authorities.”

1.3 Sanctuary Designation and Environmental Review Process

1.3.1 Overview

The NMSA authorizes the Secretary of Commerce to identify and designate as a national marine sanctuary any discrete area of the marine environment that is of special national significance. Section 304 of the NMSA, 16 U.S.C. § 1434, describes the sanctuary designation process, including required notices, the preparation of documents, and opportunities for public participation. The process includes the following:

- A notice in the *Federal Register* of the proposed designation, proposed regulations, and a summary of the draft SMP;
- A resource assessment that describes present and potential uses of the area (see the draft EIS Chapter 4);
- A draft SMP for the proposed national marine sanctuary, which is a document that outlines the proposed goals, objectives, and strategies for managing sanctuary resources for the next five years (see the draft EIS Appendix A);
- Maps depicting the boundaries of the proposed sanctuary (see sections 3.4, 3.5, and 3.6);
- An assessment of whether the proposed sanctuary meets the designation standards and factors for consideration, as described in sections 303(a) and 303(b)(1) of the NMSA (discussed in chapters 1 and 2).

In addition, section 304(a)(2) of the NMSA requires NOAA to prepare an EIS pursuant to NEPA as part of the sanctuary designation process. NEPA requires that federal agencies include in their decision-making processes appropriate and careful consideration of all potential environmental effects of proposed actions and analyze them and their alternatives. The NEPA process is intended to encourage and facilitate public involvement in decisions that affect the quality of the human environment.

The State of Hawai‘i co-developed this draft EIS and recommends the inclusion of all State waters and submerged ceded lands within Papahānaumokuākea. The term “ceded lands” refers to Hawaiian lands transferred to the United States at the time of annexation and includes benthic marine habitats underlying State waters. Requirements for the Hawai‘i environmental review process are codified in Hawai‘i Revised Statutes (HRS) chapter 343, known as the Hawai‘i Environmental Policy Act (HEPA), and in corresponding Hawai‘i Administrative Rules (HAR) chapter 11-200.1. Under HRS section 343-5, the Proposed Action triggers environmental review as it involves the use of State lands (HRS section 343-5(a)(1)), lands classified as in the Conservation District by the State Land Use Commission under HRS chapter 205 (HRS section 343-5(a)(2)), and lands classified as historic sites or districts (HRS section 343-5(a)(4)). The purpose of the HEPA process is to ensure that environmental, economic, and technical concerns

are given appropriate consideration in decision-making. HRS section 343-5(f) allows for a single EIS for actions subject to both NEPA and HEPA.

As described above, several analyses are required to meet federal and State environmental review requirements. The four required draft documents are listed below:

1. Draft Environmental Impact Statement;
2. Cultural Impact Assessment (CIA, accompanying supplemental document);
3. Draft Sanctuary Management Plan (Appendix A); and
4. Draft Regulations (Notice of Proposed Rulemaking)

1.3.2 Public Involvement and Scoping

Sanctuary designation and environmental review includes public involvement, as well as coordination and consultations with other federal, State, and local agencies, described below.

Scoping

On November 19, 2021, NOAA, in cooperation with FWS, the State, and OHA, published a Notice of Intent in the Federal Register (86 FR 64904) to conduct scoping and to prepare an EIS for the proposed sanctuary designation. The public comment period took place over the course of 74 days from November 19, 2021–January 31, 2022, and included virtual public scoping meetings on the following dates where comments were solicited:

- Wednesday, December 8, 2021, 6 p.m. HST
- Saturday, December 11, 2021, 12 p.m. HST
- Tuesday, December 14, 2021, 6 p.m. HST
- Thursday, December 16, 2021, 3 p.m. HST

Comments were accepted 1) during the virtual public scoping meetings, 2) through the Federal e-Rulemaking Portal, and 3) by traditional mail through January 31, 2022. An estimated 165 people attended the four public scoping meetings. During the public comment period, 73 individuals and organizations provided written comments and nine people provided oral comments. Sixty-five of these 82 total comments mentioned support for resource protection, while 31 mentioned sanctuary regulations. Other comments noted Native Hawaiian values and practices (21), historic properties (20), fishery management (19), threats (15), sanctuary boundaries (13), economics (8), and enforcement (6). A summary Public Scoping Report, which documents oral and written comments, is included as Appendix F to this draft EIS.

Nohopapa Hawai‘i, LLC created the document *E Ho ‘i I Ke Au A Kanaloa* (2023) containing the CIA and legal analysis relating to Native Hawaiian rights and cultural resources. Nohopapa Hawai‘i, LLC interviewed 25 people with connections to Papahānaumokuākea.

Reserve Advisory Council

The RAC was created by Executive Order 13178 to provide advice and recommendations to ONMS on the Reserve Operations Plan and designation and management of any sanctuary. RAC members serve as liaisons between the site and the surrounding community. Since publication of the Notice of Intent to conduct scoping and prepare an EIS for the proposed sanctuary

designation, the RAC has forwarded letters to ONMS with recommendations for 1) the draft SMP's framework and content; 2) boundary options; 3) draft fishing regulations in response to a WPRFMC letter; and 4) sanctuary regulations and permitting to advocate for equal or greater protections. These recommendations were drafted by a RAC subcommittee and voted upon and approved by the RAC.

1.3.3 Relationship to Other Applicable Laws, Regulations, and Executive Orders

In addition to NEPA, NOAA must comply with several related statutes, regulations, and Executive Orders as part of this federal action, including the National Historic Preservation Act (NHPA); Coastal Zone Management Act (CZMA); Endangered Species Act (ESA); Marine Mammal Protection Act (MMPA); Migratory Bird Treaty Act (MBTA); Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA); and Executive Order 12898 on addressing environmental justice in minority populations and low-income populations. Appendices C and E describe the requirements of the statutes, Executive Orders, and other regulations applicable to the proposed sanctuary designation and NOAA's compliance with these applicable laws and policies.

1.4 Scope of the Environmental Review

This draft EIS evaluates the environmental impacts associated with the range of alternatives under consideration for the proposed designation of Papahānaumokuākea National Marine Sanctuary. This draft EIS specifically evaluates how implementing the proposed sanctuary boundary, regulations, and sanctuary management plan could affect the environment. Both the additional protection to resources and loss of opportunity to users created by sanctuary designation are analyzed.

The geographic scope of the analysis includes areas of the marine environment within PMNM and the MEA, including the marine areas within Midway Atoll NWR and Hawaiian Islands NWR. The geographic scope for socio-economic impacts extends to the State of Hawai'i. The timeframe for this analysis evaluates current conditions and conditions that are likely to be present for approximately five years.

Some sanctuary management activities that may occur at a later time within the proposed sanctuary, including issuing permits for specific future activities, are outside the scope of the proposed action described in the draft EIS because the specific nature, timing, and location of these activities cannot be known at this time. In the event that the sanctuary is designated, through the permit process, NOAA would review these future management activities to ensure that those actions are addressed under NEPA and other applicable environmental laws. The Council on Environmental Quality's (CEQ) NEPA regulations and NOAA NEPA guidance describe strategies that allow NOAA to build upon and incorporate this draft EIS's analysis when preparing future environmental compliance documentation.

Regulation of commercial fishing is outside the scope of this draft EIS. The development and analysis of non-commercial fishing regulations for the MEA is being conducted by NMFS and WPRFMC in consultation with ONMS. NMFS will complete the environmental compliance

requirements for these proposed regulations. Commercial fishing is already banned by regulation in PMNM and the proposed NMFS rule would codify a commercial fishing prohibition for the MEA, resulting in its prohibition throughout the Monument.

This draft EIS also serves as a resource assessment under the NMSA (16 U.S.C. § 1434(a)(2)(B)), which includes (i) present and potential uses of the areas considered in the alternatives; (ii) commercial, governmental, or recreational resource uses in the areas that are subject to the primary jurisdiction of the Department of the Interior; and (iii) any past, present, or proposed future disposal or discharge of materials in the vicinity of the proposed sanctuary.

1.5 Organization of This Draft Environmental Impact Statement

This draft EIS is organized as follows:

Chapter 1: Provides background on the National Marine Sanctuary System, the proposed sanctuary designation for Papahānaumokuākea, and the sanctuary designation and environmental review processes under NMSA, NEPA, and HEPA.

Chapter 2: Outlines the purpose and need for the proposed designation of a national marine sanctuary at Papahānaumokuākea.

Chapter 3: Describes the process to develop alternatives. Identifies the No Action Alternative, the three action alternatives, and the alternatives considered but eliminated from detailed evaluation. For each alternative, Chapter 3 describes the proposed boundary, regulations, and draft SMP.

Chapter 4: Describes the existing conditions in the geographic scope of the action to provide a baseline for assessing environmental impacts including an overview of marine ecosystems, shipwrecks, the cultural landscape, and human uses within the proposed sanctuary.

Chapter 5: Provides an analysis of the potential environmental consequences of each alternative and compares the environmental consequences across alternatives. Direct, indirect, short-term, long-term, and cumulative impacts are evaluated.

Chapter 6: Describes the unavoidable adverse impacts, the relationship of short-term and long-term productivity, and irreversible or irretrievable commitment of resources associated with the alternatives, per the requirements of NEPA.

1.6 Public Review of the Draft EIS

The next step of public involvement is to ensure wide circulation of the draft EIS and to solicit public comments on this document. A public review period will follow the publication of the draft EIS. Availability of the draft EIS is announced in the Federal Register, on various email lists, on the project website, and on the State of Hawai‘i Environmental Review Program [website](#). Public hearings will be held no sooner than 30 days after the notice of availability is published in the Federal Register. During the public comment period, NOAA and the State will solicit oral and written comments from organizations; federal, State, and local agencies and

officials; the Native Hawaiian community; and interested individuals. A summary of these comments and the corresponding agency responses will be included in the final EIS. In preparing the final EIS, final SMP, and final rule, NOAA and the State of Hawai‘i will consider all substantive comments timely submitted, will prepare a response to comments including responding to all substantive issues raised by the comments, and will make changes to the draft EIS, if necessary, as a result of the public comments. Hawai‘i environmental law requires responses to each unique comment, which will be published online on the Environmental Review Program website. If NOAA moves forward with a final action, it will issue a final EIS, after which a 30-day mandatory waiting period will occur, and then NOAA may issue its record of decision. In addition, a final rule would be published in the Federal Register.

Chapter 2: Purpose and Need for Action

2.1 Purpose of the Proposed Action

NOAA’s proposed action is to designate marine areas of Papahānaumokuākea as a national marine sanctuary. The purpose of this action is to provide comprehensive and coordinated management of the marine areas of Papahānaumokuākea to protect nationally significant biological, cultural, and historical resources. See Section 1.2.1, “Significance of the Area and Rationale for Proposed Sanctuary Designation,” for more information on the national significance of the area proposed as a national marine sanctuary. Additionally, the purpose of the designation is to implement the provisions of [Executive Order 13178](#), Presidential Proclamation 9478, and the Joint Explanatory Statement accompanying the Consolidated Appropriations Act, 2021, that directed NOAA to consider initiating the sanctuary designation process.

Executive Order 13178 states “*The Secretary shall initiate the process to designate the Reserve as a national marine sanctuary pursuant to sections 303 and 304 of the National Marine Sanctuaries Act.*”

Presidential Proclamation 9478 states “[T]he Secretary of Commerce should consider initiating the process under the National Marine Sanctuaries Act to designate the Monument Expansion area and the Monument seaward of the Hawaiian Islands National Wildlife Refuge and Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial as a National Marine Sanctuary to supplement and complement existing authorities.”

The NMSA authorizes the secretary of Commerce to designate national marine sanctuaries to meet the purposes and policies of the NMSA, including:

- “to provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities” (16 U.S.C. § 1431(b)(2));
- “to maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes” (16 U.S.C. § 1431(b)(3));
- “to enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the ... historical, cultural, and archaeological resources of the National Marine Sanctuary System” (16 U.S.C. § 1431(b)(4));
- “to support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas” (16 U.S.C. § (b)(5)); and
- “to facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities” (16 U.S.C. § 1431(b)(6)).

2.2 Need for the Proposed Action

The area proposed for national marine sanctuary designation is a globally significant interconnected set of marine ecosystems, including coral islands, shallow, deep, and mesophotic

reefs, seamounts, banks, and pelagic waters connected to the greater North Pacific Ocean. This area supports rare and endangered wildlife, is the location of the historic Battle of Midway, and holds deep cosmological and traditional significance to living Native Hawaiian culture. While its remote location protects the area from impacts from local human uses, threats from climate change, marine debris from across the North Pacific, the introduction of invasive species, and international shipping traffic have and will continue to adversely impact these fragile resources. Through the proposed national marine sanctuary designation, NOAA aims to address these threats and discrepancies in management across the Monument by:

- developing objectives and actions that ensure lasting protections consistent with the existing Monument proclamations;
- safeguarding natural and cultural values of the marine environment;
- applying additional regulatory and non-regulatory tools to augment and strengthen existing protections for Papahānaumokuākea ecosystems, wildlife, and cultural and maritime heritage resources;
- authorizing NOAA to assess civil penalties for violations of sanctuary regulations or violations of permits and to enforce provisions of the NMSA;
- imposing liability for the destruction, loss of, or injury to sanctuary resources and providing natural resource damage assessment to authorities for destruction, loss of, or injury to any sanctuary resources; and
- requiring interagency consultation for any federal agency action that is likely to destroy, cause the loss of, or injure any sanctuary resource.

2.2.1 Complement and Supplement Existing Regulatory Authorities

Congress has declared that one purpose of the NMSA is to provide coordinated and comprehensive management of special areas of the marine environment that would complement other existing regulatory authorities (16 U.S.C. § 1431(b)(2)). By designating this area as a national marine sanctuary, NOAA would implement regulations to complement and supplement existing authorities under the Antiquities Act; Presidential Proclamations 8031, 8112, and 9478; Executive Order 13178; 50 CFR 404, as well as other existing federal and State statutes designed to protect marine resources. See Section 3.3.1 for an overview of proposed sanctuary regulations and Appendices C and E for a comprehensive list of existing federal and State authorities that the NMSA would complement and supplement. See Section 4.4 for further discussion of protected species and habitats and Section 4.5 for discussion of cultural and historic resources in the proposed sanctuary. Designating the proposed national marine sanctuary under the NMSA would complement and supplement these State and federal resource protection laws to manage these nationally significant resources.

The directives in Presidential Proclamations 8031 and 8112 (codified in 50 CFR part 404) and those in 9478 address similar resource management concerns but exhibit technical differences in structure and content. At present, there are no regulations to authorize permitting or enforce the prohibitions in the MEA as outlined in Presidential Proclamation 9478. The lack of implementing regulations presents uncertainty in management, enforcement, and allowed activities. Sanctuary designation provides the opportunity to develop a cohesive set of regulations that maintains and enhances existing resource protection by adopting management

measures from the Presidential Proclamations and, in some places, adding to those measures to allow for consistency in the management of resources and resource values in this area.

Through sanctuary designation, the NMSA provides additional regulatory tools for management and protection of resources within Papahānaumokuākea. Sanctuary designation provides the authority for a permitting system to manage waters of PMNM and the MEA in coordination with the Monument permitting system, eliminating potential gaps in management. This provides clarity for permittees, managers, and enforcement personnel, including for permitted activities that occur across PMNM and the MEA. With sanctuary designation, the NMSA authorizes NOAA to assess civil penalties for violations of sanctuary regulations or permits and to enforce other provisions of the NMSA. Under Section 312 of the NMSA, NOAA can impose liability for destruction, loss of, or injury to sanctuary resources and provide natural resource damage assessment to authorities for destruction, loss of, or injury to any sanctuary resource.

Section 304(d) of the NMSA allows NOAA to further protect resources by requiring federal agencies to consider alternatives to proposed actions that are “likely to destroy, cause the loss of, or injure any sanctuary resource.” These and other directives in the NMSA would help to ensure a stable and comprehensive framework deserving of this place of special national significance.

Sanctuary designation also provides additional non-regulatory tools to further manage and protect Monument resources. For more than 20 years, NOAA has maintained robust and effective programs for conservation science; the weaving of Kānaka ‘Ōiwi, heritage, knowledge, values, and practices into co-management; maritime heritage; and education, providing services and expertise that can be leveraged to support resource protection across the Monument.

2.2.2 Approach to Management of the Proposed Sanctuary

Through the proposed sanctuary designation, NOAA is proposing to supplement and complement existing management of the area and would manage the sanctuary in close collaboration with Monument co-trustees. The draft SMP (Appendix A), required by the NMSA and developed in consultation with the State, FWS, and OHA, provides the framework, core elements, adaptive management strategies, and comprehensive suite of actions required to address resource management needs in the areas of resource protection, research and monitoring, cultural heritage, and outreach and education. This collaborative approach was followed to explicitly “ensure concurrence of plans between the sanctuary and the overarching monument” (Appendix A: Draft SMP). The draft SMP also reflects the strengths of the National Marine Sanctuary System which includes national programs for conservation science, maritime heritage, climate change, and education.

2.3 State of Hawai‘i Designation Responsibility

The State of Hawai‘i, who co-developed this draft EIS, proposes to the public for consideration that NOAA include all state waters and submerged lands within the Monument in the proposed national marine sanctuary. These waters and submerged lands run from zero to three nmi around Nihoa, Mokumanamana, Lalo, Kamole (Laysan Island), Kamokuokamohoali‘i (Maro Reef), ‘Ōnūnui and ‘Ōnūiki (Gardner Pinnacles), Kapou (Lisianski Island), Manawai, and Hōlanikū. The State waters and submerged lands within Papahānaumokuākea serve significant

ecological, cultural, and historic purposes. The State also recognizes the Native Hawaiian spiritual connection to Papahānaumokuākea and its significance in Native Hawaiian traditions and culture. The State of Hawai‘i would co-manage the proposed sanctuary. This proposed sanctuary management structure would be incorporated into the larger co-management framework for the Monument.

2.3.1 State of Hawai‘i Constitutional Public Trust Duties

The State has constitutional public trust duties to protect these waters and submerged lands for the benefit of the public and Native Hawaiians. Article XI, section one of the Constitution of the State of Hawai‘i stipulates a State duty to “conserve and protect Hawaii’s natural beauty and all natural resources” for the benefit of the people and future generations. The State also has constitutional duties particular to Native Hawaiians.

2.3.2 Native Hawaiian Rights

Article XII, section seven of the Constitution of the State of Hawai‘i stipulates that the State must protect Native Hawaiian rights “customarily and traditionally exercised for subsistence, cultural and religious purposes.” The Admission Act, Section 5 and Article XII, Section 4 of the Constitution of the State of Hawai‘i provide additional protection through a separate public land trust with the State as trustee for the ceded lands granted to it during its admission to the U.S. as a state.⁵ Native Hawaiians and the “general public” are beneficiaries of both trusts.⁶ HEPA requires analysis of impacts to cultural resources resulting in the State’s CIA within the document titled *E Ho‘i I Ke Au A Kanaloa* (Nohopapa Hawai‘i, 2023). To support the State’s constitutional duties to protect Native Hawaiian traditional and customary practices, this document also contains a legal analysis.

The CIA presents a detailed genealogy of Papahānaumokuākea, its connection to Hawaiian history and the main Hawaiian Islands, and the cultural resources, practices, beliefs, and spirituality associated with this biocultural seascape that are fundamental to Native Hawaiians. Following extensive outreach to identify individuals and groups interested in participating, Nohopapa Hawai‘i, LLC interviewed 25 people with connections to Papahānaumokuākea. These interviewees identified their cultural practices and connection to Papahānaumokuākea, potential impacts to these practices and cultural resources, recommendations, and other considerations. The CIA outlines several Native Hawaiian customs such as voyaging, kilo (indigenous observational science), feather gathering, and fishing. Based on analysis in the CIA,

⁵ The public land trust has five trust purposes: the support of the public schools and other public educational institutions, the betterment of the conditions of native Hawaiians, the development of farm and home ownership on as widespread a basis as possible, for the making of public improvements, and for the provision of lands for public use. HI ADMISSION ACT § 5(f).

⁶ The Admission Act refers to the definition of “native Hawaiian” as used in the Hawaiian Homes Commission Act (1920) which is applied to “any descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778” HI HHCA § 201. Article XII of the Constitution of the State of Hawai‘i applies to descendants of native Hawaiians regardless of their blood quantum. Pub. Access Shoreline Hawai‘i by Rothstein v. Hawai‘i Cnty. Plan. Comm’n by Fujimoto, 79 Haw. 425, 449, 903 P.2d 1246, 1270 (1995). All Hawaiians fall under the classification of the general public. Off. of Hawaiian Affs. v. Hous. & Cmty. Dev. Corp. of Hawai‘i, 121 Haw. 324, 334, 219 P.3d 1111, 1121 (2009), as amended (Nov. 24, 2009).

these traditions and customs are not significantly impacted by sanctuary designation but may actually be subject to greater protection with the sanctuary designation.

The legal analysis associated with the CIA provides a legal background and support for the State to meet its duty to “affirmatively protect” religious, traditional, and customary practices of Native Hawaiians, as required under the Constitution of the State of Hawai‘i. The legal analysis highlights the need for the State to conduct a three-step Ka Pa‘akai Analysis:

- (1) the identity and scope of “valued cultural, historical, or natural resources” in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
- (2) the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
- (3) the feasible action, if any, to be taken ... by the [State and/or its political subdivisions] to reasonably protect native Hawaiian rights if they are found to exist.⁷

The Ka Pa‘akai Analysis is based on information provided in the legal analysis, CIA, draft EIS, and other supporting documents.

2.3.3 State Jurisdiction and the Hawaiian Islands National Wildlife Refuge Waters

State waters and submerged lands overlap with the Hawaiian Islands NWR. The original designation of the Hawaiian Islands NWR in 1909 describes its seaward boundary with a simple map, noting that it includes the “islets and reefs” of all Northwestern Hawaiian Islands except Midway (Executive Order 1019). Navigational maps could not be generated based on this description. Ongoing communication and collaboration between the State and FWS, beginning soon after the admission of the State to the U.S., have not yet resulted in a clear seaward boundary. Nevertheless, the State, FWS, OHA, and NOAA have successfully co-managed the area without an official seaward boundary for the Hawaiian Islands NWR. The State proposes to continue this co-management structure for the proposed sanctuary.

⁷ Ka Pa‘akai O Ka ‘Aina v. Land Use Comm’n, 94 Hawai‘i 47, 7 P.3d 1084 (2000).

Chapter 3: Alternatives

In addition to mandating consideration of the No Action Alternative, NEPA regulations (40 CFR § 1502.14) require the evaluation of a reasonable range of alternatives that meet the proposed action's purpose and need, and the comparative assessment of the alternatives' impacts to allow for public disclosure and informed decision-making. This chapter includes a description of the alternatives (No Action and three action alternatives), an outline of the process used to develop them, and discusses alternatives NOAA eliminated from detailed study and the reasons for eliminating them. NOAA developed its reasonable range of alternatives as required by CEQ's NEPA regulations and the NOAA NEPA Companion Manual.

The proposed action is the establishment of a sanctuary with terms of designation, regulations, and a sanctuary management plan. Action alternatives only differ by proposed boundaries, with Alternative 1 the largest and most comprehensive, and Alternatives 2 and 3 smaller.

The boundary alternatives include the following:

- Alternative 1 is coextensive with the marine portions of the Monument. The boundary includes the marine environment surrounding the Northwestern Hawaiian Islands from the shoreline⁸ of the islands and atolls seaward to 200 nmi, including all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai'i Northwestern Hawaiian Islands Marine Refuge. The area encompassed in Alternative 1 is approximately 582,570 square miles (439,910 square nmi).
- Alternative 2 includes the marine environment from the shoreline of the islands and atolls seaward to 50 nmi. This alternative includes all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai'i Northwestern Hawaiian Islands Marine Refuge. This alternative does not include the MEA. The area encompassed in Alternative 2 is approximately 139,782 square miles (105,552 square nmi).
- Alternative 3 has the same boundaries as Alternative 1, excluding waters within the Midway Atoll and Hawaiian Islands National Wildlife Refuges. The area encompassed in Alternative 3 is approximately 581,263 square miles (438,923 square nmi).

Under each action alternative, NOAA would designate a national marine sanctuary with terms of designation, regulations, and a management plan. The terms of designation, regulations, and sanctuary management plan are consistent across all alternatives, differing only to the extent necessary to reflect the different boundaries. The analysis of impacts related to implementation of the draft SMP is limited, and primarily focused on socioeconomic impacts, because the SMP is an overarching administrative document that includes no specific implementation level projects or activities. The draft SMP is available as Appendix A. Principally the draft EIS focuses

⁸ The State defines shoreline as "the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season of the year in which the highest wash of the waves occur, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves" (HAR § 13-222).

on potential impacts to existing laws and management, shallow water habitat, corals, cultural and maritime heritage resources, and human uses from the proposed designation.

NOAA has identified Alternative 1 as the Agency-Preferred Alternative. Alternative 1 also represents the area under consideration described by NOAA in the Notice of Intent (86 FR 64904[Nov. 19, 2021]), as well as the boundary reflected in the proposed rule. See Chapter 5 for a comparison of all alternatives, as well as details explaining the basis for identifying the Agency Preferred Alternative.

3.1 Development of Alternatives

Developing alternatives required assessing a range of technically and economically feasible options that meet the purpose and need of the proposed action of designating a sanctuary. As noted previously, the 2020 Joint Explanatory Statement accompanying the Consolidated Appropriations Act directed NOAA to initiate the process under the NMSA to designate Papahānaumokuākea as a national marine sanctuary “to supplement and complement, rather than supplant, existing authorities.” In response to this instruction, NOAA’s proposed action and the development of all reasonable alternatives was guided by two themes:

1. The protections described in Presidential Proclamations 8031, 8112, and 9478 provide the foundation for developing alternatives, and the proposed sanctuary would add to and not diminish those protections.
2. The structural features related to the co-management of the Monument would be maintained if a sanctuary is designated.

In developing alternatives, NOAA considered the following questions:

- Is the alternative consistent with the purposes and policies of the NMSA?
- Does the alternative meet the purpose and need of the proposed action?
- Does the alternative add to and not diminish existing protections?
- Does the alternative enhance, improve, or maintain public awareness and/or conservation of the natural, ecological, historical, scientific, cultural, archaeological, and/or educational resources, esthetic qualities, and/or resolve user conflicts in the area?

Public scoping comments (Appendix F) ranged from opposing sanctuary designation to strong support for sanctuary designation, including requests to designate a sanctuary in areas of the marine environment beyond current Monument boundaries.

3.1.1 Development of Boundary Alternatives

A wide range of boundary alternatives were suggested and supported in public scoping comments from a variety of interested parties. The majority of boundary-related comments suggested that NOAA should include all waters of PMNM and the MEA in the proposed sanctuary. Others suggested that the sanctuary include the marine environment within PMNM and exclude the MEA. Others suggested an even smaller boundary, including the marine environment within PMNM excluding the waters within Midway Atoll NWR. No public comments supported excluding marine waters within the Hawaiian Islands NWR.

FWS, a cooperating agency for this action and a co-manager of the Monument, requested that NOAA consider an alternative that excludes marine areas of NWRs from the proposed sanctuary, consistent with the directive Presidential Proclamation 9478 (2016), which states “the Secretary of Commerce should consider initiating the process ... to designate the Monument Expansion area and the Monument seaward of the Hawaiian Islands National Wildlife Refuge and Midway Atoll National Wildlife Refuge ... as a National Marine Sanctuary to supplement and complement existing authorities.”

A couple of comments suggested that sanctuary boundaries should extend beyond the footprint of the Monument to adjacent areas, including nearby seamounts and the entirety of Middle Bank, while other commenters did not want Middle Bank to be included in the sanctuary. All of the proposed boundary alternatives have been included as action alternatives or as alternatives that were eliminated from detailed study, with a brief discussion of the reason for elimination. The text below summarizes the rationale for the alternatives carried forward.

Sections 3.4–3.6 describe the boundary alternatives NOAA is considering for the proposed designation of the sanctuary. Table 3.1 provides comparative statistics for all boundary action alternatives.

Table 3.1. Description of Alternative Boundaries

Alternative	Total Area	Overlay of Marine Environment	Features
Alternative 1	582,570 square miles	PMNM, MEA, National Wildlife Refuges, State Marine Refuge	Largest sanctuary alternative.
Alternative 2	139,782 square miles	PMNM, National Wildlife Refuges, State Marine Refuge	Smallest sanctuary alternative.
Alternative 3	581,263 square miles	Part of PMNM, MEA, Part of State Marine Refuge	Similar to Alternative 1, but excludes the National Wildlife Refuges, therefore much of the State waters are not included.

3.1.2 Development of Proposed Regulations

The NMSA authorizes NOAA to establish site-specific regulations for each national marine sanctuary. The purpose and need for the proposed sanctuary designation (Chapter 2) and NOAA’s preferred alternative provide the framework for the development of the proposed sanctuary regulations. Scoping comments from numerous individuals and Non-Governmental Organizations stressed the need for consistency with existing Monument regulations as well as augmentation of Monument regulations and exemptions for certain activities. Presidential Proclamations 8031, 8112, and 9478 served as benchmarks for drafting regulations for the proposed sanctuary. The proposed rule would only add to and not diminish the management measures and protections provided by the presidential proclamations. Note, the PMNM regulations at 50 CFR Part 404 apply to the part of the monument designated by Presidential Proclamation 8031 and 8112 (Original Area, 0–50 nmi). The text of the regulations found at 50 CFR Part 404 is essentially identical to the directives in Presidential Proclamation 8031.

Therefore, the 50 CFR Part 404 regulations do not expand on the nature of the action that was taken through Presidential Proclamation 8031 as modified by Presidential Proclamation 8112.

In the proposed sanctuary regulations, NOAA has adopted the management measures from the Presidential Proclamations, and in a few places, added onto those measures to provide consistency in management across the proposed sanctuary. Minor changes in management measures for each area of the Monument (PMNM and MEA) are provided for in the proposed sanctuary regulations to remove discrepancies and gaps in prohibitions, regulated activities, and permit criteria across the two zones.

Per the NMSA, NOAA provided the WPRFMC with the opportunity to recommend any draft fishing regulations it deemed necessary to implement the proposed sanctuary designation. NOAA initiated the consultation on November 19, 2021 ([letter](#)). NOAA accepted the majority of the WPRFMC's recommendation, as it was found to fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation. However, the WPRFMC's recommendation providing Native Hawaiian Subsistence Practices Fishing Permit applicants the ability to request limited cost recovery by selling their catch in the permit application process through a Statement of Need for cost recovery along with expected costs, failed to fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation ([NOAA response letter, May 31, 2023](#)). NOAA prepared regulations under the Magnuson–Stevens Fishery Conservation and Management Act and the NMSA to reflect the outcome of the NMSA section 304(a)(5) process. Appendix C provides further details of this consultation process.

3.1.3 Development of Sanctuary Management Plan

Management plans are sanctuary-specific planning and management documents used by all national marine sanctuaries. They identify immediate, mid-range, and long-range opportunities, and outline future activities. The draft SMP substantially reflects the core values and integrated approach to management developed by the Monument co-managers, weaving together knowledge systems from a biocultural perspective and from a co-management perspective. The integration between the draft SMP and Monument management 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. The draft SMP would chart the course for the proposed sanctuary over the next five to 10 years. The draft SMP is included as Appendix A to the draft EIS.

Management plans fulfill many functions, including describing non-regulatory programs; outlining collaborations with partners; setting priorities for resource protection, research, and education programs; and guiding development of future budgets, staffing needs, and management activities. The NMSA requires NOAA to review sanctuary management plans every five years.

3.2 No-Action Alternative

Under the No Action Alternative, NOAA would not designate a national marine sanctuary at Papahānaumokuākea. There would be no change from current management direction or level of

management intensity. The existing management framework for PMNM (0 to 50 nmi), described in Section 4.2, includes existing regulations in the PMNM (50 CFR 404), a Monument Management Plan, and a permitting process that includes operational protocols, best management practices (BMPs), and other guiding documents listed in Section 4.2.3. Management of the MEA would continue to be guided by Presidential Proclamation 9478.

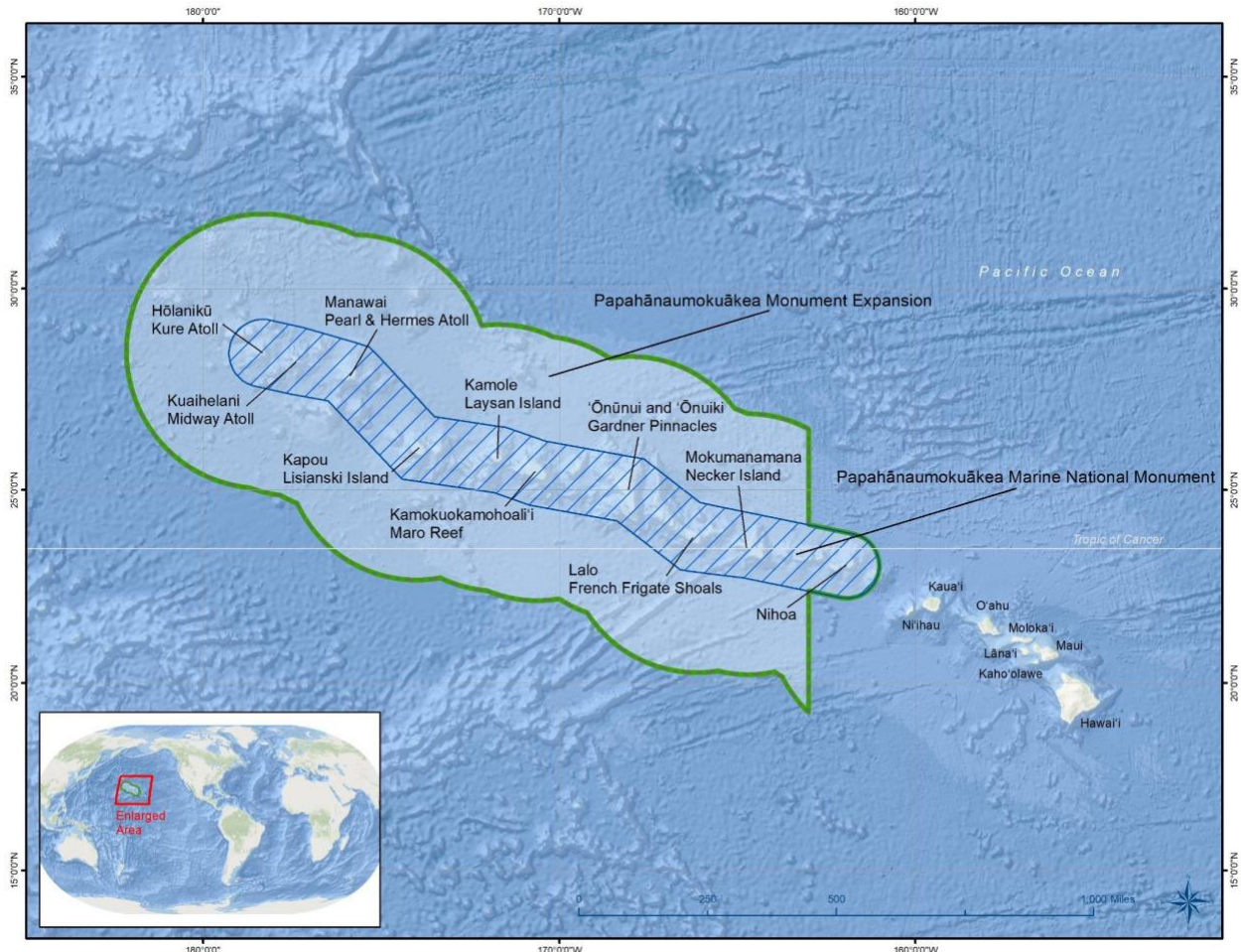


Figure 3.1. No Action Alternative showing existing monument boundaries. Image: NOAA

3.3 Elements Common to All Action Alternatives

3.3.1 Regulations

Under all action alternatives, proposed regulations include site-specific definitions, co-management, access provisions, prohibited or otherwise regulated activities, and permit procedures. In addition, applicable sections of the *National Marine Sanctuary Program Regulations* (15 CFR part 922) subpart A—*Regulations of General Applicability* and subpart D—*National Marine Sanctuary Permitting* would apply within the proposed sanctuary. Within subpart D, section 922.36 (NMSA Authorizations) and Section 922.37 (Appeals of Permitting Decisions) would not be applicable for the proposed action.

Definitions

The proposed rule adopts common terms defined in the Regulations of General Applicability at 15 CFR § 922.11. In addition, NOAA proposes to include site-specific definitions within the proposed rule. To the extent that a term appears in 15 CFR § 922.11 and in the site-specific regulations, the site-specific definition governs. NOAA is proposing to adopt 19 site-specific definitions for the proposed sanctuary (see the Notice of Proposed Rulemaking for full text of these definitions). The terms NOAA has defined for this site are:

- Bottomfish Species and Pelagic Species (adopted from regulations for Fisheries in the Western Pacific, 50 CFR § 665.201 and 50 CFR § 665.800).
- Ecological integrity, Midway Atoll Special Management Area, Native Hawaiian practices, Pono, Recreational activity, Special Preservation Area, Stowed and not available for immediate use, Sustenance fishing, and Vessel Monitoring System or VMS (adopted from Presidential Proclamation 8031).
- Commercial fishing and Non-commercial fishing (adopted from the Magnuson-Stevens Fishery Conservation and Management Act and, in part, Western Pacific Fisheries regulations, 50 CFR § 665.12).
- Particularly Sensitive Sea Area (PSSA) (adopted from IMO Resolution A.982(24), December 1, 2005).
- Areas To Be Avoided and Office of Law Enforcement (adopted from Papahānaumokuākea Marine National Monument regulations, 50 CFR § 404.3).
- Outer Sanctuary Zone, to define the area of the sanctuary that would extend from approximately 50 nautical miles from all the islands and emergent lands of the Northwestern Hawaiian Islands to the extent of the seaward limit of the United States Exclusive Economic Zone west of 163° West Longitude. This area of the proposed sanctuary would correspond with the area designated as a marine national monument by Presidential Proclamation 9478, referred to as the “Papahānaumokuākea Marine National Monument Expansion” or MEA.
- Reporting area, to define the area of the proposed sanctuary that extends outward ten nautical miles from the Particularly Sensitive Sea Area (PSSA) boundary, as designated by the IMO, and excludes the Areas to be Avoided that fall within the PSSA boundary. NOAA is proposing to define the “reporting area” to clarify in which areas of the proposed sanctuary ship reporting requirements apply.
- Scientific instrument, a term used in Presidential Proclamation 9478, but not defined. The proposed rule defines scientific instruments to mean “a device, vehicle, or tool used for scientific purposes and is inclusive of structures, materials, or other matter incidental to proper use of such device, vehicle, or tool.”

Co-Management

Through sanctuary designation, NOAA is proposing to supplement and complement existing management of the Monument, and would manage the sanctuary in close collaboration with Monument co-trustees.

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.

Access

Access to the sanctuary would be prohibited and thus unlawful except under the following circumstances: for emergency response actions, law enforcement activities, and activities and exercises of the Armed Forces; pursuant to a sanctuary permit; when conducting non-commercial fishing activities in the Outer Sanctuary Zone authorized under the Magnuson-Stevens Fishery Conservation and Management Act provided that no sale of harvested fish occurs; and when passing through the sanctuary without interruption.

A vessel may pass without interruption through the sanctuary without requiring a permit as long as the vessel does not stop, anchor, or engage in prohibited activities within the sanctuary, and vessel discharges are limited to the following:

1. Vessel engine cooling water, weather deck runoff, and vessel engine exhaust within a Special Preservation Area or the Midway Atoll Special Management Area.
2. Discharge incidental to vessel operations such as deck wash, approved marine sanitation device effluent, cooling water, and engine exhaust in areas other than Special Preservation Areas or the Midway Atoll Special Management Area.

NOAA also proposes regulations to implement the ship reporting system (CORAL SHIPREP) adopted by the IMO, which would require entrance and exit notifications for vessels that pass without interruption through the sanctuary areas contained within a reporting area, which would be defined as “the area of the proposed sanctuary that extends outward ten nautical miles from the PSSA boundary, as designated by the IMO, and excludes the Areas To Be Avoided that fall within the PSSA boundary.”⁹ The ship reporting requirements would not apply to vessels conducting activities pursuant to a sanctuary permit or vessels conducting non-commercial fishing activities in the Outer Sanctuary Zone authorized under the Magnuson-Stevens Fishery Conservation and Management Act. NOAA also proposes exemptions for emergency response and law enforcement purposes, and for activities and exercises of the Armed Forces. The ship reporting requirements would apply to vessels of the United States; all other ships 300 gross tonnage or greater that are entering or departing a United States port or place; and all other ships of any size entering or departing a United States port or place and experiencing an emergency while transiting through the reporting area.

Prohibited or Otherwise Regulated Activities

NOAA is proposing prohibited or otherwise regulated activities as well as exemptions to the prohibited activities under 15 CFR part 922 subpart W.

⁹ The boundary areas for Alternatives 2 and 3 exclude areas of the proposed reporting area. Therefore, the reporting area would be reduced in size under Alternatives 2 and 3, and only include areas that fall within each respective boundary alternative.

The following activities would be prohibited within the proposed sanctuary, subject to specified exemptions:

1. Exploring for, developing, or producing oil, gas, or minerals, or any energy development activities.
2. Using or attempting to use poisons, electrical charges, or explosives in the collection or harvest of a sanctuary resource.
3. Introducing or otherwise releasing an introduced species from within or into the sanctuary.
4. Deserting a vessel.
5. Anchoring on or having a vessel anchored on any living or dead coral with an anchor, anchor chain, or anchor rope
6. Commercial fishing and possessing commercial fishing gear except when stowed and not available for immediate use.
7. Non-commercial fishing and possessing non-commercial fishing gear except when stowed and not available for immediate use.
8. Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands.
9. 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.
10. Attracting any living sanctuary resource.
11. Touching coral, living or dead.
12. Swimming, snorkeling, or closed or open circuit SCUBA diving.
13. 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 and injures any resources of the sanctuary, except as described to allow for passage without interruption.
14. Anchoring a vessel.

Prohibitions 1–6 could never be allowed via permit, while prohibitions 7–14 could be regulated via a permit. Obtaining a permit to conduct activities relating to Prohibition 8 within the Outer Sanctuary Zone would be further restricted to scientific instruments only, consistent with Presidential Proclamation 9478.

Exemptions

The proposed prohibitions would not apply to:

1. Activities necessary to respond to emergencies that threaten life, property, or the environment.
2. Activities necessary for law enforcement purposes.
3. Activities and exercises of the U.S. Armed Forces including those carried out by the U.S. Coast Guard (USCG).

4. Non-commercial fishing in the Outer Sanctuary Zone authorized under the Magnuson-Stevens Fishery Conservation and Management Act is exempt from prohibitions 7 -14, provided that no sale of harvested fish occurs.¹⁰
5. Scientific exploration or research activities by or for the Secretary of Commerce and/or the Secretary of the Interior in the Outer Sanctuary Zone.

NMSA Regulations

Sanctuary designation imparts a specific set of new benefits afforded by the NMSA. *National Marine Sanctuary Program Regulations* (15 CFR part 922) subpart A—Regulations of General Applicability includes sections relevant to the action. The NMSA allows ONMS to supplement existing authorities, in part with the following:

- **Emergency regulations (§ 922.7).** Where necessary to prevent or minimize the destruction of, loss of, or injury to a Sanctuary resource or quality, or minimize the imminent risk of such destruction, loss, or injury, any and all such activities are subject to immediate temporary regulation, including prohibition.
- **Penalties (§ 922.8(a))** Each violation of the NMSA, any NMSA regulation, or any permit issued pursuant thereto, is subject to a civil penalty. Each day of a continuing violation constitutes a separate violation.
- **Response costs and damages (§ 922.9)** Under section 312 of the NMSA, any person who destroys, causes the loss of, or injures any Sanctuary resource is liable to the United States for response costs and damages resulting from such destruction, loss, or injury. Any vessel used to destroy, cause the loss of, or injure any Sanctuary resource is liable in rem to the United States for response costs and damages resulting from such destruction, loss, or injury.

In addition, NMSA Section 304(d) requires interagency consultation for any federal agency action that is likely to destroy, cause the loss of, or injure any sanctuary resource. This requirement applies to all federal agencies, including agencies that are otherwise exempt from sanctuary prohibitions. If the federal agency action is likely to destroy, cause the loss of, or injure a sanctuary resource, the federal agency proposing the action shall provide the Secretary of Commerce with a written statement describing the action and its potential effects on sanctuary resources. If the Secretary of Commerce finds that the federal agency action is likely to destroy, cause the loss of, or injure a sanctuary resource, the secretary shall recommend reasonable and prudent alternatives.

Permitting

The proposed sanctuary includes a permitting system modeled after the existing Monument permitting system. The proposed permitting system would not supplant the joint permitting system for PMNM, and was developed to ensure a continued joint permitting system administered by Monument co-managers. The proposed regulations include two types of sanctuary permits. These proposed sanctuary permit categories were designed to provide the same management function and permittee interface as the current Monument permits. Co-

¹⁰ As Alternative 2 excludes the waters of the MEA for sanctuary designation, this exemption is not part of Alternative 2.

managers may develop a Memorandum of Agreement in the future to add further clarification on joint- permitting.

Sanctuary General Permits

The proposed regulations would establish a permit process to allow prohibited activities 7 through 14 under certain conditions via a national marine sanctuary general permit pursuant to 15 CFR part 922, subpart D and the site-specific regulations proposed for this sanctuary. Under the proposed regulations, sanctuary general permits may be issued if the ONMS Director (typically delegated to the sanctuary Superintendent) determines that the proposed activities fall within one of three categories in the national regulations (15 CFR § 922.30(b)) relevant to this proposed sanctuary: (1) Research—activities that constitute scientific research or scientific monitoring of a national marine sanctuary resource or quality; (2) Education—activities that enhance public awareness, understanding, or appreciation of a national marine sanctuary or national marine sanctuary resource or quality; (3) Management—activities that assist in managing a national marine sanctuary. NOAA is proposing to add two additional categories specific to Papahānaumokuākea within 15 CFR 922.30 for which a sanctuary general permit could be issued: Native Hawaiian Practices—activities that allow for Native Hawaiian practices within the Sanctuary, and Recreation—recreational activities within the Sanctuary limited to the Midway Atoll Special Management Area.¹¹ NOAA is proposing these two additional general permit categories to maintain the types of activities permitted under Monument regulations.

Per 15 CFR § 922.33, the ONMS Director must make findings prior to issuing a sanctuary general permit, based on nine review criteria, including if the proposed activity will be conducted in a manner compatible with the primary objective of protection of national marine sanctuary resources and qualities, and if it is necessary to conduct the proposed activity within the national marine sanctuary to achieve its stated purpose. These findings parallel nine of the ten existing Monument permitting criteria. One general criteria and all permit-specific criteria for Native Hawaiian Practices and Recreation permits from 50 CFR § 404.11 would be added to section 922.33 to be consistent with the general findings criteria and permit-specific findings criteria for the Monument. This proposed rule would also amend 15 CFR § 922.37 “Appeals of permitting decisions,” to reflect that the general appeals process for sanctuary permits will not apply to permit applications for the proposed sanctuary. Consistent with the current interagency permitting regime that has been in place for the Monument, there would be no appeals process for the proposed sanctuary. Should a permit applicant want NOAA and the other agencies to reconsider a permitting decision, they would need to file a new permit application.

Special Use Permits

Section 310 of the NMSA (16 U.S.C. § 1441) states that Special Use permits may be issued to authorize the conduct of specific activities in a national marine sanctuary under certain circumstances. This provision for Special Use permits applies to any national marine sanctuary. A permit issued under section 310 of the NMSA: (1) shall authorize the conduct of an activity only if that activity is compatible with the purposes for which the sanctuary is designated and with protection of sanctuary resources; (2) shall not authorize the conduct of any activity for a

¹¹ Recreation permits would not be added under Alternative 3, as Midway Atoll NWR (the only location these permits would be issued) would not be included in the sanctuary designation.

period of more than five years unless otherwise renewed; (3) shall require that activities carried out under the permit be conducted in a manner that does not destroy, cause the loss of, or injure sanctuary resources; and (4) shall require the permittee to purchase and maintain comprehensive general liability insurance, or post an equivalent bond, against claims arising out of activities conducted under the permit and to agree to hold the United States harmless against such claims. The NMSA also authorizes NOAA to assess and collect fees for the conduct of any activity under a Special Use permit, including costs incurred, or expected to be incurred, in issuing the permit and the fair market value of the use of sanctuary resources. Implementing regulations at 15 CFR § 922.35 provide additional detail on assessment of fees for Special Use permits. Like with sanctuary general permits, NOAA can place conditions on Special Use permits specific to the activity being permitted. NOAA shall provide appropriate public notice before identifying any category of activity subject to a Special Use permit.

NOAA is not proposing any new category of activity subject to a Special Use permit as part of this designation. In evaluating applications for Special Use permits, NOAA will consider all applicable permitting requirements, including permitting procedures and criteria under the Monument's existing management framework. For example, certain activities may be subject to the requirements of Special Ocean Use permits, as authorized by Presidential Proclamation 8031, and issued by Monument managers in the PMNM via 40 CFR § 404.11. Special ocean use permit requirements were modeled after Special Use permits authorized by section 310 of the NMSA, but also include a few additional requirements, such as for activities within the Midway Atoll Special Management Area.

Sustenance Fishing

The Secretary may authorize sustenance fishing¹² outside of any Special Preservation Area as a term or condition of any sanctuary permit. Sustenance Fishing is allowed incidental to an activity permitted in the PMNM under Presidential Proclamation 8031, and in regulations at 50 CFR part 404. Sustenance fishing was not specifically identified in Presidential Proclamation 9478 governing the MEA, but is allowable. For consistency in management and permitting, NOAA proposes managing this activity as a term or condition of a general permit or special use permit for the proposed sanctuary.

Vessel Monitoring System

To complement existing regulations for PMNM, and provide consistency and comprehensive protection across the sanctuary, an owner or operator of a vessel that has been issued a general permit or special use permit must have a working NOAA Office of Law Enforcement (OLE) type-approved Vessel Monitoring System (VMS) on board when within the Sanctuary. OLE has authority over the type of VMS, installation of the VMS and supplemental equipment, and means of operation. The owner or operator of a vessel must coordinate with OLE to install and activate an approved VMS prior to departure. If the VMS is not operating properly while at sea, the owner or operator must immediately contact OLE, and follow instructions from that office, including (1) manually communicating the vessel's location; or (2) returning to port until the VMS is operable. The permittee must allow OLE, USCG, and their authorized officers and

¹² Sustenance fishing means fishing for bottomfish or pelagic species in which all catch is consumed within the Monument, and that is incidental to an activity permitted under this part (50 CFR § 404.3).

designees access to the vessel's position data obtained from the VMS. Consistent with other applicable laws, including the limitations on access to, and use of, VMS data collected under the Magnuson-Stevens Fishery Conservation and Management Act, the co-trustees may have access to, and use of, collected data for scientific, statistical, and management purposes. The following activities regarding VMS are prohibited and thus unlawful for any person to conduct or cause to be conducted:

- i. Operating any vessel within the Sanctuary without an OLE-type approved VMS;
- ii. Failing to install, activate, repair, or replace a VMS prior to leaving port.
- iii. Failing to operate and maintain a VMS on board the vessel at all times.
- iv. Tampering with, damaging, destroying, altering, or in any way distorting, rendering useless, inoperative, ineffective, or inaccurate the VMS, or VMS signal.
- v. Failing to contact OLE or follow OLE instructions when automatic position reporting has been interrupted.
- vi. Registering a VMS to more than one vessel at the same time.
- vii. Connecting or leaving connected additional equipment to a VMS unit without the prior approval of OLE.
- viii. Making a false statement, oral or written, to an authorized officer regarding the installation, use, operation, or maintenance of a VMS unit or communication service provider.

Terms of Designation

Section 304(a)(4) of the NMSA requires that the terms of designation for national marine sanctuaries include: (1) the geographic area included within the sanctuary; (2) the characteristics of the area that give it conservation, recreational, ecological, historical, research, educational, or aesthetic value; and (3) the types of activities subject to regulation by NOAA to protect those characteristics. See the accompanying Notice of Proposed Rulemaking for the full text of the proposed terms of designation.

The proposed Sanctuary terms of designation establish the authorities to regulate and prohibit activities to the extent necessary and reasonable to ensure the protection and management of the area's conservation, ecological, recreational, research, educational, historical, and aesthetic resources and qualities.

3.3.2 Sanctuary Management Plan and Program Support

Sanctuary Management Plan

The NMSA requires preparation of a draft management plan as part of the proposed action, included as Appendix A to the draft EIS. The core elements and framework for the SMP were designed in coordination with the monument's co-trustees, in order to ensure concurrence of plans between the proposed sanctuary designation and the overarching monument designation. The core elements of this draft SMP—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. This approach ensures that when Monument management planning resumes, there is a foundation to build on that would not alter the Monument's co-management structure.

At the heart of the draft SMP, there are five kūkulu (pillars of management):

1. Resource Protection and Conservation
2. Research and Monitoring
3. Governance and Operations
4. Partnerships and Constituent Engagement
5. Education, Interpretation, and Mentoring.

Each kūkulu includes a goal and five to 13 strategies. The strategies identified in the draft SMP entail actions already being conducted by ONMS and Monument co-managers. Performance indicators and measures provided for each kūkulu provide an indication of types of actions that typically occur, and would be assessed in tracking management plan strategy implementation.

Program Support

While co-trustee agencies provide staff and program support for the Monument, sanctuary designation would ensure access to ONMS resources, including national programs for conservation science, maritime heritage, climate change and education. To augment this support, NMSA Section 311(b) authorizes non-profit organizations to solicit private donations on behalf of the sanctuary, and NMSA Section 311(f) allows ONMS to apply for, accept, and use grants from other federal agencies, states, local governments, regional agencies, interstate agencies, foundations, or other persons.

3.4 Action Alternative 1

This section describes the components of Alternative 1, the agency-preferred alternative.

3.4.1 Sanctuary boundary

Alternative 1 is coextensive with the marine portions of the Monument. The boundary includes the marine environment surrounding the Northwestern Hawaiian Islands from the shoreline of the islands and atolls seaward to 200 nmi, including all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai‘i Northwestern Hawaiian Islands Marine Refuge. The area encompassed in Alternative 1 is approximately 582,570 square miles (439,910 square nmi).

Alternative 1 includes all of the resources, habitats, and interconnected ecosystems described in Section 1.2.1 and in Chapter 4. Shallow-water coral reefs supporting sea turtles and monk seals, schools of apex predatory fish, and other species occur in the nearshore habitat. Deeper waters overlying algal beds and non-photosynthetic corals occur seaward of the shallow reefs, where pelagic fish migrate along the chain and monk seals and seabirds forage. Deep offshore waters of the MEA contain numerous offshore banks and seamounts, which support oases of life, as well as hundreds of military vessels and aircraft at the bottom of these deep waters.

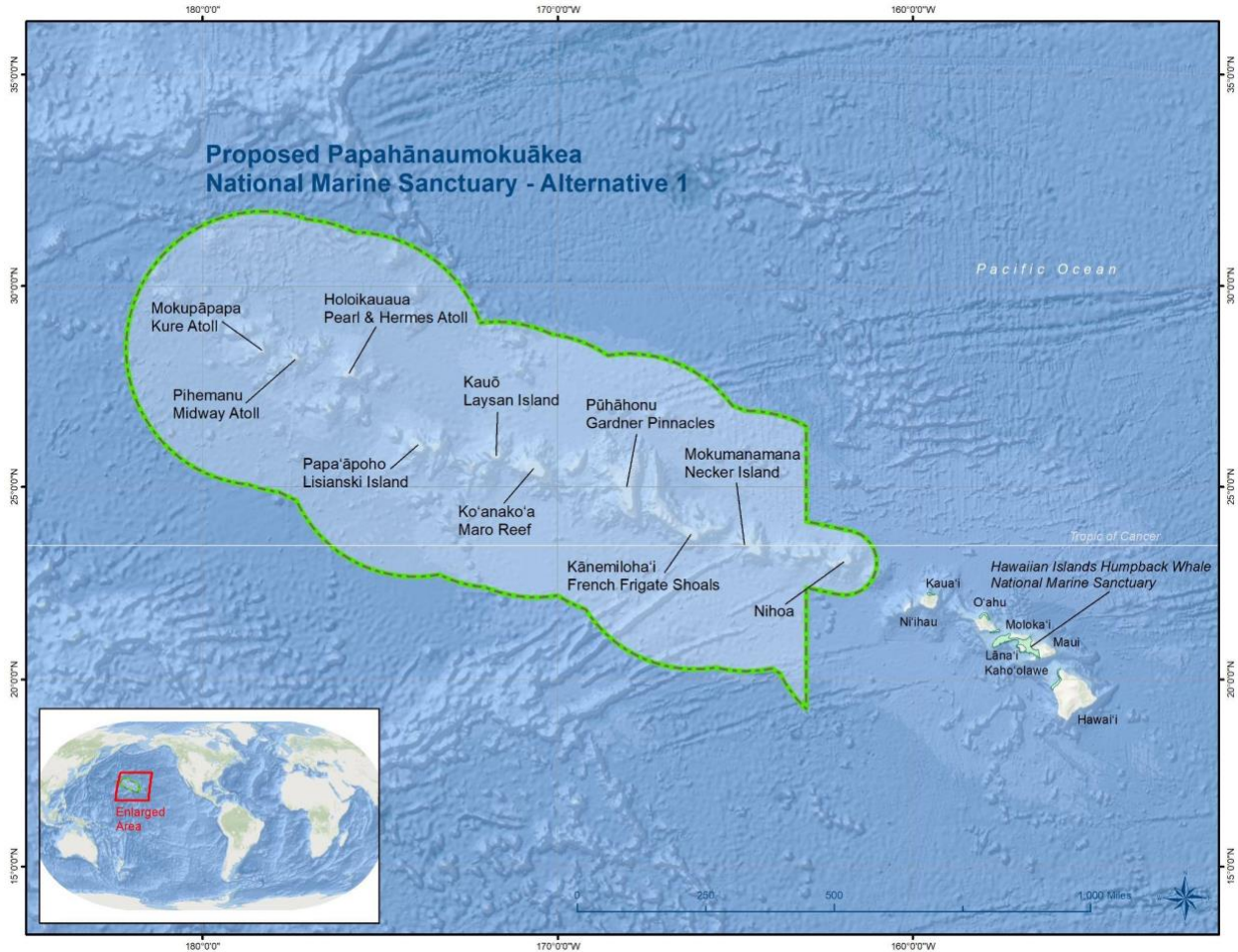


Figure 3.2. Alternative 1 sanctuary boundary (marine areas only). Image: NOAA

3.4.2 Regulations

The regulations under Alternative 1 would be the same as those described above under Section 3.3.1 “Actions Common to All Action Alternatives” for the area of the proposed sanctuary. Under Alternative 1, regulations promulgated under the NMSA would largely be consistent with existing regulations for the Monument. Minor changes have been presented in the proposed regulations to remove discrepancies and gaps in prohibitions, regulated activities, and permitting across the two zones (PMNM and MEA) of the proposed sanctuary. The following are the effective differences between Alternative 1 and the existing management framework under the No Action Alternative.

Access

While access restrictions for areas of the proposed sanctuary that overlap with the PMNM (shoreline of the islands and atolls to 50 nmi) are already in place under the No Action Alternative, the MEA (50–200 nmi) currently has no access restrictions. Under Alternative 1, access would be regulated for the entire sanctuary, including portions of the sanctuary that overlap with the MEA, the Outer Sanctuary Zone.

Prohibited or Otherwise Regulated Activities

Under the No Action Alternative, the proposed prohibitions are all currently in place for PMNM through 50 CFR part 404 except for prohibitions 1 and 4 (detailed below). Minor changes are proposed to prohibitions 1 and 4 to remove discrepancies across the two zones (PMNM and MEA) of the proposed sanctuary. Under Alternative 1, the proposed sanctuary regulations would prohibit:

- (1) “Exploring for, developing, or producing oil, gas, or minerals, or any energy development activities.”
 - Consistent with Presidential Proclamation 8031 for PMNM and 9478 for the MEA, NOAA is proposing to prohibit exploring for, developing, or producing oil, gas, or minerals. The addition of the prohibition on ‘any energy development activities’ would be new for PMNM, and was added to create consistency in the management framework across the proposed sanctuary.
- (4) “Deserting a vessel.”
 - This is a regulated activity (allowed only with a permit) in PMNM pursuant to Presidential Proclamation 8031. Prohibiting this activity in the Original Area would align with the prohibition provided for the MEA in Presidential Proclamation 9478.

Under Alternative 1, the proposed rule provides, in part, the first set of implementing regulations for many of the directives in Presidential Proclamation 9478. Therefore, promulgation of regulations in the area of the proposed sanctuary that overlaps with the MEA under the proposed action is also an effective difference. Most of the prohibitions adopted in the proposed rule are identified in Presidential Proclamation 9478, however, prohibitions 7 and 10–14 would be new prohibitions for the MEA.

Exemptions

With the exception of the exemption for non-commercial fishing, the list of proposed exemptions under Alternative 1 is consistent with current management under the No Action Alternative. Non-commercial fishing authorized under the Magnuson-Stevens Fishery Conservation and Management Act in the Outer Sanctuary Zone would require a permit obtained through NMFS to meet the exemption requirement.

Permitting

Under Alternative 1, a person may conduct prohibited activities 7-14 if such activity is specifically authorized by, and conducted in accordance with the scope, purpose, terms, and conditions of, a sanctuary general permit or special use permit. Under Alternative 1, the establishment of a permit process to allow some prohibited activities under certain conditions via a national marine sanctuary general permit in portions of the sanctuary that overlap with the MEA is an effective difference from No Action. In addition, ONMS would have the ability to collect fees for the conduct of specific activities in the area of the proposed sanctuary that overlaps with the MEA under a Special Use permit.

Sustenance Fishing

Under the No Action Alternative, regulations for the PMNM provide that sustenance fishing may be allowed outside of any Special Preservation Area as a term or condition of a permit, including at Midway Atoll NWR, therefore, there is no effective difference for the management or permittee allowance for sustenance fishing for the area of the sanctuary that overlaps with PMNM. Under Alternative 1, these regulations would extend to areas of the proposed sanctuary that overlap with the MEA, and is an effective difference from the No Action Alternative.

Vessel Monitoring System

Under Alternative 1, the VMS requirement for permittees operating within the areas of the proposed sanctuary that overlap with the MEA would be a new requirement, and is an effective difference from the No Action Alternative.

3.5 Action Alternative 2

3.5.1 Sanctuary Boundary

Alternative 2 includes the marine environment from the shoreline of the islands and atolls seaward to 50 nmi. This alternative includes all State waters and waters of the Reserve, Midway Atoll and Hawaiian Islands National Wildlife Refuges, and State of Hawai‘i Northwestern Hawaiian Islands Marine Refuge. This alternative does not include the MEA. The area encompassed in Alternative 2 is approximately 139,782 square miles (105,552 square nmi).

Alternative 2 does not include the MEA. The MEA encompasses 442,781 square miles of marine waters, which include numerous seamounts, known and undiscovered maritime heritage resources, and a vast unexplored abyss. Human uses and ecological threats described in Chapter 4 are substantially less in the deep and vast pelagic offshore waters of the MEA. Since 2016, eight Monument permits have been issued for activities within the MEA, with only one of these exclusively for activities within the MEA. The potential impact from threats to resources, such as storm surge, vessel groundings, and invasive species introductions are greatly reduced in these waters.

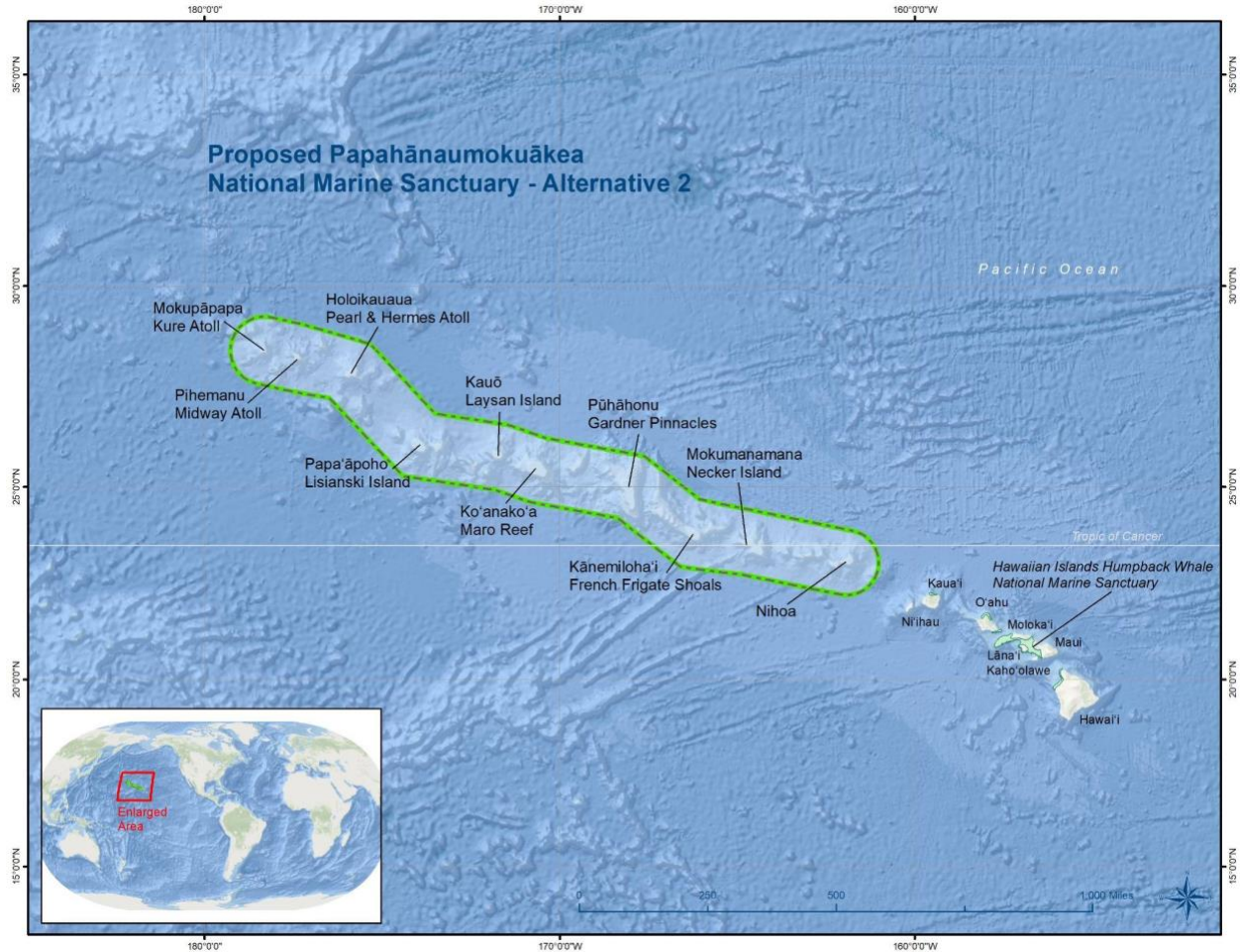


Figure 3.3. Alternative 2 sanctuary boundary (marine areas only). Image: NOAA

3.5.2 Regulations

The regulations under Alternative 2 would be the same as those described above under Section 3.3.1 “Actions Common to All Alternatives” for the area of the proposed sanctuary which extends from the shoreline of the islands and atolls to 50 nmi. Under Alternative 2, Presidential Proclamation 9478 would continue to guide Monument management in the MEA. The following are the effective differences between Alternative 2 and the existing management framework under the No Action Alternative.

Prohibited or Otherwise Regulated Activities

Within PMNM, the proposed prohibitions are all currently in place through 50 CFR part 404 except for prohibitions 1 and 4 (detailed below). Minor changes are proposed to prohibitions 1 and 4. Under Alternative 2, the proposed sanctuary regulations would prohibit:

- (1) “Exploring for, developing, or producing oil, gas, or minerals, or any energy development activities.”
 - Consistent with Presidential Proclamation 8031 for PMNM and 9478 for the MEA, NOAA is proposing to prohibit exploring for, developing, or producing oil, gas, or minerals. The addition of the prohibition on “any energy development

activities” would be new for PMNM, and was added to create consistency in the management framework across the proposed sanctuary.

- (4) “Deserting a vessel.”
 - This is a regulated activity (allowed only with a permit) in PMNM pursuant to Presidential Proclamation 8031. Prohibiting this activity in the Original Area would align with the prohibition provided for the MEA in Presidential Proclamation 9478

Permitting

Under Alternative 2, a person may conduct prohibited activities 7–14 if such activity is specifically authorized by, and conducted in accordance with the scope, purpose, terms, and conditions of, a sanctuary general permit or special use permit. The ability for ONMS to collect fees for commercial activities under a Special Use permit is an effective difference from the No Action Alternative.

3.6 Action Alternative 3

3.6.1 Sanctuary Boundary

Alternative 3 has the same boundaries as Alternative 1, excluding waters within the Midway Atoll and Hawaiian Islands National Wildlife Refuges. The area encompassed in Alternative 3 is approximately 581,263 square miles (438,923 square nmi). Alternative 3 is a single alternative, but will be analyzed in Chapter 5 in two parts. The exclusion of Midway Atoll NWR (from land to 12 nmi, totaling 907.4 square miles of marine waters) and the exclusion of Hawaiian Islands NWR (from land to a boundary which varies by islet, estimated to total 400.2 square miles of marine waters), are analyzed separately. For the Hawaiian Island NWR, 327 square miles are within State waters (shoreline to three nmi) and 73 square miles are in federal waters. NOAA used data from the FWS National Realty Tracts database to generate these values. Figure 3.4 illustrates the boundaries of this alternative, although no seaward boundary of the Hawaiian Islands NWR is depicted, as the seaward boundary has not been formally established (see Section 2.3.3). For this reason, these area estimates are not official, and are presented to provide the public with an indication of the total area difference between Alternatives 1 and 3.

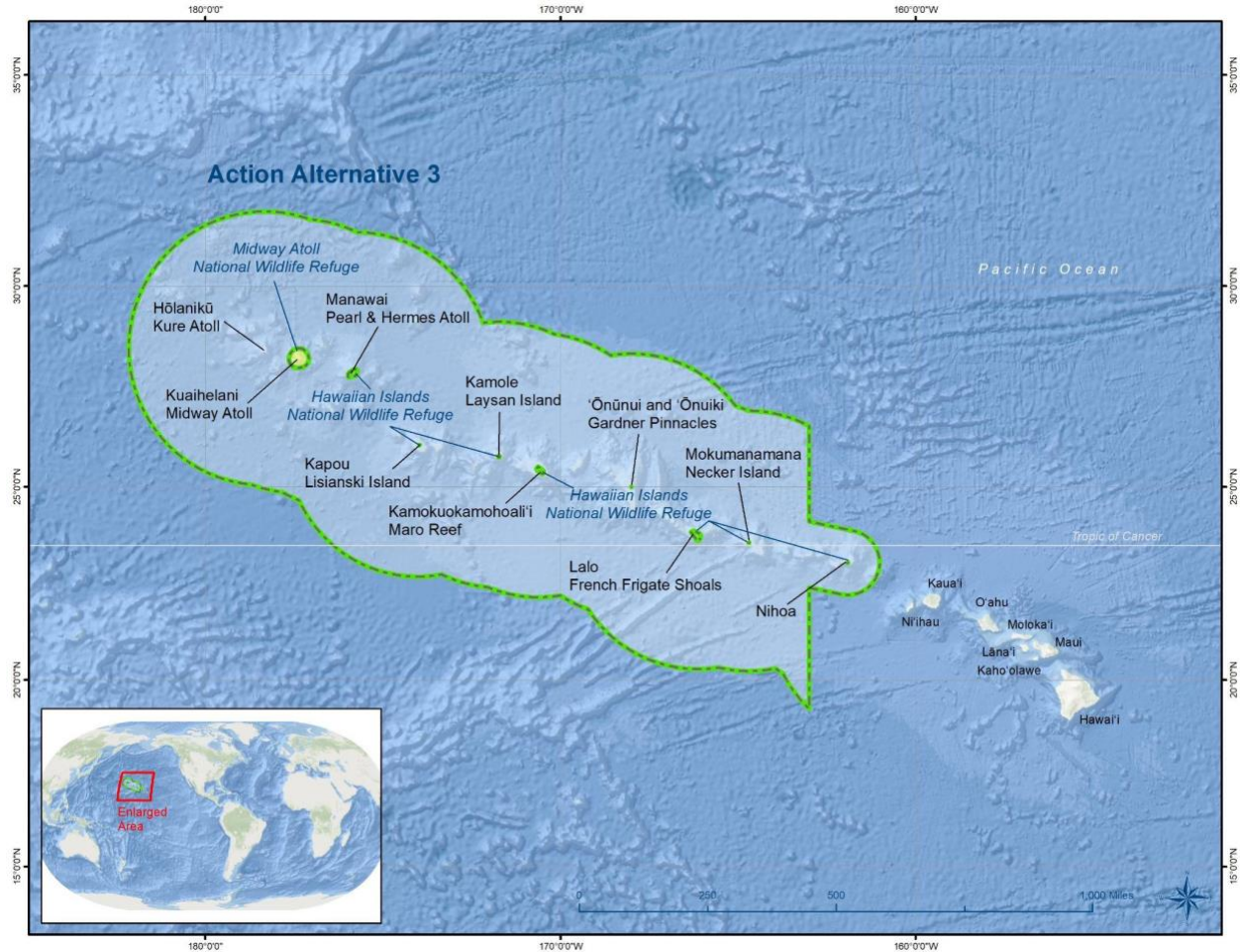


Figure 3.4. Alternative 3 sanctuary boundary (illustrating unofficial estimates of the National Wildlife Refuge seaward boundary). The co-managers do not agree as to the seaward extent of the U.S. Fish and Wildlife Service Hawaiian Islands NWR in the Northwestern Hawaiian Islands. Image: NOAA

Alternative 3 does not include the waters of Midway Atoll NWR or the Hawaiian Islands National Wildlife Refuge. Information on the areas excluded under Alternative 3 is detailed below.

Midway Atoll NWR. Midway Atoll NWR encompasses 907.4 square miles of the marine environment. The established boundary of the Midway Atoll NWR extends 12 nmi from shore (69 FR 1756 [Jan. 12, 2004]); and the land and waters to 12 nmi around Kuaihelani are designated in the Monument as the Midway Atoll SMA (50 CFR part 404). Monument Recreation permits are only issued at Midway Atoll SMA (50 CFR part 404), meaning recreational activities are prohibited in all other waters of the Monument.

With regards to human activity, Midway Atoll is unique within the Monument. Because Midway Atoll experiences the highest levels of human activity in the Monument, human-caused impacts—accidental, intentional, or unavoidable—including vessel groundings, water quality issues, invasive species introduction, and wildlife disturbance, have altered the ecosystem and continue to have a higher likelihood of occurring in and around Midway Atoll. Currently, an average of 60 people are operating under permits within the Monument on any given day, with

approximately 50 individuals necessary to operate Midway facilities and conduct ongoing environmental remediation (NOAA ONMS, 2020). Most of the activity at Midway Atoll is land-based and is only indirectly related to this action. Midway Atoll is the only location within the Monument with a working runway, accepting between 22 and 41 flights each year. Midway Atoll experiences an above-average level of vessel traffic, including resupply barges from Honolulu, providing critical logistical support for activities that occur across the northwestern portion of the Monument (PMNM, 2017).

Hawaiian Islands NWR. As described in Section 2.3, the seaward boundary of the Hawaiian Islands NWR has not yet been established. Co-management of the Hawaiian Islands NWR between the State and DOI continues. By excluding the Hawaiian Islands NWR from the proposed sanctuary in Alternative 3, ONMS estimates the area excluded consists of 400.2 square miles of marine waters distributed across Nihoa, Mokumanamana, Lalo, ‘Ōnūnui and ‘Ōnuiki, Kamokuokamohoali‘i, Kamole, Kapou, and Manawai.

The shallow waters within the refuge boundary encompass a significant amount of the coral reef habitat of Papahānaumokuākea, as well as the grounds where seals, turtles, seabirds, and other species forage. It includes much of the designated monk seal critical habitat in Hawai‘i. Because of the high density and diversity of natural resources, the Hawaiian Islands NWR experiences a relatively high amount of human activity, such as marine debris removal, protected species management, and climate change research. NOAA has been conducting important research and conservation activities in the Hawaiian Islands NWR waters, including the Reef Assessment and Monitoring Program with study sites in the shallow waters around Lalo, Kapou, and Manawai, and work on Rapture Reef at Lalo assessing the impact and recovery after Hurricane Walaka in 2018, and potential future extreme weather events. Many of the non-military heritage sites, including the significant whaling shipwreck sites, are in shallow waters, possibly within NWR boundaries. NOAA’s Maritime Heritage Program has been researching these sites, developing field studies, and conducting the searches and assessments within NWR waters.

3.6.2 Regulations

The regulations under Alternative 3 would be the same as those described above under Section 3.3.1 “Actions Common to All Alternatives” for the area of the proposed sanctuary which extends from the seaward edge of the National Wildlife Refuges to 200 nmi. Under Alternative 3, regulations at 50 CFR part 404 would continue to apply within the areas of the PMNM excluded from the proposed sanctuary. Regulations promulgated under the NMSA would largely be consistent with regulations for the Monument. Minor changes have been presented in the proposed regulations to remove discrepancies and gaps in prohibitions, regulated activities, and permitting across the two zones (PMNM and MEA) of the proposed sanctuary. The effective differences between Alternative 3 and existing regulations under the No Action Alternative are the same as described under Alternative 1 and are not repeated here.

3.7 Alternatives Considered but Eliminated From Detailed Study

Other boundary alternatives and suggested prohibited activities were put forth during the public scoping process to designate the marine areas of Papahānaumokuākea as a national marine sanctuary. The following were eliminated from detailed study for the reasons discussed below.

3.7.1 Boundary Alternatives

NOAA eliminated from detailed study three of the boundary alternatives that were suggested during the public scoping period.

The first boundary eliminated from detailed study was the expansion of the southeastern portion of the PMNM boundary, delineated in 2006 by Presidential Proclamation 8031, toward the Main Hawaiian Islands to encompass all of Middle Bank, a geological feature that rises to 60 meters below the water (Figure 3.5). When Presidential Proclamation 9478 expanded the Monument's seaward boundary from 50 to 200 nmi in 2016, the eastern boundary of the Monument remained unchanged. During outreach for this sanctuary designation process, there was significant opposition, including from fishers, to expand the boundary and include all of Middle Bank. State government officials indicated that the State would not support any expansion towards the Main Hawaiian Islands due to the lack of support in the community (Nohopapa, 2023). The State of Hawai'i manages fishing activity at Middle Bank and has repeatedly acknowledged the importance of this area for Kaua'i fishers. Arguments against inclusion focused on socio-cultural and political/jurisdiction aspects, including assurances from NOAA to Kaua'i fishers during public meetings regarding the 2016 Monument Expansion that the Monument boundary would not extend further towards Kaua'i (Nohopapa, 2023). OHA noted in 2022, a federal change on this original commitment would undermine trust in the management agencies and an overreach of federal authority.

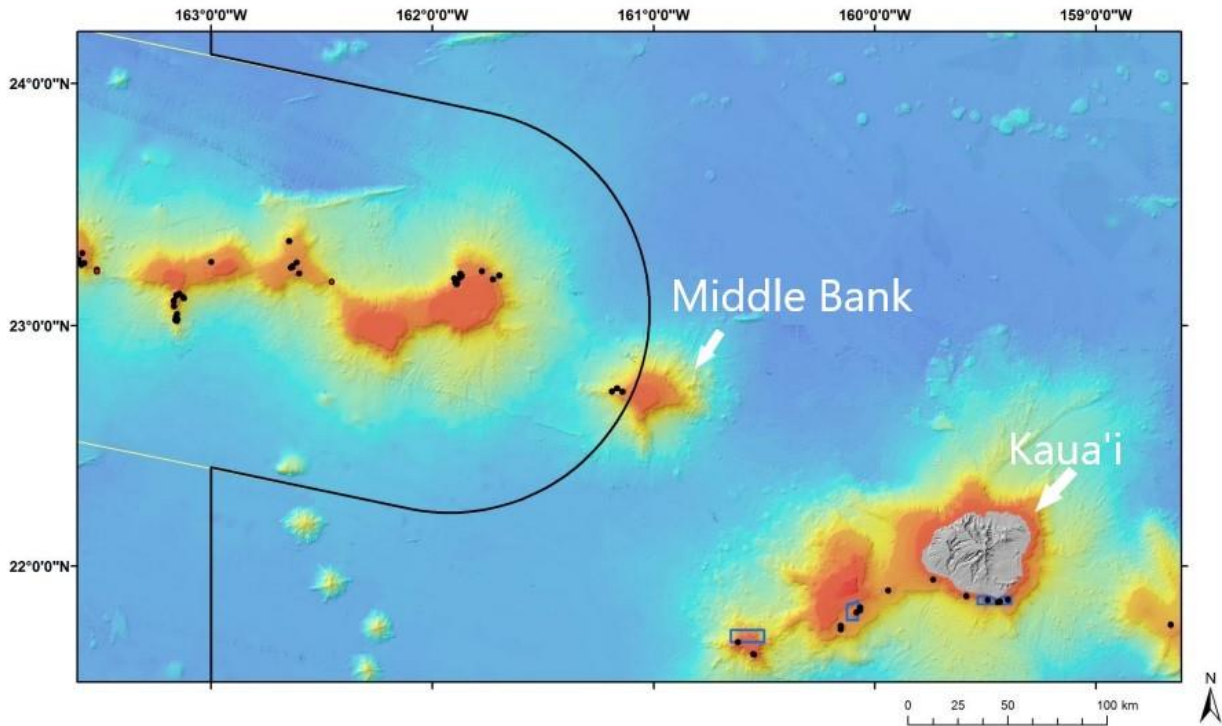


Figure 3.5. Detail of the Monument's eastern boundary showing Middle Bank. Image: C. Kelley 2016

The second boundary eliminated from detailed study was the expansion of the boundary focused on designating sanctuary waters east of the Monument Expansion boundary at 163°W, to include seamounts as well as weather buoys fished by small-boats from Kaua'i and Ni'ihau. No explicit rationale was provided in public comments for expanding into these largely pelagic waters. The rationale not to consider extending the proposed sanctuary boundary eastward from 163°W is similar to that for not including all of Middle Bank. The socioeconomic impact to small-scale local fishers, originally acknowledged and committed to by NOAA during public meetings regarding the 2016 Monument Expansion, remains for any expansion east of 163°W. This boundary option would have included Middle Bank and weather buoys important to Kaua'i and Ni'ihau fishers, who have fished these grounds for many years. Encroachment of the sanctuary towards Kaua'i would erode trust and support from many in the Native Hawaiian community (Nohopapa, 2023).

In consideration of the comments that suggested NOAA consider a sanctuary boundary that extends eastward of the Monument boundary, NOAA believes that maintaining the eastern boundary of the sanctuary, consistent with the Monument, fulfills the purposes and policies of the NMSA. The State of Hawai'i opposed a sanctuary that expanded towards the Main Hawaiian Islands. The purposes and policies of the NMSA state that ONMS "develop and implement coordinated plans for the protection and management of these areas with appropriate federal agencies, state and local governments, etc." As the State of Hawai'i is a co-managing partner for the Monument and a co-manager for the proposed sanctuary, NOAA believes that designating a sanctuary that disregards the State's opposition of expanding towards the Main Hawaiian Islands would not fulfill the purposes and policies of the NMSA, and therefore not meet the purpose and need for the proposed designation.

The final boundary eliminated from detailed study was designating the mean high tide line as the landward boundary at all islands and atolls of Papahānaumokuākea. The landward boundary chosen for action alternatives is the high tide line as defined by the State of Hawai‘i in its administrative rules (HAR 13-222). NOAA typically uses a state’s definition of the shoreline for sanctuary boundaries because, as determined by the Submerged Lands Act, the State’s shoreline definition describes the boundary between public and private land. NOAA strives to designate a sanctuary which supplements and complements existing authorities, and this designation adheres to both the State’s definition as well as the current landward boundary designation of the Monument.

3.7.2 Regulatory Alternatives

Two regulatory suggestions were put forth during public scoping: 1) prohibiting non-commercial fishing within the MEA, and 2) not applying the discharge regulations of PMNM to the MEA.

Per the NMSA, NOAA provided the WPRFMC with the opportunity to recommend any draft fishing regulations it deemed necessary to implement the proposed sanctuary designation. NOAA initiated the consultation on November 19, 2021. On March 22, 2022, the WPRFMC agreed to develop fishing regulations for the proposed sanctuary, and provided a final recommendation to NOAA on April 14, 2023. NOAA prepared regulations under the Magnuson–Stevens Fishery Conservation and Management Act and the NMSA to reflect the outcome of the NMSA section 304(a)(5) process. Therefore, regulations for non-commercial fishing are not part of the proposed action.

One organization recommended that NOAA not regulate discharge in the area of the proposed sanctuary which overlaps with the MEA. They noted that “discharge restrictions applied to this substantial area (the MEA) would have far-reaching operational impacts, including ships in transit.” While not explicitly stated in the comment, the organization was advocating to allow release of untreated sewage, including from cruise ships with as many as 4,000 people aboard. This request did not meet numerous sanctuary designation objectives to strengthen protections of sanctuary ecosystems and resources and manage the sanctuary as a sacred site (draft SMP). Further, the prohibition on discharges within or into the sanctuary is proposed in recognition that various substances can be discharged from vessels that can harm sanctuary resources or quality. Allowing unregulated discharges does not meet safeguarding natural and cultural values of the marine environment and applies additional regulatory and non-regulatory tools to augment and strengthen existing protections for Papahānaumokuākea ecosystems, wildlife, and cultural and maritime heritage resources as described in the sanctuary’s purpose and need.

Chapter 4: Affected Environment

This chapter describes the resources and human uses within or near the proposed sanctuary that could be affected by the proposed action and alternatives. This description of the affected environment serves as the environmental baseline for analyzing the environmental consequences of implementing the proposed action and alternatives in Chapter 5.

This chapter also serves as the resource assessment of present and potential uses of the area to meet the requirements of section 304(a)(2)(B) of the NMSA.

4.1 Introduction: Scope of Affected Environment

For most of the resources described in this chapter, the study area for the affected environment is the largest proposed sanctuary boundary (0–200 nmi) and, to the extent necessary for analysis, the land areas of Papahānaumokuākea. For socioeconomic resources, the affected environment is defined as the State of Hawai‘i. The temporal scope of the analysis begins with the designation of the Monument in 2006 and projects five years past the anticipated date of sanctuary designation, concurrent with the timeframe projected for the draft SMP. The resources addressed in this chapter include:

- Management regime (section 4.2).
- Physical resources, including essential fish habitat designations (section 4.3).
- Biological resources (section 4.4).
- Cultural and maritime heritage resources (section 4.5).
- Socioeconomic resources, Human Uses, and Environmental Justice (section 4.6).

The 2020 *State of Papahānaumokuākea Marine National Monument Report* (NOAA ONMS 2020), available on the [Monument’s website](#), represents a joint effort by the Monument co-trustees and partners to assess the status and trends of Monument resources. The report includes sections on threats to resources, the condition of the physical, biological, and heritage (Native Hawaiian and Maritime Archaeological) resources, as well as a section describing the co-managers’ actions to mitigate threats and conserve these resources. This document is incorporated by reference to provide greater detail to the affected environment. This draft EIS only presents the environmental, cultural heritage, and socioeconomic conditions and the threats associated with these resources that are specifically relevant to the Proposed Action and alternatives. The below resources determined to have no potential for impacts by the Proposed Action or alternatives are not discussed in this draft EIS.

- Air Quality
- Geology
- Oceanography
- Viewsheds and View Planes

4.2 Laws and Existing Management of the Action Area

The purpose and function of NEPA is satisfied if federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process (40 CFR part 1500). In addition to meeting the purpose and policies of NEPA, NOAA must also meet the requirements of the NMSA. Under the NMSA, NOAA must determine whether existing State and federal authorities are adequate or should be supplemented to ensure coordinated and comprehensive conservation and management of the area proposed for designation. The analysis of laws and management allows NOAA to consider this requirement of NMSA and meet the purpose and function of NEPA. This section provides a description of the current management regime, jurisdiction, regulations, and ongoing activities in the area under consideration for sanctuary designation.

4.2.1 Particularly Sensitive Sea Area Designation

Navigation through the Monument is dangerous and must be done with extreme caution, as transiting ships pose a threat to this fragile ecosystem. The International Maritime Organization designated PMNM as a PSSA in 2008, to protect marine resources of ecological or cultural significance from damage by ships while helping keep mariners safe. This status ensures that recently updated nautical charts include boundaries for the PSSA, Areas To Be Avoided, and Ship Reporting Area (extending 10 miles out and entirely around the PMNM boundary, except within the Areas To Be Avoided, Figure 4.1). Entry and exit reporting is mandatory for all U.S. registered vessels and some foreign vessels (50 CFR part 404) and is encouraged for exempted vessels. Each Area To Be Avoided includes one or more Monument- designated Special Preservation Areas, which cover 6,802 square miles of discrete, biologically important shallow-water habitats, including the 907 square mile Midway Atoll Special Management Area (SMA). Areas To Be Avoided have been designated where seamounts, shoals and emergent features present a significant challenge to safe and environmentally sound navigation and where vulnerable and endangered wildlife and sensitive habitats occur.

The boundaries of these areas and the requirement for ship reporting were codified in Monument regulations (50 CFR part 404). These regulations require the following vessels conducting passage without interruption (innocent passage) transiting through the PMNM Ship Reporting Area (50 CFR part 404 appendix D) to report to ONMS as described in 50 CFR part 404 appendix E:

- (1) Vessels of the United States (except as provided in 50 CFR § 404.4(f)).
- (2) All other ships 300 gross tonnage or greater, entering or departing a United States port or place.
- (3) All other ships in the event of an emergency, entering or departing a United States port or place.

The ship reporting system adopted by the IMO specifically exempts all sovereign immune vessels from the reporting requirements, therefore, the regulations adopted to implement the ship reporting system at 50 CFR part 404 do not apply to sovereign immune vessels.

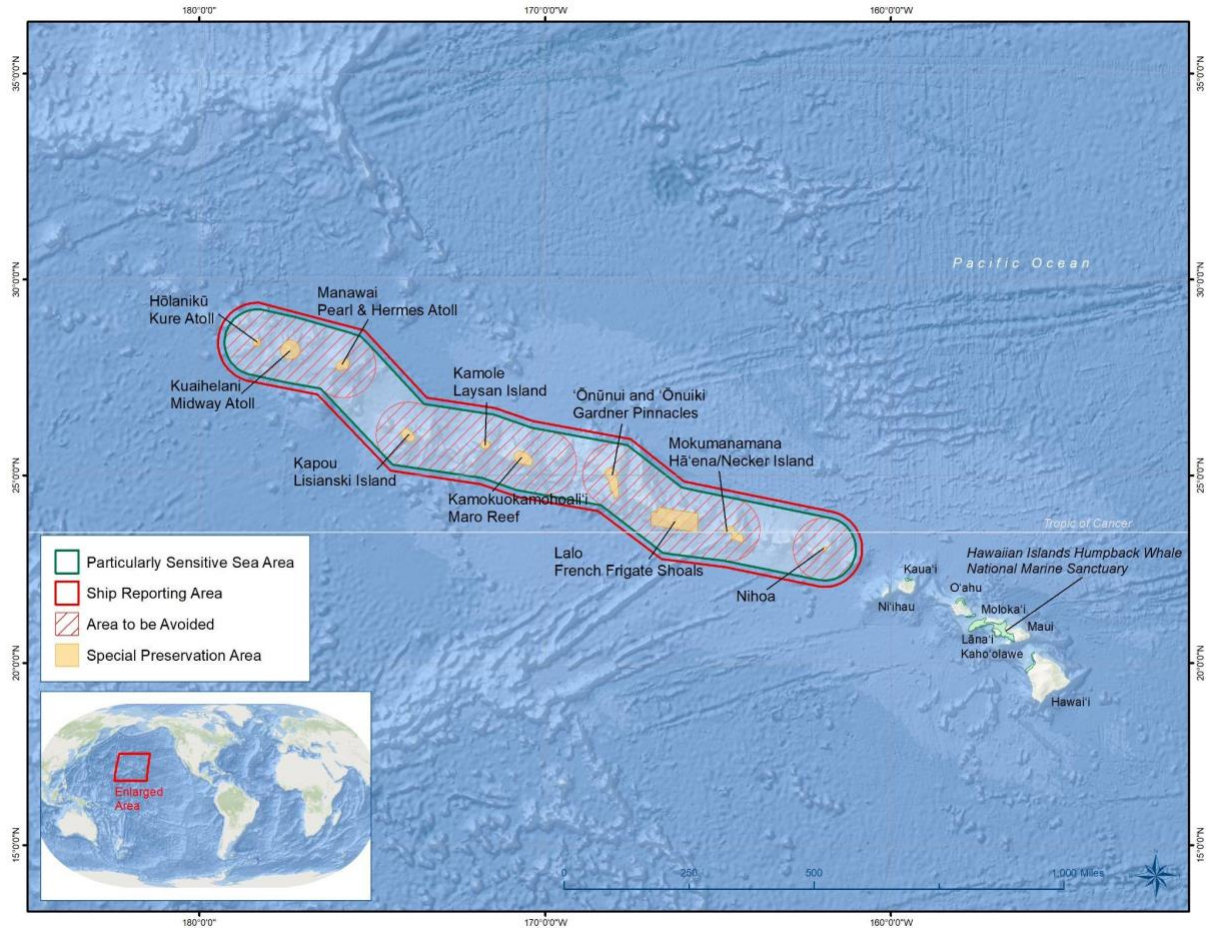


Figure 4.1. Particularly Sensitive Sea Area and Areas to Be Avoided. Image: NOAA

4.2.2 Management Authorities in the Action Area

Co-management by ONMS, FWS, OHA, and the State of Hawai‘i is guided by the Monument Management Plan and a Memorandum of Agreement between the Monument’s co-trustees, while prohibitions codified in 50 CFR part 404 based on Presidential Proclamation 8031 are enforced by co-manager law enforcement personnel. While the Monument is managed as a unit, several State and federal conservation areas exist in Papahānaumokuākea. Table 4.1 identifies these areas where individual agencies maintain jurisdictions and act as leads for Monument management.

Table 4.1. Existing Management Regimes within the Proposed Action Area1

Protected Area	Primary Jurisdiction	Established	Basic Boundary
Hawaiian Islands Bird Reservation (Executive Order 1019); Hawaiian Islands National Wildlife Refuge (Presidential Proclamation 2416)	FWS	1909/1940	All islets and reefs of the Northwestern Hawaiian Islands, except Kuaihelani and Hōlanikū
U.S. Waters	NMFS	1976	Waters from 3 nmi to 200 nmi
Midway Atoll National Wildlife Refuge	FWS	1988/1996	Kuaihelani and waters to 12 nmi

Protected Area	Primary Jurisdiction	Established	Basic Boundary
Kure Atoll Wildlife Sanctuary	DLNR Division of Forestry and Wildlife	1993	Green and Sand Islands
Northwestern Hawaiian Islands (NWHI) Coral Reef Ecosystem Reserve	NOAA	2000	3-50 nmi around all Northwestern Hawaiian Islands
State of Hawai'i NWHI Marine Refuge	DLNR Division of Aquatic Resources	2005	Waters from shoreline of all islets to 3 nmi, except Kuaiahelani
Particularly Sensitive Sea Area	IMO, Co-trustees	2008	Waters of PMNM plus a 10 mile buffer
Papahānaumokuākea MNM	Co-trustees	2006/2016	All land in the NWHI and surrounding waters to 200 nmi

¹ Some jurisdictional authorities overlap, but for simplicity's sake, overlaps are not listed here.

Regulations promulgated for these management regimes remain in place, and where conflicting regulations exist, the more stringent (resource protective) regulation applies. A complete description of the current management regime can be found on the [Monument's website](#).

Given the unique position in the Monument, special discussion is provided for Kuaiahelani. FWS has managed Midway Atoll NWR since 1988. In addition, Presidential Proclamation 8031 states “[t]he Secretary of the Interior, through the Fish and Wildlife Service (FWS), will have sole responsibility for management of the areas of the monument that overlay the Midway Atoll National Wildlife Refuge, the Battle of Midway National Memorial, and the Hawaiian Islands National Wildlife Refuge, in consultation with the Secretary of Commerce.” FWS has created numerous management documents for Midway Atoll, including the 2022 Draft Midway Atoll Comprehensive Master Plan, the 2008 Midway Atoll Visitor Services Plan, and the Monument’s 2008 Midway Atoll NWR Conceptual Site Plan.

4.2.3 Management Structure

The Monument is jointly administered by the four co-trustees through the seven-member Monument Management Board (MMB) (Figure 4.2) which oversees day-to-day management. The MMB consists of NOAA-ONMS, NOAA-NMFS, FWS Ecological Services, FWS Refuges, DLNR-Division of Aquatic Resources and DLNR-Division of Forestry and Wildlife, and OHA, working with many partners to carry out its mission. Activities of the co-managers, as well as other permitted activities in the Monument, are developed and conducted in consideration of multiple goals in the 2008 MMP, integrating Hawaiian culture, science and research, coordinated agency effort, education, and community involvement.

The MMB maintains working groups to engage in ongoing and emerging issues, providing these working groups time to deliberate and recommend an appropriate action to the MMB. This allows the MMB to make timely decisions during their quarterly meetings. For example, the permitting working group, currently led by ONMS, reviews submitted permits, works with the applicant to ensure completeness, and works with the applicant to address a lack in justification for one or more findings criteria and to revise their proposal to avoid conducting any prohibited

activity prior to a presentation and working group recommendation to the MMB. Other working groups (e.g., logistics, climate change) address both ongoing and emerging management issues.

Additionally, a Native Hawaiian Cultural Working Group (CWG), composed of Native Hawaiian kūpuna, researchers, cultural practitioners, educators, and community members with deep connections and historical ties to Papahānaumokuākea, represents the Native Hawaiian community voice, advising OHA as a co-trustee of the Monument. The CWG has taken major roles in developing cultural protocols, perpetuating ancestral knowledge, and developing the Mai Ka Pō Mai management guidance document (OHA, 2021).



Figure 4.2. Papahānaumokuākea Marine National Monument Management structure. Image: NOAA

Monument Management Plan

The MMP was written in 2008 by the Monument co-trustees. Because this Monument Management Plan is a mixture of the existing Reserve Operations Plan, the subsequent draft national marine sanctuary management plan, the refuge CCPs, and state plans, as fully described in Section 2.2 of the plan, it does not resemble typical sanctuary management plans, typical refuge CCPs, or typical State of Hawai'i management plans. However, this plan and the accompanying environmental analysis meet all applicable federal and State requirements." The MMP is a guidance document for management decisions over a 15-year horizon that sets forth desired outcomes through six priority management needs, focused by 22 Action Plans, each with strategies and activities. The MMP addresses management needs for lands and waters (nearshore and pelagic) of the Monument.

Key Monument management framework elements described in the 2008 MMP include:

- The legal and policy basis for establishment of the Monument.
- The vision, mission, and guiding principles that provide the Monument's overarching policy direction.
- Institutional arrangements between co-trustees and stakeholders.
- Regulations and zoning to manage human activities and threats.
- Goals to guide the implementation of action plans and priority management needs.
- Concepts and direction for moving toward a coordinated ecosystem approach to management.

Other Guiding Documents

In addition to the MMP, the co-trustees have developed a number of issue-specific documents to meet the management Goals and Objectives of the Monument. These include:

- [Mai Ka Pō Mai Native Hawaiian guidance document](#)
- [PMNM Climate Change Vulnerability Assessment](#)
- [PMNM Maritime Heritage Research, Education, and Management Plan](#)
- [PMNM Natural Resources Science Plan](#)
- [PMNM State of the Monument Report 2020](#)
- [Midway Atoll Visitor Services Plan](#)
- Midway Atoll Comprehensive Master Plan
- [BMP Requirements](#) (attached as conditions to Monument permits)

These ancillary documents provide more specific information and guidance for management, including the incorporation of cultural components. In particular, the Mai Ka Pō Mai guidance provides protocols to help federal and State agencies further integrate Native Hawaiian culture into all areas of management. Mai Ka Pō Mai articulates values and principles that align with Native Hawaiian culture and values, as well as various federal and State agency mandates and missions.

4.2.4 Monument Access and Prohibitions

Per Monument regulation 50 CFR § 404.4, access is prohibited within PMNM (to 50 nmi), except for: (1) emergencies, law enforcement and Armed Forces activities; (2) an individual or

group operating under a valid Monument permit; or (3) a vessel passing through the Monument without interruption. Permitted vessels, those conducting activities within PMNM, must possess a working VMS allowing Monument managers to track their movements. Certain vessels passing uninterrupted through the Monument are required to provide entry and exit notifications (Section 4.2.1). The MEA (50–200 nmi) currently has no access restrictions.

50 CFR part 404 provides a list of prohibited activities within PMNM. Similarly, Presidential Proclamation 9478 includes these and additional prohibitions for the MEA. Across both areas, the following are prohibited:

- Gas, oil, and mineral exploration or activities.
- Harvesting Monument resources using poisons, electrical charges, or explosives.
- Releasing, either accidentally or intentionally, a non-native species.
- Having an anchor, anchor chain, or anchor rope contact living or dead coral.
- Commercial fishing.

Additional prohibitions in the MEA are:

- Any energy development.
- Disturbing, damaging or taking any living or non-living Monument resource except as regulated.
- Altering or placing any structure on the seafloor, except for scientific instruments.
- Deserting a vessel at anchor or adrift.

4.2.5 Permitting and Regulated Activities

A joint permitting process has been in place and permits have been issued by the co-trustees since 2007. The Monument permitting process incorporates the Presidential Proclamations' directives, and follows FWS, NOAA, and State regulations and procedures, when compatible. For example, multi-year permits may be granted in federal waters, while the State requires one-year permits for activities in State waters. 50 CFR part 404 provides the authority to issue six permit types, each with specific criteria that the applicant must meet. Specifically, the applicant must demonstrate how the proposed activity meets management needs and adheres to the Goals and Objectives of the MMP. The six types of activities regulated through the PMNM permitting process are research; education; conservation and management; Native Hawaiian Practices; recreation; and special ocean use.

The 50 CFR part 404 regulations apply only to PMNM (to 50 nmi). Management in the MEA is governed by Presidential Proclamation 9478, which explicitly names research, education, conservation and management, and Native Hawaiian Practices, in addition to non-commercial fishing. Presidential Proclamation 9478 does not discuss permit application criteria. While Presidential Proclamation 9478 states that the Secretaries of Commerce and the Interior shall share management responsibility of the MEA, the explicit authority to issue permits has not yet been established. Until a formal permitting process is developed, research activities in the MEA have been approved via a Letter of Authorization (LOA) signed by FWS. The use of Letters of Authorization is only temporary until a formal permitting process is implemented and should not be considered precedent setting. The co-trustees agreed to implement this FWS process as an interim measure.

Permit Criteria

In the PMNM, the general and permit specific criteria that each proposed activity must meet are codified in 50 CFR § 404.11 and full descriptions of the application process and review, Monument BMPs, and permittee reporting are on the [Monument's website](#). The Monument co-trustees determine whether a permit will be issued based upon meeting the below criteria. Specific terms and conditions can be attached to a permit, as appropriate.

- The activity can be conducted with adequate safeguards for the resources and ecological integrity of the Monument.
- The activity will be conducted in a manner compatible with the goals of the Monument, considering the extent to which the conduct of the activity may diminish or enhance Monument resources, qualities, and ecological integrity, any indirect, secondary or cumulative effects of the activity, and the duration of such effects.
- There is no practicable alternative to conducting the activity within the Monument.
- The end value of the activity outweighs its adverse impacts on Monument resources, qualities, and ecological integrity.
- The duration of the activity is no longer than necessary to achieve its stated purpose.
- The applicant is qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
- The applicant has adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.
- The methods and procedures proposed by the applicant are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument resources, qualities, and ecological integrity.
- The applicant's vessel has been outfitted with a VMS unit approved by NOAA's Office of Law Enforcement (OLE).
- There are no other factors that would make the issuance of a permit for the activity inappropriate.

If the applicant has applied for a Native Hawaiian Practices permit, the following must be met:

- The activity is non-commercial and will not involve the sale of any organism or material collected.
- The purpose and intent of this activity are appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice, and its associated values and protocols.
- The activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community.
- The activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands.
- Any resource harvested from the Monument will be consumed in the Monument.

If the applicant has applied for a recreation permit the following must be met:

- The activity is not associated with any for-hire operation.
- The activity does not involve any extractive use.

If the applicant has applied for a Special Ocean Use permit the following must be met:

- The purpose of the activity is for research, education, or conservation and management related to the resources or qualities of the Monument.
- The activity will directly benefit the conservation and management of the Monument.
- The activities can be conducted in a manner that does not destroy, cause the loss of, or injure Monument resources.
- The permittee has purchased and maintained comprehensive general liability insurance throughout the duration of the activity, or agreed to post an equivalent bond, against claims arising out of activities conducted under the permit and to agree to hold the United States harmless against such claims.
- The activity does not involve the use of a commercial passenger vessel.
- For Special Ocean Use within the Midway Atoll Special Management Area, the Director of the U.S. Fish and Wildlife Service or their designee has determined that the activity is compatible with the purposes for which the Midway Atoll National Wildlife Refuge was designated.

Permitting Requirements

The following requirements must be fulfilled based on method of entry (e.g., vessel or plane), permit type, location, and permitted activities:

- Vessel must be equipped with an approved and operating VMS before departure.
- Vessel Hull, Tender Vessel, Gear and Ballast Water must be inspected and certified free of non-indigenous and invasive species before departure.
- Permittee must provide a certificate or other proof that their respective vessel is free of rodents prior to entering the Monument:
- Permittee must adhere to the following eight general terms and conditions.
 - Vessel reporting, annual and summary reporting.
 - Submittal of a copy of all data acquired under each Monument permit.
 - Compliance with all applicable federal, State, and local laws and regulations.
 - Coordination with Monument staff while in the field.
 - Adherence to hazardous material storage and transport guidelines.
 - Requirement to demonstrate proof of insurance or financial capability to cover evacuation in the event of an emergency, medical evacuation, or weather.
 - Requirement for permittees to attend a cultural briefing on the significance of Monument resources to Native Hawaiians.
 - Prohibition against the disturbance of any cultural or historic property.
- Appropriate activity-specific BMPs are included in the permit conditions. These 18 activity-specific BMPs can be found on the [Monument website](#).

Regulated Activities

Activities are regulated through the permitting system. In any permit application in which the project description includes conducting a regulated activity, the permit will explicitly describe where, when, and how this activity can be conducted within the Monument. Activities regulated in PMNM area include:

- 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 Monument resource.
- Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands.
- Anchoring a vessel.
- Deserting a vessel aground, at anchor, or adrift (prohibited in the Expansion Area).
- Touching coral, living or dead.
- Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument.
- Swimming, snorkeling, or closed or open circuit scuba diving within any Special Preservation Area or the Midway Atoll Special Management Area.
- Attracting any living Monument resource.

Permit Application and Review Process

Subject to such terms and conditions as the Secretaries deem appropriate, regulated activities may be permitted to occur within the Monument only if an applicant can demonstrate that their proposed activities are consistent with the goals of the Monument and meet all relevant findings criteria to support issuance of the permit. The joint Monument permit application template and review process were developed and implemented in 2007. Applications are reviewed by managers, scientists, and other experts from the co-trustee agencies and by Native Hawaiian cultural reviewers. The MMB may require applicants to submit additional information, comply with special conditions, or undergo additional training to meet this requirement.

Permit applications are posted for public notification, and applications with activities in State waters are approved by the State of Hawai'i Board of Land and Natural Resources. All approved permits must meet NEPA requirements and comply with all other required federal and State permits and consultations. All permits specify the requirements for compliance with quarantine protocols to avoid introduction of non-indigenous and invasive species, and list prohibited activities such as the disturbance of cultural or historical artifacts or sites. Special Conditions may also be applied to particular permits, placing additional restrictions on activities in order to minimize impacts to Monument resources.

In addition to the requirement that each permit applicant meet the permit review criteria described above, applicants must agree to the General Conditions of their respective permit as well as any Special Conditions that may apply. Special Permit Conditions are incorporated into each permit as deemed appropriate by the MMB to achieve effective conservation and management. Before entering the Monument, all permitted personnel must attend a pre-access briefing to review permit specifications and the cultural significance of Papahānaumokuākea. In addition, all permitted vessels require mandatory rodent inspection, hull and tender inspection, and ballast water inspection (if applicable) be completed before entrance to minimize the potential for introduction of non-indigenous or invasive species. Inspection results may result in denial of entrance into the Monument or a list of measures that need to be implemented before the vessel may enter the Monument.

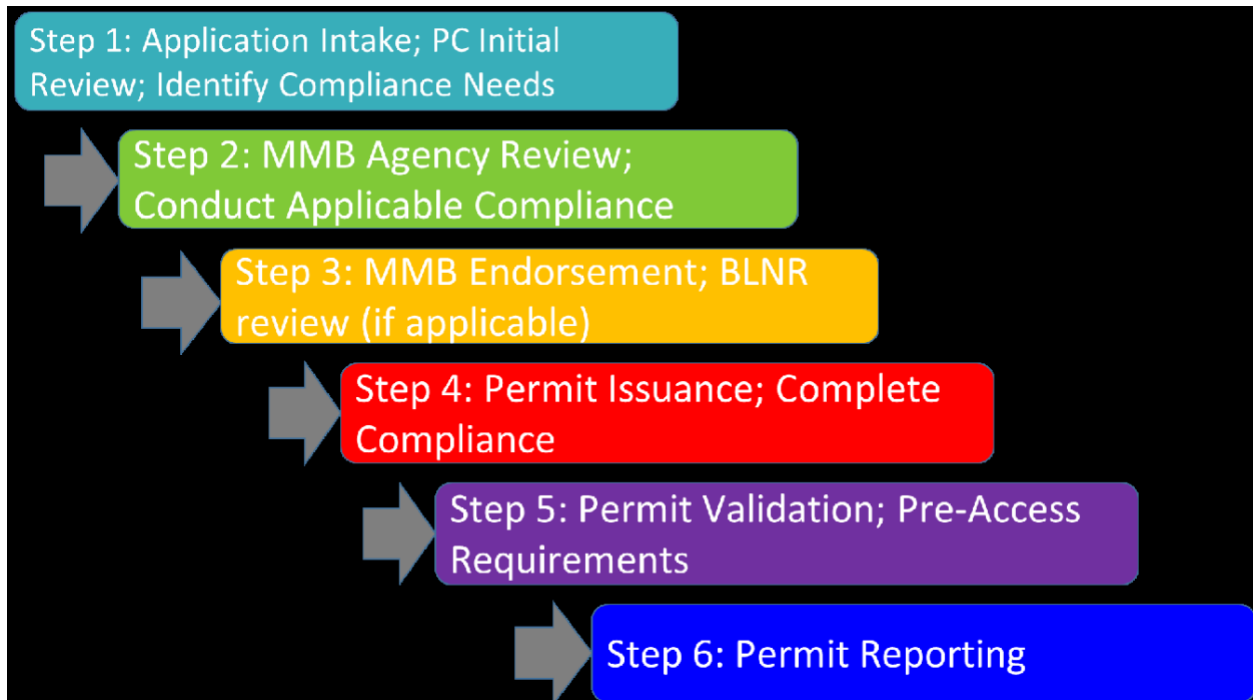


Figure 4.3. Simplified Monument permit process. Image: NOAA

4.2.6 Permitted Activities Summary

Activities permitted over the past 15 years were guided by the MMP. Activities fall under 22 action areas that are described in detail in the 2008 MMP, for which an Environmental Assessment was completed. Ongoing and newly proposed activities that meet the MMP's goals are expected to continue at a similar level of effort.

Monitoring of activities in the Monument is primarily linked to permit requirements. At the discretion of the MMB, as part of the application process, permittees may be required to accommodate a Resource Monitor. These monitors are trained in cultural protocols as well as universal and project-specific BMPs developed by the Monument. Each permit describes the specific tasks of the monitor. Monitoring would continue for all sanctuary designation alternatives. All those named on a permit application undergo a pre-activity cultural briefing in which they are educated in proper protocols for entering and exiting the Monument as well as manner of conduct while in the Monument to ensure appropriate respect for the sacredness of the place is maintained.

Co-managers track the total number of people in the Monument over the course of the year as well as the number of people at each atoll to monitor the intensity of the permitted activities. This allows managers to proactively monitor for and mitigate cumulative impacts. Most locations average fewer than 1 person any given day on a specific island habitat, although the maximum on a single day can exceed 20 individuals.

With regards to human activity, Kuaihelani is unique within the Monument. On average, 60 people are within Monument boundaries on any given day. Of these, approximately 50 individuals are necessary to operate Kuaihelani facilities and conduct environmental remediation. Most of this activity is land-based and would not be subject to sanctuary

designation analysis. Kuaihelani is also the only location with a working runway, accepting between 22 and 41 flights each year. Hōlanikū sees the next most activity, with a permanent six-person team stationed at the atoll year-round (PMNM, 2017).

From 2007–2021, a total of 442 Monument permits were issued (NOAA ONMS, 2022). Most (a little over 50%) of these permits have been for research activities, followed by conservation and management actions (21%), special ocean uses (15%), Native Hawaiian Practices (7%), Education (6%), and recreation (1%) (Table 4.2). Since 2016, eight permits included activities in the MEA.

Table 4.2. Monument Permits Issued 2007–2021

Year	Research	Conservation and Management	Education	Native Hawaiian Practices	Recreation	Special Ocean Use	Total
2007	37	5	2	1	1	5	51
2008	30	10	3	1	2	3	49
2009	28	6	2	4	1	10	51
2010	27	7	6	1	1	8	50
2011	19	6	4	3	0	5	37
2012	18	5	1	1	0	16	41
2013	6	5	0	2	0	5	18
2014	11	7	0	2	0	1	21
2015	9	8	0	4	0	0	21
2016	8	8	1	1	0	4	22
2017	6	8	1	3	0	0	18
2018	7	3	4	4	0	3	21
2019	7	6	0	2	0	1	16
2020	1	5	0	0	0	2	8
2021	8	2	1	4	0	3	18
TOTAL	222	91	25	33	5	66	442

While the purpose of each permitted activity is specific, the methodologies and instruments employed are similar. Most efforts are based or supported by research vessels. Exploration of deep habitats is conducted using various sonar techniques, remotely-operated and autonomous vehicles, and the placement of instruments on the seafloor. Shallow water activities are often supported through small-boat operations, often with people in the water. Specimens may be collected and animals tagged, along with a variety of non-invasive data collection. Some management efforts, specifically marine debris and invasive species removal, impart a higher intensity of contact with the benthic resources, as well as potential disturbance to mobile marine life. Permit applications are required to describe where and for how long of the methodologies needed to conduct the activity, including an analysis of the potential short- and long-term impacts of these activities.

4.2.7 Management of Threats

The State of the Monument Report (NOAA ONMS, 2020) describes threats to resources and the measures taken to address those threats under current Monument management. The following provides an overview of these threats. Threats specific to Monument resources (e.g., monk seal entanglement in derelict fishing gear) are discussed under those specific resources.

Climate Change

Climate change contributes to the increased erosion of reef habitat from large wave events, the loss of habitat due to sea level rise, and the inability to form reefs due to ocean acidification. The MMB and partners developed a Climate Change Vulnerability Assessment to understand likely effects of climate change on Papahānaumokuākea’s natural and cultural resources to provide guidance for Monument managers (Wagner & Polhemus, 2016). Climate change-specific monitoring efforts conducted by management agencies include assessments of fundamental changes in species composition and distribution for climate-sensitive species such as corals, as well as direct monitoring of calcification rates and calcification minerals in the ocean. Multi-year monitoring has been conducted to evaluate the impacts on corals and the ecosystem from a 2014 coral bleaching event. Using cutting-edge technology, such as 3-D photogrammetry, managers assess the impacts of climate change on coral reef ecology and habitats. However, there are still research gaps related to other aspects of climate change under current management.

Invasive Species

A species may be considered invasive when it becomes established and causes negative impacts to the ecosystem, outcompeting native species, and altering habitat and trophic structure. Life history traits commonly demonstrated by invasive species include rapid growth and spread, invasion of new habitats, and displacement of native organisms. Since it is difficult, if not impossible, to determine whether a species will become invasive in a given environment, the majority of efforts are focused on preventing non-indigenous species from entering the Monument. Current Monument operational protocols continue to be developed and refined to minimize the potential for non-indigenous species to be introduced. Regulation (50 CFR § 404.6(c)) and Presidential Proclamation 9478 prohibit introducing or otherwise releasing a non-indigenous species from within or into PMNM and the MEA, respectively. Further, co-managers, led by ONMS research scientists, are actively monitoring habitats where invasive species have or may adversely alter the ecosystem.

Non-indigenous species may arrive on vessels or debris of any kind from ports around the world. Ballast water and biofouling associated with global shipping are considered the most significant cause of human caused oceanic dispersal of invasive species, although biofilms (e.g., bacteria, microalgae, and fungi), encrusting (e.g., barnacles, bryozoans, hydroids) and mobile organisms (e.g., arthropods, mollusks, cnidarians) are commonly found on rafting marine debris (NOAA Marine Debris Program, 2017), which is a significant concern in the Monument. Discharge from vessels operating in or transiting the Monument can introduce pathogens that contribute to coral disease and threaten marine mammal populations.

The Monument maintains an inventory of marine non-indigenous species identified and the location(s) each species was observed. Sixty-eight non-indigenous marine invertebrate, fish, and algal species have been recorded in the proposed sanctuary, including ta‘ape (bluestripe snapper, *Lutjanus kasmira*) and roi (peacock grouper, *Cephalopholis argus*) (Tsuda et al., 2015; Godwin et al., 2020). Of these, 42 are established and 21 are designated as cryptogenic (hidden, and undetermined whether established). Two species were determined to not be established, and three species are included with questionable data. Fifty-seven of these species occur at Kuaihelani, while 48 of those were observed only at Kuaihelani (Godwin et al., 2005). Appendix

D-Species List includes all identified non-indigenous species and where they have been observed in the proposed sanctuary.

To prevent the introduction of non-indigenous marine species, NOAA staff perform a complete risk assessment coupled with the visual inspection of hulls for permitted vessels that transit into the Monument. Vessels fouled with marine organisms must be thoroughly cleaned. Vessels are also required to have a professional rodent inspection, and be certified rodent-free, before transiting to the Monument (Monument BMPs 001 and 018). BMPs to prevent the spread of non-indigenous species and disease are often included as permit conditions for those operating in the Monument.

Monitoring of established non-indigenous species is conducted in conjunction with interagency coordination, education, and outreach activities. In 2019, the MMB designated an interagency technical Invasive Algal Working Group comprised of scientists and biosecurity specialists to: 1) identify data gaps; and 2) develop BMPs for biosecurity regarding a previously unrecorded species of invasive red algae (*Chondria tumulosa*) spreading across Manawai in 2019 (Sherwood et al., 2020) and in Kuaihelani in 2021 (Kosaki, pers. comm.). This species smothered entire sections of coral reef and other vital organisms at Manawai. The Working Group's BMPs were adopted in early 2020 as part of the standard biosecurity conditions for all persons operating at Manawai. Spiny seaweed (*Acanthophora spicifera*), the most common invasive marine alga of subtidal and intertidal habitats in the Main Hawaiian Islands (Smith et al., 2002), was observed at Kuaihelani in July 2022 (Rankin et al., 2022). Strategies are being considered to control these two algae (FWS, 2022).

Monument co-managers are also working to prevent introductions of known, aggressively invasive species like the recently documented soft coral *Unomia stolonifera* in Pearl Harbor (Hauk, pers. comm). This species has devastated the marine habitat of Venezuela in a few years, and managers are working to understand and prevent its spread across the Hawaiian Islands (Ruiz-Allais et al., 2021).

Marine Debris

Marine debris consists of 80% plastic (International Union for Conservation of Nature, 2021). Because plastic is lighter than sea water, it floats on or near the surface of the ocean, allowing marine debris from across the Pacific, driven by wind and currents, to accumulate in the uninhabited shallow waters of Papahānaumokuākea. This influx entangles marine species, damages reef habitat, is a potential vector for invasive species, and is mistaken for food by seabirds and sea turtles. Hazardous marine debris and microplastics contaminated with chemical additives and pollutants potentially create vectors for toxic exposure (do Sul & Costa, 2014). The threat of marine debris is described in Chapter 4 as it relates to a specific resource (e.g., monk seals entanglement).

The Marine Debris Program, established in 2005 under NOAA's Office of Response and Restoration, was authorized in 2006 by the Marine Debris Research, Prevention, and Reduction Act. Since 1996, this program and its partners have removed 923 metric tons (more than two million pounds) of primarily derelict fishing gear and plastics from Papahānaumokuākea. Most recently in 2023, two 30-day missions by the non-profit Papahānaumokuākea Marine Debris Project successfully removed over 96 metric tons of marine debris from shallow coral reef and

shoreline environments. NOAA will continue to prioritize removal of existing debris, detection and prevention of incoming debris, and education to prevent the generation of more debris to reduce overall impacts. NOAA and its partners will continue to disentangle animals from derelict fishing gear and abandoned military structures (e.g., crumbling seawall at Tern Island), directly preventing their mortality.

4.3 Physical Environment

The physical resources within the study area would generally not be affected by the Proposed Action, but aspects of the physical environment are linked to potential impacts. For instance, sea surface temperature is not affected by the action, but its connection to coral bleaching is a factor to the impacts to biological resources. Similarly, human-introduced noise (e.g., vessel motors) directly affects the soundscape, but the concern generally relates to the effect it has on marine mammals and other mobile species. Of the physical resources of the Monument, only water quality and benthic habitat could be directly impacted by human activities, although the proposed action does not directly increase or decrease human uses within the action area.

4.3.1 Overview of Physical Environment

The most important physical feature of the action area is its remote location in the middle of the Pacific Ocean. This affects the quality of most of the marine resources described in this chapter, as emphasized in the *State of the Monument Report*. “Due to Papahānaumokuākea’s isolation, past management efforts, and current regulations controlling access, impacts from local human uses have been relatively few, and thus its reefs and other resources are considered to be in nearly pristine condition across most of the region (NOAA ONMS, 2020).” While direct human impact to resources is minimal, regional and global threats continue to impact Monument resources. The influx of marine debris into Monument waters from across the North Pacific entangles marine species, damages reef habitat, is a potential vector for invasive species, and is mistaken for food. Sea level rise, increased frequency and power of storms, and increased regional sea surface temperature due to climate change contribute to the erosion of submerged abiotic habitats and contribute to coral bleaching and proliferation of diseases (Wagner and Polhemus, 2016).

The second most important feature is the enormous size of the action area, which encompasses 582,578 mi² of the Pacific Ocean—an area larger than all U.S. national parks combined. Within this expanse, 1,424 mi² (3,687 km²) of shallow water reef habitat (<30 m depth, Miller et al., 2004; 2006; Maragos et al., 2009) support a complex and highly productive marine ecosystem. Beyond the shallow reef, scattered in the vast pelagic ocean, are more than 100 submerged ancillary banks and seamounts.

Oceanic conditions, including currents, wave events, temperature, nutrients, and productivity, are described in the *2020 State of the Monument Report*. Currents transport larvae and marine debris, with the mean average flow of surface water moving east to west in response to the prevailing northeast trade winds (Firing & Brainard, 2006). Significant wave events (33-foot or 10-meter waves) from large winter storms and hurricanes also influence reef structure and distribution of marine life (Dollar, 1982; Dollar & Grigg, 2004; Friedlander et al., 2005) and cause erosion of the low islets in the Monument. Wave energy is highest between November and

March and lowest between May and September. Global sea level rise has been documented since 1900, and may be accelerating, although the increase has been variable in Papahānaumokuākea over the past 10 years (Chen et al., 2017).

On average, four or five tropical typhoons or hurricanes are observed annually in the Central Pacific. Until 2018, the strongest hurricane recorded in the Monument area was Patsy in 1959, which passed between Kuaihelani and Hōlanikū with wind speeds greater than 115 mph (100 knots) (Friedlander et al., 2005). In October 2018, Hurricane Walaka passed through Lalo, with maximum winds of 127 mph (110 knots), causing extensive damage to Rapture Reef at 80 feet depth and almost eliminating East Island (Pascoe et al., 2021).

Sea surface temperature is an important physical factor influencing coral reefs and other marine ecosystems. NOAA's long-running National Coral Reef Monitoring Program collects in situ temperature data and correlates these data to response factors, including bleaching events. The northernmost atolls range from 19°C in the winter to 26°C in the summer, an extremely large fluctuation compared to most reef ecosystems. Across Papahānaumokuākea, sea surface temperatures have been on average 0.6°C higher between 2009–2018 than those recorded from 1984–2008 (NOAA ONMS, 2020). Between July and September 2002, sea surface temperatures across the Hawaiian Archipelago were anomalously warm, resulting in widespread coral bleaching, particularly in three northern atolls. A global coral bleaching event in 2014–2017 also affected corals in the Monument, particularly a shallow reef to the east of Kapou (Couch et al., 2017).

Most of the waters of the action area are low in nutrients, and thus low in primary productivity. A subtropical front that lies primarily north of the Monument migrates southward to the northernmost atolls, bringing high nutrient waters (Seki et al., 2002). This front and its productive waters attract larger species, including sea turtles, squid, and pelagic fish.

Water quality, including excessive nutrients or microbiological contamination, has not been a major issue in nearshore areas of the Monument. Overall, adverse water quality conditions throughout most of the monument's oceanic waters are not expected, except near legacy pollutant sources from military activities at Kuaihelani, Hōlanikū, and Tern Island at Lalo (NOAA ONMS, 2020). While these sites are on land and outside of the proposed sanctuary, contaminants could easily migrate through the shallow sandy soil into marine waters. Legacy contamination still occurs at Kuaihelani (Ge et al., 2013), including petroleum in the groundwater and nearshore waters, pesticides (e.g., DDT) in the soil, PCBs in soil, groundwater, and nearshore sediments and biota, metals such as lead and arsenic in soil and nearshore waters, and unlined, uncharacterized landfills. While some of the worst areas of contamination were remediated, several areas, including unlined, eroding landfills, warrant continuous monitoring for potential releases (FWS, 2019). Contamination sites are also present at Kamole and Manawai (NOAA ONMS, 2020). These historical contaminants remain despite remediation, and hazardous marine debris could potentially be sources of contamination, as every emergent and submerged location in the monument is not regularly monitored for hazardous marine debris. Microplastic debris (<5 mm) accumulates in the water column and in sediments. Because these tiny plastic particles can be contaminated with chemical additives and pollutants absorbed from the surrounding environment, their ingestion potentially creates a new vector for

toxic exposure (do Sul & Costa, 2014). Disease-causing microbiota in nearshore marine waters is not expected to be problematic or occur at levels that exceed water quality standards. Physical hazards within the Monument include marine debris and the deterioration of land-based military infrastructure, both which pose a threat to seals, seabirds, and turtles.

Near-shore benthic habitat is threatened from external events, including the influx of derelict fishing gear as well as oceanic scientific equipment. Discarded or lost fishing nets from distant fleets and plastic trash threaten and damage coral reefs, entangle and choke marine life, and aid in the transport of non-indigenous species and contaminants. An estimated 52 metric tons of derelict fishing gear from fisheries all over the Pacific drift into the Monument every year, influenced by large- and small-scale ocean circulation patterns and El Niño and La Niña events, ultimately accumulating in shallow reef habitat (Dameron et al., 2007).

In recent years, three National Weather Service buoys have broken free of their moorings and threatened Monument resources. Two groundings occurred at Kapou in 2015 and 2019. The third entered the MEA in 2022. The 2015 buoy was salvaged in May of 2016 and damage was surveyed using 3-D photogrammetry (Burns et al., 2018). The 2019 buoy's mooring system contacted benthic substrata, remaining stationary for multiple days at three different locations inside the Monument before reaching the shore of Kapou on February 7, 2019 (Fukunaga et al., 2021). A commercial salvage company removed the buoy in August/September of 2020 (Figure 4.4). Habitat recovery at these two sites is still being monitored. The third buoy was successfully recovered in June 2022 from the waters of the MEA. This proactive decision prevented an additional grounding and resulting damage caused by ground tackle and the buoy itself.

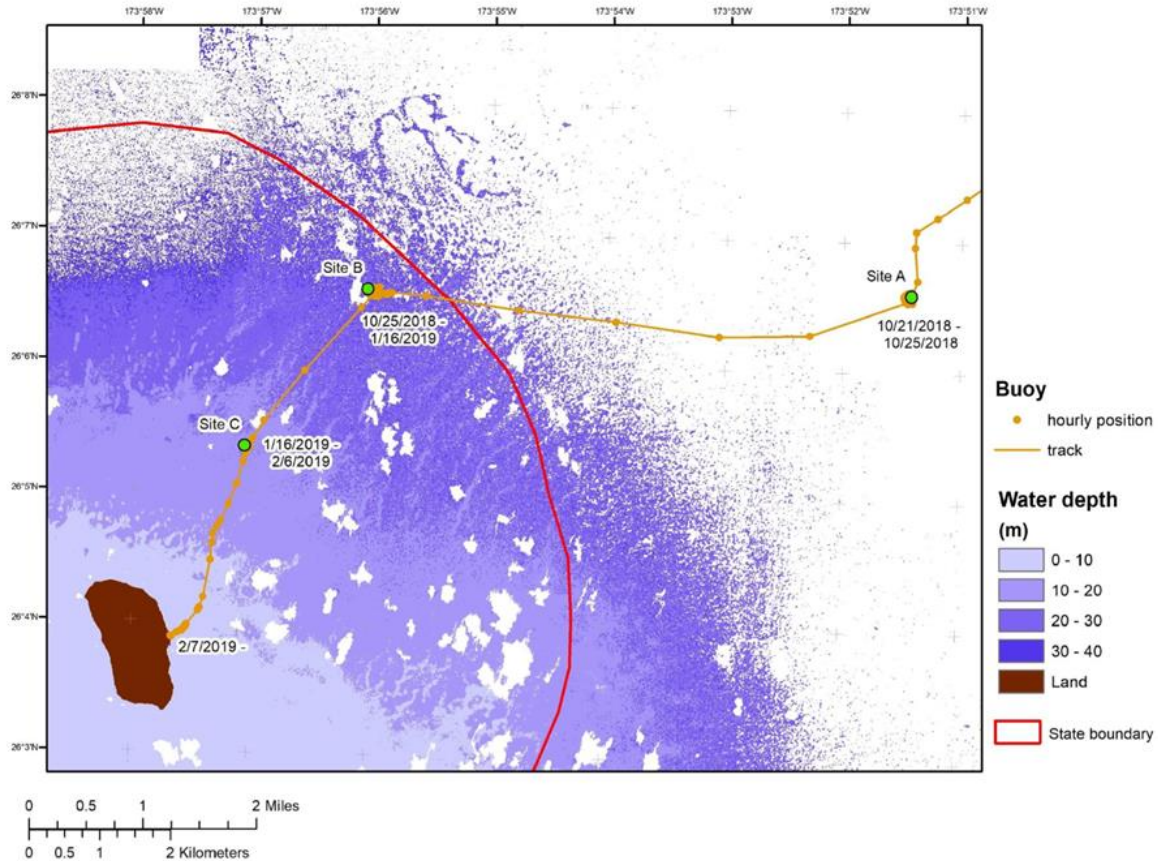


Figure 4.4. Satellite track of National Weather Service buoy, October 21, 2018 to February 7, 2019.
Source: Fukunaga et al., 2021

On July 2, 2005, the M/V *Casitas* ran aground at Manawai (NOAA Damage Assessment, Remediation, and Restoration Program, 2021). Intending to salvage the vessel, crews installed temporary patches before towing the M/V *Casitas* towards Honolulu. The vessel could not be salvaged and on August 4 was sunk in over 7,000 feet of water at an EPA-approved emergency site northwest of the atoll. The grounding sheared and scraped corals across a reef area measuring 42 meters long by 15 to 20 meters wide. Removal efforts required setting and moving cables to position a barge, damaging an additional 1,600 square meters of reef habitat, including 461 square meters of coral. In the Spring of 2011 a [Restoration Plan](#) was finalized to restore resources injured by the grounding and compensate the public for injuries from the time of the grounding until full recovery. The focus of the restoration has been the removal of marine debris from Papahānaumokuākea.

Designated Essential Fish Habitat

Essential fish habitat (EFH) is defined as those waters and substrate necessary for federally managed species to spawn, breed, feed, and/or grow to maturity. EFH is a tool to manage marine habitat, ensuring that the federally managed species have a healthy future. EFH in the Western Pacific is broadly defined by depth for bottomfish, seamount groundfish, pelagics, coral reef ecosystem, and crustaceans. Only precious coral EFH is location-specific (Table 4.3).

Details on the EFH of the project area can be found in the Fishery Ecosystem Plans for Pelagic Fisheries and the Hawaiian Archipelago of the Western Pacific (WPFMC, 2009a, 2009b).

Table 4.3. Essential Fish Habitat of the Project Area

Management Unit Species	EFH for Eggs and Larvae	EFH for Juveniles and Adults
Bottomfish	Water column down to 400 meters depth from shoreline out to the 200-mile U.S. EEZ boundary.	Water column and all bottom from shoreline down to 400 meters depth.
Seamount Groundfish	Water column down to 200 meters depth of all EEZ waters bounded by 29 degree–35 degree North and 171 degree East–179 degree West.	Water column down to 200 meters depth of all EEZ waters bounded by 29 degree–35 degree North and 171 degree East –179 degree West.
Pelagics	Water column down to 200 meters depth from shoreline out to EEZ boundary.	Water column down to 1,000 meters depth from shoreline out to EEZ boundary.
Precious Corals	Known precious coral beds in the Hawaiian Islands located at: Keāhole point, between Miloli'i and South Point, the 'Au'au Channel, Makapu'u, Ka'ena point, the southern border of Kaua'i, Wespac bed, Brooks bank bed, and 180 Fathom Bank.	
Coral Reef Ecosystems	Water column and all bottom down to 100 meters depth from shoreline out to EEZ boundary.	Water column and all bottom down to 100 meters depth from shoreline out to EEZ boundary.
Crustaceans	Lobsters/crab: water column down to 150 meters depth from shoreline out to EEZ boundary. Deepwater shrimp: outer reef slopes between 300–700 meters depth.	Lobsters/crab: bottom from shoreline down to 100 meters depth. Deepwater shrimp: outer reef slopes between 550–700 meters depth.

Source: NMFS, 2023

4.4 Biological Environment

The proposed sanctuary is a large marine ecosystem exposed to a wide range of oceanographic conditions and environmental and anthropogenic stressors. The variety of physical habitats, including reef, slope, bank, submarine canyon, and abyssal plains, support more than 7,000 known shallow and deepwater marine species. Small islands and islets provide essential breeding grounds and nesting sites for endangered, threatened, and rare species, which forage on land and throughout the coral reef, deepwater, and pelagic ecosystems. Biological resources in the study area that may be affected by the proposed action and alternatives include reef organisms, bottomfish, pelagic species, turtles, birds, and marine mammals.

“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 vigorous, and endangered species status is largely attributed to factors inherent in isolated locations, such as limited distributions, small populations, and vulnerability to perturbations. Further, management actions such as translocations, non-indigenous species removal, and habitat restoration have successfully contributed to improvements in habitat quality and species abundance and distribution” (NOAA ONMS, 2020).

4.4.1 Algae

The marine algal flora of the proposed sanctuary are diverse and abundant, with 335 known species of macroalgae and two seagrass species (Tsuda, 2014). The species composition of the macroalgae community is relatively similar throughout Papahānaumokuākea. *Chlorophyta*, *Rhodophyta*, *Ochrophyta*, branched coralline, crustose coralline, cyanobacteria, and turf algae occur in varying combinations, with green algae having the largest biomass and area coverage (Vroom & Page, 2006). The calcified algae in the genus *Halimeda* is widespread and contributes greatly to sand formation (Vroom & Page, 2006). Unlike the main Hawaiian Islands, where non-indigenous species and invasive algae have overgrown many coral reefs, reefs in Papahānaumokuākea are relatively free of non-indigenous algae, and the high natural herbivory results in a natural algal assemblage. However, two recently discovered species are known to act invasively. The mat-forming cryptogenic red algae *Chondria tumulosa* was discovered at Manawai in 2019 (Sherwood et al., 2020). The presence of this red algae was later confirmed at Kuaihelani in 2021 along with spiny seaweed (*Acanthophora spicifera*) which was discovered in 2022 (Rankin et al., 2022).

4.4.2 Corals

Fifty-seven species of stony corals are known in Papahānaumokuākea's shallow subtropical waters (at depths of less than 100 feet [30 meters]), covering 3,687 square kilometers of marine habitat (Miller et al. 2004; 2006; Maragos et al., 2009). Endemism is high, with 17 species (30%) found only in the Hawaiian Archipelago. These endemics account for 37 to 53 percent of visible stony corals in all shallow reef areas surveyed (Friedlander et al., 2005). Deepwater corals are more diverse, with 137 gorgonian octocorals and 63 species of azooxanthellate scleractinians documented in Papahānaumokuākea (Parrish & Baco, 2007). Larval recruitment to deep-water ecosystems, as well as isolated to seamounts, is rare from other locations. Once established, self-recruitment within these habitats is the primary mechanism to sustain these ecosystems (Crochelet et al., 2020).

Live coral cover is highest in the reefs in the middle of Papahānaumokuākea, with 59-63% of available substrate at Kamokuokamohoali 'i and Kapou covered with living corals (Maragos et al., 2004), although there is minimal coverage at most other reef sites (Maragos et al., 2009). The same pattern is observed for species richness, with 41 coral species reported at Lalo and lower diversity at the archipelago's northern end and off the exposed basalt islands to the southeast.

While Papahānaumokuākea's coral reefs are relatively undisturbed by the direct impacts of fishing, tourism, land-based pollution and poor water quality, conditions have recently declined to "fair" in the *State of the Monument Report*, likely due to bleaching events and storms (NOAA ONMS, 2020). Coral disease (tumors and lesions associated with parasites, ciliates, bacteria, and fungi) is lower in the NWHI than in the rest of the archipelago (Aeby, 2006). Derelict fishing gear, an ongoing issue in Papahānaumokuākea, degrades reef health by abrading, smothering, and dislodging corals, as well as by preventing recruitment on reef surfaces (Donohue & Brainard, 2001). Current science suggests that the direct and indirect effects of climate change are likely to have profound effects on the corals in Papahānaumokuākea (PMNM, 2011), including 1) ocean warming which can result in coral bleaching, 2) increases in

frequency and severity of tropical storms which can affect reef structure and cause erosion, 3) sea level rise which exacerbates habitat loss, and 4) ocean acidification which impedes growth of coral skeletons, mollusk shells, and some plankton. The northern coral reefs, particularly Manawai, Kuaihelani, and Hōlanikū, experience the highest fluctuation in sea surface temperatures, and have experienced the most severe bleaching events in the proposed sanctuary, but are also sentinel sites for research into climate change impacts (NOAA ONMS, 2020).

4.4.3 Benthic Shallow Water Invertebrates

With the exception of coral and lobster species, marine invertebrates of the proposed sanctuary are poorly known. In 2000, the NWHI Reef Assessment and Monitoring Program reported 838 species from 12 orders, along with several new species endemic to the NWHI (DeFelice et al., 2002). In 2006, over 1,000 species of macroinvertebrates were identified at Lalo during the Census of Marine Life expedition (Maragos et al., 2009) and potentially as many as 2,300 unique morphospecies were identified from Lalo alone. Preliminary results from studies in 2010 and 2013 suggest that cryptic invertebrates are far more diverse than previously thought, and species richness is likely 8–10 fold greater than formerly documented values (Timmers 2019).

The black lipped pearl oyster (*Pinctada margaritifera*) was first discovered at Manawai in 1927. It was overharvested between 1928-1930 when approximately 150,000 oysters were taken for their pearls and shell. A 1930 expedition estimated 100,000 oysters remaining. Surveys in 1969, 1996, 2000, and 2003 found only a few oysters, indicating that the population had not recovered (Keenan et al., 2006). The slow recovery of this species demonstrates the fragility of some proposed sanctuary resources (Schultz et al., 2011).

4.4.4 Crustaceans

The NWHI lobster trap fishery, which commenced in the mid-1970s, primarily targeted two species of ula: Hawaiian spiny lobster (*Panulirus marginatus*) and slipper lobster (*Scyllarides squammosus*). Three other ula species, the green spiny lobster (*P. penicillatus*), ridgeback slipper lobster (*S. haanii*), and sculptured slipper lobster (*Parribacus antarcticus*), were caught in low abundance (DiNardo & Marshall, 2001). The fishery was closed in 2000 because of the uncertainty in the population models used to assess the stocks (DeMartini et al., 2003).

Status assessments of the lobster stocks ended with the close of the commercial fishery. Fishery-independent lobster tagging research conducted between 2002 and 2008 indicated that the stocks had not recovered. No data has been collected on lobster populations since. Numerous hypotheses have been advanced to explain population fluctuations of lobsters in the NWHI, including environmental (Polovina & Mitchum, 1992), biotic (e.g., habitat and competition) (Parrish & Polovina, 1994), and anthropogenic (e.g., fishing) (Polovina et al., 1995; Schultz et al., 2011). Each hypothesis by itself offers a plausible, however simplistic, explanation of events that in fact result from several processes acting together. Population fluctuations of lobsters in the proposed sanctuary is more likely a mix of the hypotheses presented, each describing a different set of mechanisms (DiNardo & Marshall, 2001).

4.4.5 Reef Fish

There are approximately 338 species of shallow (< 30 m) and mesophotic (30 - 150 m) fish in the proposed sanctuary. Isolation contributes to a lower fish species diversity relative to other sites (Mac et al., 1998). The long-term protection from fishing pressure has resulted in standing stocks of fish more than 260% greater than the main Hawaiian Islands. Reef fish structure in the proposed sanctuary is very different from the main Hawaiian Islands and most places in the world, with more than 54% of the total fish biomass consisting of reef predators. In contrast, fish biomass in the main Hawaiian Islands is dominated by herbivorous fish species (55%), with only 3% composed of reef predators (Friedlander & DeMartini, 2002). Reef predator biomass on forereef habitats is 1.3 metric tons per hectare, compared with less than 0.05 metric tons per hectare on forereef habitats in the main Hawaiian Islands. Large, predatory fish such as sharks, Ulua (giant trevally, *Caranx ignobilis*), and Hapu'upu'u (Hawaiian grouper, *Epinephelus quernus*) that are rarely seen and heavily overfished in populated areas are abundant in the proposed sanctuary.

Papahānaumokuākea is also characterized by a high degree of endemism in reef fish species, particularly at the northern end of the chain, with endemism rates well over 50%, making it one of the most unique fish faunas on earth (DeMartini & Friedlander, 2004). Extremely high endemism has also been reported among mesophotic fish at Hōlanikū (Kane et al. 2014; Kosaki et al. 2017). The decline in global marine biodiversity emphasizes how important endemic “hot spots” like Hawai'i are for global biodiversity conservation (Friedlander et al. 2005; DeMartini & Friedlander, 2004). Within the proposed sanctuary, endemism increases up the chain and is highest at Kapou, Manawai, Kuaihelani, and Hōlanikū (Fukunaga et al., 2017). Another feature of the shallow-water reef fish community noticed by divers is that some species found only at much greater depths in the main Hawaiian Islands inhabit shallower waters. This might be explained by water temperature preferences or by disturbance levels that vary between the two ends of the archipelago.

4.4.6 Bottomfish

Bottomfish species are in the taxonomic groups Lutjanidae (snappers), Serranidae (groupers), and Carangidae (jacks). Bottomfish stocks in the proposed sanctuary have not been determined to be overfished, and towards the end of the commercial fishing period, were reported as “healthy and lightly exploited” (Brodziak et al., 2009).

4.4.7 Pelagic Marine Life

Pelagic species, including billfish, tuna, mahimahi, and wahoo, are cosmopolitan, occurring in all oceans within the tropical and subtropical zones, although individual species and stocks may have very specific water temperature preferences (Longhurst & Pauly, 1987). Yellowfin tuna prefer water no cooler than 18 to 21°C, which coincides with the proposed sanctuary's northern boundary. All species undertake seasonal and age-related migrations, traveling between spawning grounds and feeding grounds appropriate for their sizes. They prey on medium-sized pelagic fish, crustaceans, and cephalopods. Tagging studies of yellowfin tuna and bigeye tuna have demonstrated that, while these species have enormous capacity to travel huge distances, they show very specific attraction to fish aggregating devices, island reef ledges, seamounts, and

other elements of structure (Itano & Holland, 2000). Lowe et al. (2006) similarly found that while two species of manō, tiger sharks (*Galeocerdo cuvier*) and Galapagos sharks (*Carcharhinus galapagensis*), are capable of long-distance travel, they showed more site fidelity than expected throughout the year, with 70% of tiger sharks exhibiting year-round residence at Lalo. Some of the study subjects did make long-distance movements, with sharks marked at Lalo traveling to both ends of the island chain (Kuaihelani and Hawai'i Island). The tremendous economic value of these fishes has resulted in declines of most populations because of industrialized fishing. While Myers and Worm (2003) calculated that large predatory fish biomass today is only about ten percent of pre-industrial levels worldwide, large predatory fish populations remain healthy and robust in the proposed sanctuary (Friedlander et al., 2005). Based on the 2022 Stock Assessment and Fishery Evaluation Report (WPRFMC, 2023), only two stocks of fish are overfished in the Western Pacific region: Pacific bluefin tuna (*Thunnus orientalis*) and North Pacific striped marlin (*Tetrapturus audax*).

4.4.8 Reptiles

The five species of sea turtles that occur in the proposed sanctuary are the honu (green, *Chelonia mydas*), the loggerhead (*Caretta caretta*), the olive ridley (*Lepidochelys olivacea*), the leatherback (*Dermochelys coriacea*), and the honu'ea (hawksbill, *Eretmochelys imbricata*). All of these species are protected by the ESA and HRS 195D. Of these species, only the honu comes ashore to bask and breed. Lalo is the site of the principal rookery for the entire honu (Hawaiian green turtle) stock, with more than 90% of the population nesting there (Balazs & Chaloupka, 2004). As adults, most of these turtles travel to foraging grounds in the main Hawaiian Islands or in Kuaihelani or Kalama Atoll (Johnston Atoll), where they graze on benthic macroalgae. They periodically swim back to the nesting grounds at Lalo or, in smaller numbers, to Kapou and Manawai to lay eggs. Breeding adults remain extremely faithful to the colony where they were hatched for their own reproductive activities (Bowen et al., 1992). Hatchling turtles may spend several years in pelagic habitats foraging in the neritic zone before switching to a benthic algae diet as adults.

The Hawaiian population of honu has been monitored for more than 50 years, following the cessation of harvesting in the 1970s, and has shown a steady recovery from its depleted state (Balazs & Chaloupka, 2004). The transition zone chlorophyll front, located north of the proposed sanctuary in most years, occasionally moves southward along with one of the species tightly associated with it, the loggerhead turtle. The North Pacific population breeds in Japan but feeds on buoyant organisms concentrated at the convergent front in these high chlorophyll waters, which support a complex food web including cephalopods, fishes, and crustaceans, also fed upon by albacore tuna (*Thunnus alalunga*) and a variety of billfish (Polovina et al., 2001).

The near-pristine nature of the proposed sanctuary's marine ecosystems has contributed to the low level of diseases observed. Fibropapillomatosis, a disease that causes tumors in turtles, affected 40–60% of the honu in the 1990s, although this declined to 9.7% by 2007 (Chaloupka et al., 2009) and has remained low. An estimated 52 metric tons of derelict fishing gear drifting into the Monument from across the Pacific is a significant entanglement threat to sea turtles.

4.4.9 Seabirds

The importance of seabirds in Papahānaumokuākea was recognized in 1909 with the establishment as the Hawaiian Islands Bird Reservation, which became the Hawaiian Islands NWR. Early protection and active management have resulted in large, diverse, and relatively intact seabird populations. These seabird colonies constitute one of the largest and most important assemblages of tropical seabirds in the world, with approximately 14 million birds (5.5 million breeding annually), representing 21 species (Naughton and Flint 2004). More than 98% of the world's mōlī (Laysan albatross, *Phoebastria immutabilis*) and ka'upu (black-footed albatross, *Phoebastria nigripes*) populations nest here, with the largest nesting colonies of both species in the world occurring at Kuaihelani. For several other species, such as Nunulu (Bonin petrel, *Pterodroma hypoleuca*), 'ao'ū (Christmas shearwater, *Puffinus nativitatis*), 'akihike'ehi'ale (Tristram's storm petrel), and the pakalakala (gray-backed tern, *Sterna lunata*), Papahānaumokuākea supports colonies of global significance. The last complete inventory of breeding populations was done between 1979 and 1984 (Fefer et al., 1984). Population trends since then have been derived from more intensive monitoring at three islands, which indicate stable or increasing numbers for most species, but concern for a few, especially the albatrosses.

The conservation status of seabirds in Hawai'i was assessed as part of the North American Waterbird Conservation Plan (Kushlan et al., 2002). Eleven of the 21 species were classified as highly imperiled or of high conservation concern at the broad scale of the plan (eastern north Pacific, western north Atlantic, and Caribbean). At the regional scale (Pacific Islands), six species were included in these highest concern categories: mōlī, ka'upu, 'ao'ū, 'akihike'ehi'ale, makalena, and Noio hinaoku. Distribution, population status and trends, ecology, and conservation concerns of each of these species are in the Regional Seabird Conservation Plan, Pacific Region (FWS, 2005). The greatest threats to seabirds that reside in Papahānaumokuākea are both local and global. These threats include introduction of non-indigenous mammals and other invasive species, fishery interactions, contaminants, oil pollution, marine debris, and climate change. Over the past 20 years, active management in the NWRs and State Seabird Sanctuary has included the eradication of the black rat (*Rattus rattus*) at Kuaihelani, and the iole (Polynesian rat, *Rattus exulans*) at Hōlanikū; eradication or control of invasive plants; cleanup of contaminants and hazards at former military sites; and coordination with NMFS and the regional fishery management councils, as well as industry and conservation organizations, to reduce fishing impacts.

Table 4.4. Seabirds of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Status	Threat Level
Black-footed albatross	Ka'upu	<i>Phoebastria nigripes</i>	I	BCC
Laysan albatross	Mōlī	<i>Phoebastria immutabilis</i>	I	BBC
Short-tailed albatross	Makalena	<i>Phoebastria albatrus</i>	I	E
Bonin petrel	Nunulu	<i>Pterodroma hypoleuca</i>	I	LC
Bulwer's petrel	'Ou	<i>Bulweria bulwerii</i>	I	LC

Common Name	Hawaiian Name	Scientific Name	Status	Threat Level
Wedge-tailed shearwater	‘Ua‘u kani	<i>Puffinus pacificus</i>	I	LC
Christmas shearwater	‘Ao‘ū	<i>Puffinus nativitatus</i>	I	LC
Tristram’s storm-petrel	‘Akihike‘ehi‘ale	<i>Oceanodroma tristrami</i>	I	BCC
Red-tailed tropicbird	Koa‘e ‘ula	<i>Phaethon rubricauda</i>	I	LC
Masked booby	‘Ā, Akeake	<i>Sula dactylatra</i>	I	LC
Red footed booby	‘Ā, Akeake	<i>Sula sula</i>	I	LC
Great frigatebird	‘Iwa	<i>Fregata minor</i>	I	LC
White tern	Manu o Kū	<i>Gygis alba</i>	I	LC
Grey-backed tern	Pakalakala	<i>Sterna lunata</i>	I	LC
Sooty tern	‘Ewa‘ewa	<i>Sterna fuscata</i>	I	LC
Black noddy	Noio, lae hina	<i>Anous minutus</i>	I	LC
Brown noddy	Noio koha	<i>Anous stolidus</i>	I	LC
Blue-gray noddy	Noio hinaoku, manuohina	<i>Procelsterna cerulea</i>	I	LC

1 E = endemic to the Hawaiian Islands; I = indigenous to the Hawaiian Islands; M = non-breeding migrant in the Hawaiian Islands; X = possibly extinct (not counted in species total for IBA qualification purposes).
 2 E = endangered; T = threatened; C = candidate for listing; BCC = bird of conservation concern; LC = least concern (FWS 2002).

Source: Adapted from VanderWerf 2008

4.4.10 Marine Mammals

Papahānaumokuākea ecosystems play an important role in supporting more than 20 species of marine mammals. The endemic ‘Ilioholoikauaua (Hawaiian monk seal), the most endangered pinniped in the United States, is a year-round resident, and is the only seal known to be dependent upon coral reefs for its existence. Some species of nai‘a (dolphins) are year-round residents, including spinner dolphins (*Stenella longirostris*) and bottlenose dolphins (*Tursiops truncatus*). Wide-ranging and migratory species such as spotted dolphins (*Stenella frontalis*), nu‘ao (false killer whales, *Pseudorca crassidens*), koholā (humpback whales, *Megaptera novaeangliae*) and numerous other cetaceans also occur within the proposed sanctuary.

‘Ilioholoikauaua (Hawaiian monk seal)

The marine and littoral ecosystems of the proposed sanctuary provide essential habitat for the ‘Ilioholoikauaua (Hawaiian monk seal, *Neomonachus schauinslandi*). The ‘Ilioholoikauaua was listed as an endangered species under the ESA in 1976 (41 FR 51611 [Nov. 23, 1976]) and is protected by the State under HRS 195D. The NWHI population reached a low point around 2013

and has been slowly growing since (Baker et al., 2016; Carretta et al., 2022). The total population of ‘īlioholoikauaua is currently estimated to be around 1,465 individuals (Carretta et al., 2020). The majority of the population lives within the proposed sanctuary —nearly 1,200 seals (NOAA ONMS, 2020). Their range consists of the islands, banks, and corridors within Papahānaumokuākea, with most foraging concentrated in depths up to 200m (though some seals range to depths as deep as 500m) (Stewart et al., 2006).

In May 1988, NMFS designated critical habitat under the ESA for the ‘īlioholoikauaua from shore to 20 fathoms in ten areas of the NWHI. Critical habitat for this species includes all beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and ocean waters out to a depth of 20 fathoms around the following: Manawai; Hōlanikū; Kuaihelani, except Sand Island and its harbor; Kapou; Kamole; Kamokuokamohoali‘i; ‘Ōnūnui & ‘Ōnūiki; Lalo; Mokumanamana; and Nihoa (50 CFR § 226.201). Critical habitat was designated to enhance the protection of habitat used by seals for pupping and nursing, areas where pups learn to swim and forage, and major haul out areas. The loss of terrestrial habitat is a priority issue of concern in the NWHI, primarily caused by environmental factors such as storms and sea level rise. Significant habitat loss at Lalo (e.g., the loss of Whaleskate and Trig Islands, and significant erosion of East Island) was followed by a dramatic drop in pup survival rate (Baker et al. 2020). Sea level rise over the long term may threaten other islands in the chain, decreasing available haul out and pupping beaches over a large portion of this terrestrial habitat (Baker et al. 2006, Reynolds et al. 2012).

Foraging patterns include 1) a range of 18,593 miles (48,156 square kilometers), or 14 percent of the proposed sanctuary, 2) the most activity at Lalo and surrounding banks, and 3) traveling specific corridors associated with the submarine ridge between breeding and haul out sites, where they likely forage around subsurface features like reefs, banks, and seamount (Stewart 2004a, b, and c; Stewart & Yochem 2004a, b, and c). Several banks northwest of Hōlanikū represent the northern extent of the ‘īlioholoikauaua foraging range (Stewart, 2004a).

Past and present impacts to the NWHI seal population include hunting in the 1880s; disturbance from military uses of the area; direct fishery interaction, both recreational fishing (Hōlanikū) and commercial fishing prior to the establishment of the 50-nmi Protected Species Zone around the NWHI in 1991 (NMFS, 2007); predation by sharks (Nolan, 1981); entrapment in the degrading steel seawalls of Tern Island at Lalo (Baker et al., 2020); aggression by adult male seals; and reduction of habitat and prey due to environmental change (Antonelis et al., 2006).

The ecological impacts of marine debris are an ongoing problem in Papahānaumokuākea. Mortality as the result of entanglement in derelict fishing gear, primarily nets, is of particular concern (Henderson, 2001; 1990; 1984a; 1984b). Between 1982 and 2019, up to 404 ‘īlioholoikauaua were observed entangled in derelict fishing gear in the proposed sanctuary.

Cetaceans

The waters of the proposed sanctuary are also home to more than 20 cetacean species, six of them federally recognized as endangered under the ESA and HRS 195D, and “depleted” under the Marine Mammal Protection Act, but comparatively little is known about the distributions

and ecologies of these whales and dolphins (Barlow, 2006). The proposed sanctuary contains two-thirds of the koholā (humpback whale, *Megaptera novaeangliae*) wintering habitat in the Hawaiian Archipelago (Johnston et al., 2007), and is known to be used for breeding and calving activity, with an apparent high presence of whales at Lalo (Lammers et al., 2023). The most well-studied cetacean species in the proposed sanctuary is the Hawaiian spinner dolphin (*Stenella longirostris*). This geographically isolated subgroup of the spinner dolphin is genetically distinct from those of the eastern tropical Pacific (Galver, 2000). They occur off all of the main Hawaiian Islands and four islands in Papahānaumokuākea (Hōlanikū, Kuaihelani, Manawai, and Lalo) (Karczmarski et al., 2005). Andrews et al. (2010) found that animals at Kuaihelani and Hōlanikū were genetically differentiated from those at Manawai, and both are distinct from island-associated populations in the main Hawaiian Islands. These northern areas are recognized as Biologically Important Areas for spinner dolphins by the U.S. government (Baird et al., 2015; Kratofil et al., 2023). Genetic isolation, together with an apparent low genetic diversity, suggests that spinner dolphins could be highly vulnerable to anthropogenic and environmental stressors (Andrews et al., 2004).

4.4.11 Summary of Threatened and Endangered Species and Critical Habitat

Twenty-three species occurring in the proposed sanctuary are listed as threatened or endangered under the ESA and/or State endangered species list. This includes five marine turtles, the ‘īlioholoikauaua or Hawaiian monk seal, six cetaceans, one seabird, and one coral (Table 4.5). In addition, the islands, which are within the project area but not included for sanctuary designation, have four terrestrial birds and six plants on the list.

Table 4.5a. ESA and State-Listed Marine Reptile Species within the Project Area

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Central North Pacific Green Sea Turtle	Honu	<i>Chelonia mydas</i>	Resident	Threatened
Hawksbill Turtle	Honu‘ea	<i>Eretmochelys imbricata</i>	Resident to Main Hawaiian Islands	Endangered
North Pacific Loggerhead Turtle	None	<i>Caretta caretta</i>	Transient	Endangered
Olive Ridley Turtle	None	<i>Lepidochelys olivacea</i>	Transient	Threatened
Leatherback Turtle	None	<i>Dermochelys coriacea</i>	Transient	Endangered

Table 4.5b. ESA and State-Listed Marine Mammal Species within the Project Area

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Hawaiian Monk Seal	ʻĪlioheʻiʻio	<i>Neomonachus schauinslandi</i>	Resident	Endangered
Sperm Whale	Palaoa	<i>Physeter macrocephalus</i>	Transient	Endangered
Blue Whale	Koholā	<i>Balaenoptera musculus</i>	Transient	Endangered
Sei Whale	Koholā	<i>B. borealis</i>	Transient	Endangered
Fin Whale	Koholā	<i>B. physalus</i>	Transient	Endangered
North Pacific Right Whale	Koholā	<i>Eubalaena japonica</i>	Transient	Endangered

Table 4.5c. ESA and State-Listed Marine Fish Species within the Project Area

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Giant Manta Ray	Hāhālua	<i>Manta birostris</i>	Unknown	Threatened
Oceanic Whitetip Shark	Manō	<i>Carcharhinus longimanus</i>	Unknown	Threatened
Shortfin mako shark	Manō	<i>Isurus oxyrinchus</i>	Unknown	Candidate

Table 4.5d. ESA and State-Listed Seabird Species within the Project Area

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Short-tailed Albatross	Mōlī	<i>Phoebastria albatrus</i>	Resident	Endangered

Table 4.5e. ESA and State-Listed Coral Species within the Project Area

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
No common name	No common name	<i>Acropora globiceps</i>	Resident	Threatened

In 1988, the National Marine Fisheries Service designated critical habitat for the Hawaiian monk seal from shore to 20 fathoms around every island, atoll, and bank of the proposed sanctuary, except Sand Island at Midway Atoll. This habitat includes “all beach areas, sand spits and islets, inner reef waters, and ocean waters.”

Both NMFS and FWS have published proposed rules for the designation of critical habitat that includes areas within Papahānaumokuākea. On November 27, 2023, NMFS published a proposal to designate 17 island units of critical habitat in the Pacific Islands Region for seven Indo-Pacific coral species listed under the ESA, including one in the proposed sanctuary at Lalo

(88 FR 83644[Nov. 27, 2023]). The species *Acropora globiceps* is reported to occur at Lalo on hard substrate at depths of 0–10 meters. Proposed critical habitat includes all hard substrate from 0–10 meters at Lalo based on maps developed by National Centers for Coastal and Ocean Sciences (NCCOS, 2003). Public comments on this proposed action were accepted through February 28, 2024. On July 19, 2023, FWS published a proposal to designate critical habitat for the Central North Pacific Distinct Population Segment of the green sea turtle in the terrestrial environment at Kamole, Kapou, Manawai, Kuaihelani, and Hōlanikū (88 FR 46376[July 19, 2023]). A public hearing on the Central North Pacific Distinct Population Segment of the green sea turtle critical habitat is scheduled for August 21, 2024.

4.5 Cultural and Historical Resources

NOAA defines maritime heritage inclusively as “the wide variety of tangible and intangible elements (historic, cultural and archaeological resources) which represent our human connections to our Great Lakes and ocean areas” (NOAA ONMS, 2022a). This includes cultural, archaeological, and historical resources, ranging from Traditional Cultural Properties (historic sites that are imbued with cultural importance by a particular group) to more recent historic sunken vessels and aircraft. Therefore, understanding the interconnectedness of maritime heritage resources and Native Hawaiian cultural resources is critical to the successful stewardship and preservation of all public heritage resources.

From its inception, the Monument management regime has recognized and valued the importance of human connection to place and the essential role that culture plays. Native Hawaiian culture weaves through all aspects of conservation and co-management of marine resources. In Hawaiian traditions, the NWHI are considered a sacred place, a region of primordial darkness from which life springs and spirits return after death (Kikilo, 2006).

In recognition of the cultural importance and the original identity of the archipelago, Native Hawaiian cultural resources are addressed as a separate category (Section 4.5.1) and the supplemental document *E Ho‘i I Ke Au A Kanaloa* (Nohopapa Hawai‘i, 2023), distinguishes Native Hawaiian cultural resources from historical or maritime heritage resources (Section 4.5.2, focuses on post-1778 history of Papahānaumokuākea).

Descriptions of the Native Hawaiian relationships, knowledge systems, values, and practices are documented in oral traditions, kūpuna (elder) interviews, etc. As knowledge was transmitted through oral traditions, primary data sources of Native Hawaiian knowledge include the mele (songs), hula (dance), mo‘olelo (stories), memories, and narratives that serve as indigenous data repositories. Primary data sources for maritime heritage resources included State Historic Preservation Division and local libraries and archives, National Archives and Records Administration, Department of Defense shipwreck and aircraft databases, historical documents and newspaper archives, archaeological field data from submerged resource surveys 1998–2021, and NOAA’s Office of Coast Survey and other sources.

4.5.1 Native Hawaiian Cultural Resources

The ocean is a cultural seascape that is vital to Native Hawaiian self-identity, and well-being within a Hawaiian worldview (Lewis, 1972; Kyselka, 1987). It encompasses an ecological kinship within Native Hawaiian genealogies (Oliveira, 2014). It is also an essential component of Native Hawaiian physical and spiritual well-being and sustenance on a daily basis (Andrade, 2008; Olivera, 2014; Malo, 1903). Papahānaumokuākea is the only intact cultural voyaging seascape in the Hawaiian Islands (Kikiloi et al., 2017). This expansive ocean environment was the setting for ancient Hawaiian chiefs to voyage back and forth between the main Hawaiian Islands and the NWHI over the course of a 400-to-500 year period in traditional times. In addition, smaller communities from Ni‘ihau, Kaua‘i, and O‘ahu have been documented in the post contact period of continuing voyaging into this region well into the 20th century (Maly & Maly, 2003; Kikiloi, 2012). Continuing to access and acknowledge the biocultural seascapes of the NWHI ensures that these relationships continue to thrive in the broader aloha ‘āina (love for the land) movement and resurgence of ‘Ōiwi (Native Hawaiian) identity and political advocacy to protect the lands, freshwater resources, and oceans that are inextricably linked to the health of ‘Ōiwi communities (Goodyear-Ka‘ōpua et al., 2014). It embodies the tangible and intangible values of Native Hawaiian culture that have developed and evolved over countless generations (Kikiloi, 2010).

Uniquely positioned in Hawaiian cosmologies, genealogies, and practices, the NWHI are commonly referred to as the ‘Āina Akua (realm of the gods) or Kūpuna (ancestral or elder) Islands. This seascape represents a distinctly sacred realm that embodies the realms of Pō (darkness/realm of the ancestors) and Ao (realm of the light and living; Kikiloi, 2010). Hawaiian genealogical chants and oral narratives serve as a rich repository of traditional Hawaiian practices that connect Kānaka ‘Ōiwi to their origin and where ancestral spirits return. ‘Ōiwi traditions in Papahānaumokuākea were rooted in a mastery of skill and expertise of na akua (elemental deities) with a specific purpose and intentions on spiritual, physical, emotional, and mental levels (Maly & Maly, 2003; State of Hawai‘i DLNR, 2008; Kikiloi, 2010, 2019). Ali‘i (Native Hawaiian chiefs) would access this region as a rite of passage to commemorate the source of origins and mana (divine power/authority), and of authority as derived by the ancestral gods (Kikiloi, 2006, 2019).

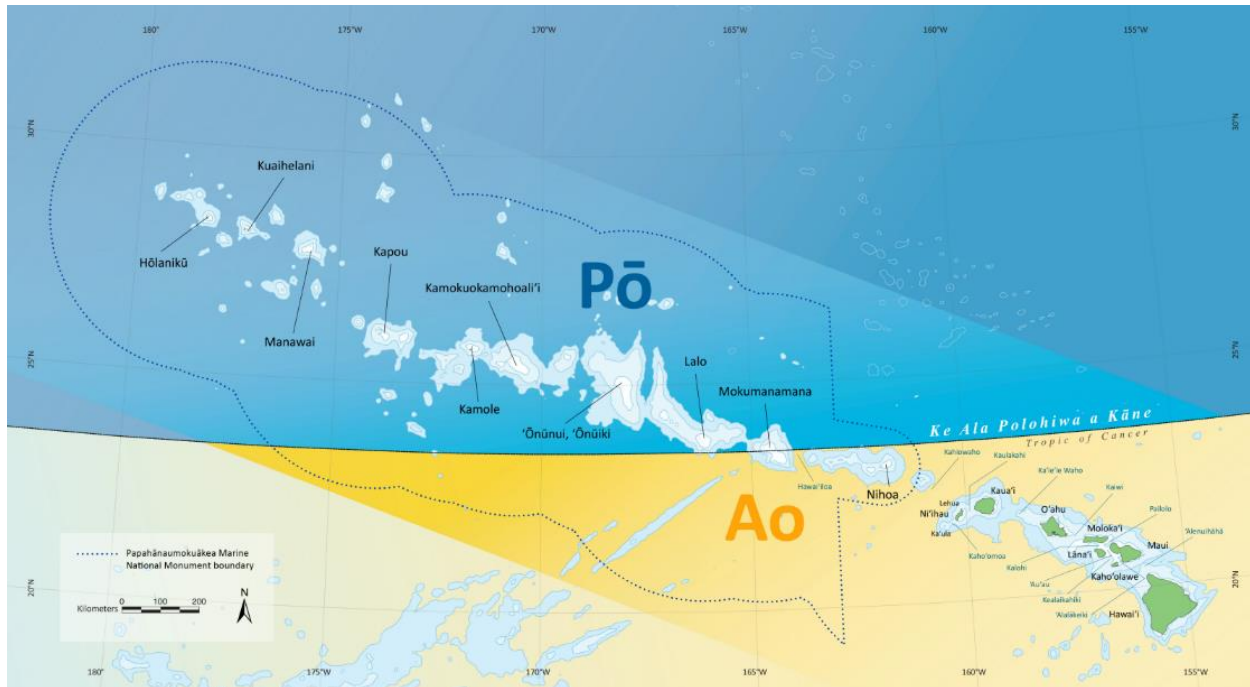


Figure 4.5. Map of the Hawaiian universe from the eastern edge to the northwestern extent of the Hawaiian Archipelago. Image: NOAA

Today, Kānaka ʻŌiwi continue to weave knowledge systems to perpetuate cultural practices in the NWHI, growing living relationships to this ancestral place. These relationships are embodied in the following ʻōlelo noʻeau (traditional Hawaiian proverb), “*I ka wā ma mua ka wā ma hope*” which represents a Kānaka ʻŌiwi worldview that one is always looking to the past to guide the future (Kameʻeleihiwa, 1992). Access to the NWHI allows Kānaka ʻŌiwi to weave diverse knowledge systems that solidify a strong collective pilina (relationship) and kuleana (privilege/responsibilities) to care for Papahānaumokuākea. These growing connections enable ʻŌiwi to perpetuate cultural practices across multiple generations and bring these experiences, enveloped in diverse relationships to this sacred place, into working with local communities back home (OHA, 2021).

Part of strengthening Native Hawaiian relationships to the NWHI is reinforcing the perpetuation of traditions, values, and intentions associated with this biocultural seascape. The traditional art of wayfinding has always been an integral aspect of expertise needed to make the journey to the NWHI (Maly & Maly, 2003). Kānaka ʻŌiwi descend from a rich heritage of open-ocean voyaging connected to one of the most remarkable feats of open-ocean voyaging and settlement in all of human history, the movement of ancestral oceanic peoples across the largest ocean on the planet, beginning as early as 1500 B.C. (Irwin, 2006). This legacy of ocean expertise is perpetuated by the descendants of the ancestral Polynesian navigators who voyaged thousands of kilometers weaving together similar genealogies, cosmologies, and oral traditions across the Pacific (Finney, 1977). The ocean waters of the proposed sanctuary were an ancient pathway for a voyaging sphere that occurred between this region and the main Hawaiian Islands for over 400–500 years (ca. AD 1300–1800). The ocean pathways and knowledge associated with the interconnected weather, marine, and terrestrial systems of the NWHI are part of this ancestral legacy, and are perpetuated by Native Hawaiian traditional voyaging organizations

such as the Polynesian Voyaging Society, to this day. Young navigators test their skills on voyages from Ni‘ihau to Nihoa to Mokumanamana that are significant milestones. Ceremonies and protocol associated with visits to these and other islands can only be performed off those shores, where appropriate respect can be paid to one’s ancestors, in their particular spiritual, natural, and geological manifestations (NOAA ONMS, 2020; OHA et al., 2021).

In addition to wayfinding, religious practices, and spiritual practices, Kānaka ‘Ōiwi continue to perpetuate traditions, values, and intentions associated with Papahānaumokuākea through tangible cultural practices such as indigenous science, traditional gathering, fishing, and burial practices. Indigenous science supports stewardship of the proposed sanctuary and perpetuates the practice of mālama ‘āina associated with ‘Ōiwi culture and the Aloha ‘Āina movement. Gathering practices include feathers for feather-work, shells, shark teeth, albatross bones for traditional tattooing, and food for subsistence and sustenance. Fishing in the Monument is currently limited to subsistence and sustenance fishing. More details on these cultural practices can be found in E Ho‘i I Ke Au A Kanaloa (Nohopapa Hawai‘i, 2023).

The occupation and use of these islands represent one of the earliest signs of Hawaiian religious activity. For over four hundred years (ca. 1400–1815 A.D.) the islands were used as a ritual center of power supported by an extensive voyaging interaction sphere that supported long-term settlement of the islands (Kikiloi, 2012). Nihoa and Mokumanamana have more than 140 archaeological sites that include agricultural, habitation, and religious structures. Based on radiocarbon data, it has been estimated that Nihoa and Mokumanamana Islands could have been inhabited from 100 A.D. to 1700 A.D. (Kikiloi, 2012; PMNM, 2008). The island of Mokumanamana is a potent portal that presides at the boundary between Pō and Ao. This boundary is the northern limit of the sun’s journey on the horizon, the Tropic of Cancer, reverently referred to as Ke Alanui Polohiwa a Kāne, the dark glistening path of Kāne, whose kinolau (physical forms) is Kānehoalani, or the sun, and its movements on the horizon. Similar to the sun and the islands themselves, the life path of Kānaka ‘Ōiwi begins in the east in the realm of Ao and continues westward, eventually returning to Pō.

Kānaka ‘Ōiwi believe that when people pass away, their spirits travel to portals, called leina, located on each inhabited island of the archipelago. This was a place where many ka‘ao (oral histories), mele, and mo‘olelo document the epic journeys of akua who traveled there and back (Kikiloi, 2010; Kanahale & Nu‘uhiwa, 2015). The Edith Kanaka‘ole Foundation continues to conduct research tracking the path of the sun during Ke Ala Polohiwa a Kāne (summer solstice) and Kanaloa (winter solstice) and Ka Piko o Wākea (spring equinox) using celestial expertise and heiau recorded in oral traditions (Kanahale & Nuuhiwa, 2015).

As described above, the cultural value of the area to Kānaka ‘Ōiwi is not only measured in the tangible cultural resources of archaeological sites on the islands of Nihoa and Mokumanamana, but also includes intangible cultural resources. The area is integral to Hawaiian spirituality, factoring in the creation myth as well as its position as a portal between the world of the living and the afterlife. Further, natural resources are cultural resources, and the health of the ecosystem directly relates to the vitality of Hawaiian culture. This region and the resources with it correspond to the Hawaiian origin myth, the Hawaiian’s place in the world, and the place beyond, blending the past, present, and future.

This recognition drives many aspects of the current management regime in order to support, maintain, and propagate the area's critical role in the living Hawaiian culture and spirituality. Guiding principles for considering Native Hawaiian cultural resources in the management of the Monument inform cultural practitioners and others who conduct activities in the proposed sanctuary on their responsibilities to the place, to their preparation for the activity conducted, and how to utilize the knowledge attained. The creation, management, and expansion of the Marine National Monument has been shaped by over twenty years of weaving a biocultural approach to protect this area as one of the world's largest marine protected areas, where the natural and cultural realms share an intertwined story and a common origin (Kikiloi et al., 2017). Papahānaumokuākea was inscribed as a UNESCO World Heritage site in 2010 for its outstanding natural and cultural significance to the heritage of mankind (UNESCO, 2010). Through Kānaka ʻŌiwi leadership, engagement, and knowledge, ʻŌiwi culture has shaped management through various policy and management actions such as developing a rigorous permitting process, culturally-appropriate standards and procedures, and opportunities for scientists and Native Hawaiians to collaborate in an equitable and ethical way (Kikiloi et al., 2017; OHA et al.; 2021).

The CWG is a group of Native Hawaiian kūpuna, researchers, cultural practitioners, educators, and community members that have deep connections and historical ties to Papahānaumokuākea through a living pilina bound by genealogy, cultural protocols, and values, building contemporary multi-disciplinary research and practice. Since 2001, the CWG has represented the Native Hawaiian community voice for the NWHI, giving advice, first to NOAA through the RAC, and more recently through OHA as a Monument co-trustee. In 2016, through many discussions among Native Hawaiian leadership uplifting the vision of kūpuna leaders to protect and care for this special place in perpetuity, OHA became a PMNM co-trustee agency to, in part, elevate the CWG collective voice and guidance to the MMB. Through the support of OHA and NOAA, the CWG consulted with ʻŌiwi communities for more than a decade which led to the creation of a historic management guidance document called *Mai Ka Pō Mai*. This document lays the foundational framework to guide the weaving of Kānaka ʻŌiwi knowledge systems, values, and practices into all aspects of management of Papahānaumokuākea (OHA et al., 2021). Cultural protocol is another facet of the CWG's many major contributions to the protection of the NWHI in collaboration with OHA to emphasize a living Native Hawaiian culture that relies on mo'olelo, oli, mele, and connection to place to perpetuate ancestral knowledge and cultural connections (Kikiloi, 2010). The CWG members have continued to re-learn ancestral names for the islands and atolls and create new names for places among the islands (Pihana & Lorenzo-Elarco, 2022). New mele and oli have been created for Papahānaumokuākea (OHA et al., 2021).

The co-managers of the Monument have emphasized Indigenous Knowledge in management, with a mission to ensure ecological integrity and achieve strong, long-term protection and perpetuation of Northwestern Hawaiian Island ecosystems, Native Hawaiian culture, and heritage resources for current and future generations. The basis for building a firm foundation to apply Indigenous Knowledge to management has been the development of strategies for the involvement of cultural practitioners in policy, management, education, and research (Kikiloi et al., 2017). The long-term planning needed to effectively apply Indigenous Knowledge to management hinges on empowering indigenous peoples within research, management, and policy who are well-positioned to work collaboratively from the agency to Native Hawaiian

communities. These positions tap into community networks and enhance the longevity of management and meaningful relationships to Native Hawaiian communities and back to the resource managers.

Papahānaumokuākea is part of Moananuiākea, commonly known today as the Pacific Ocean. The 110 seamounts, open waters, and all life in the proposed sanctuary boundaries are considered biocultural resources and linked to the Hawaiian people through environmental kinship. This connection is further strengthened by ‘Ōiwi communities bringing these experiences and knowledge to their communities to support ‘āina momona. These islands symbolize a generational legacy of growing and tending to the pilina to Papahānaumokuākea that continues to guide and shape management activities inclusive of ‘Ōiwi worldview, knowledge, and values. These relationships solidify the foundations of ancestral memories within ‘Ōiwi knowledge systems encompassing cultural conduct/protocols, research, and practices into growing respectful and reciprocal relationships to Papahānaumokuākea as a sacred biocultural oceanscape.

4.5.2 Maritime Heritage Resources

Maritime heritage resources in the proposed sanctuary reflect special elements of Hawaiian history, such as the distinctive Hawaiian fishing sampans, a local hybrid of Japanese traditional watercraft historically associated with Hawaii’s commercial tuna fishery (Schug, 2001). Some heritage resources, notably the collection of historic whaling shipwrecks that are distinctive on a global scale, reflect both Western and Hawaiian heritage. The 19th century whaling industry was the mainstay of the Hawaiian economy for decades. In 1846, the Kingdom’s Minister of the Interior reported that “perhaps 15,000 (approximately 20%) of the Hawaiian men between the ages of 15 and 30 years were employed at sea or in foreign lands” (Lebo, 2013). The shipwrecks and submerged aircraft of the pivotal Battle of Midway in 1942 stand out as nationally and internationally recognized heritage associated with a critical turning point in World War II. Two of the four Japanese aircraft carriers sunk during the battle have only recently been discovered. Such archaeological and historical properties reflect the events, individuals, and technologies that have shaped our past in important ways at the local, regional, national, and international levels.

There are more than 60 reported vessel losses in the historic record, and hundreds of sunken naval aircraft lost within the proposed sanctuary’s boundaries. Thirty-five of these sites have been located and assessed. Appendix G presents NOAA’s identification of historic properties within the area of potential effects for the proposed undertaking, pursuant to NOAA’s consultation responsibilities under section 106 of the NHPA.

Many sites are related to the sea battle of Midway that occurred in the vast northwestern area of the proposed sanctuary, hundreds of miles from the atoll, and their existence and location are based only on military records. Archaeological surveys of submerged resources in the Northwestern Hawaiian Islands were initiated by the University of Hawai‘i Marine Option Program in 1998 and 2002. From 2003-2021 NOAA archaeologists continued on an opportunistic basis to research, locate, and assess maritime heritage sites, supported by the Monument and NOAA’s Maritime Heritage Program. The Maritime Heritage Program provides guidance on the assessment and preservation of maritime heritage resources and maintains the

database on maritime heritage properties within the Monument. Collaboration is an important part of preservation.

Seven of nine confirmed military vessels, and three of five military aircraft listed in Appendix G were found within the waters of the Midway Atoll Special Management Area (SMA, 12 nmi surrounding the atoll). Archival research indicates that 22 American and nine Japanese aircraft were lost within five miles of Midway Atoll during the Japanese Air Raid on Midway, June 4, 1942 (Linville, 2010). While the Midway Atoll SMA encompasses an area of intensive maritime and aviation activities through the pre-WWII, WWII, Vietnam, Korean War, and Cold War periods, there has nevertheless been a limited number of remote sensing surveys conducted to date in these waters. As such, maritime heritage experts anticipate a high likelihood of historically significant heritage resources yet to be discovered within the SMA and surrounding waters.

Preservation laws including NMSA, NHPA, the Sunken Military Craft Act (SMCA), and other mandates define federal management of the heritage resource (Varmer, 2014). BMPs endorsed by the Presidential Advisory Council for Historic Preservation emphasize in situ preservation and maintenance of undisturbed conditions at heritage sites, to maximize our knowledge and benefit of the public resource (PMNM, 2011a). Threats to the maritime heritage resource include illegal salvage/looting, anchoring damage, and other intentional or inadvertent human impacts. The natural forces of biochemical deterioration, and mechanical storm and surge erosion will, over time, deteriorate many heritage resource sites, diminishing their significance. Climate changes exacerbate these impacts (Roth, 2021).

4.6 Socioeconomic Resources, Human Uses, and Environmental Justice

4.6.1 Socioeconomic Resources Overview

This section describes recent socioeconomic and demographic conditions in the proposed sanctuary community, which includes the Hawaiian Islands five counties of Hawai‘i, Honolulu, Kalawao, Kaua‘i, and Maui. These socioeconomic characteristics include population density, income and employment, and economic value to determine the baseline to be used in the impact analysis. This section describes sources of income and the status of the labor as indicators of the health of the local economy and opportunities for employment. An overview of what is currently known about the uses of natural and cultural resources includes fishing, recreation and tourism. NOAA prepared a detailed socioeconomic profile to characterize recent demographic and economic conditions and to determine the baseline statistics to be used in the impact analysis of the alternatives (Samonte et al., 2024).

Population

Population Growth and Density

From 2010 to 2022, the sanctuary community’s population grew 8.8%, with a population growth rate between 7.8% and 12.3% across counties. The county with the greatest population density in 2022 was Honolulu followed by Maui and Kalawao at 1,681 and 140 people per square

mile, respectively. Hawai‘i and Kaua‘i had population densities of 50 and 118 people per square mile.

Per Capita Income

In 2010, the real per capita income for the sanctuary community was \$54,621 (in 2022 U.S.\$) and in 2022 it increased to \$61,779. In 2022, Hawai‘i County had the lowest per capita income at \$49,476, and Honolulu County had the greatest at \$64,936.

Poverty Rates

In 2022, the poverty rate in the sanctuary community was 9.6%, with the lowest rate of 8.3% in Kaua‘i County and the highest rate of 14.9% in Kalawao County. The U.S. poverty threshold in 2022 was \$14,880 for an individual and \$23,280 for a family size of three (U.S. Census Bureau, 2022).

Unemployment Rates

In 2022, the unemployment rate in the sanctuary community was 5.1%, with the lowest unemployment rate in Kaua‘i County at 4.1% and the highest in Hawai‘i County at 6.5%. Unemployment rates decreased for the sanctuary community between 2010 and 2022.

Demographics

Gender

From 2010 to 2022, the percentage of female residents in the sanctuary community held consistent between 49.5% and 49.9%.

Racial Composition

In 2022, 37.2% of the population identified as Asian, 25.5% identified as two or more races, and 23.0% identified as White.

Ethnicity

This community is much more racially diverse than the U.S. which is comprised of a 65.9% White demographic. In 2022, the sanctuary community recorded a percentage of Hispanic respondents at 11.0%, compared to 18.7% of the U.S. population.

Age Distribution

The largest percentage of people were between 25 to 34 years of age.

Education Level

Twenty-two percent of the sanctuary community population has a minimum of a bachelor’s degree (2022), increasing from 19.7% in 2010. About 26.7% of the sanctuary population has a highest education level of a high school diploma or equivalent in 2022. The proportion of the sanctuary community who attained a high school diploma/equivalent or greater increased between 2010 and 2019.

Labor and Employment

Labor Force

In 2022, the sanctuary community labor force was over 760,000 people, an increase of over 46,000 people since 2010.

Employment

In 2022, over 675,000 people were employed in the sanctuary community, a 6.1% net growth from 2010.

Household Income

In 2022, average household income was similar between the sanctuary community and the U.S. at \$100,000 to \$149,999.

Employment by Industry

In 2022, the five highest percentages of total employment by industry in the sanctuary community were government and government enterprises (19.1% of total employment), accommodation and food services (11.8%), health care and social assistance (9.5%), retail trade (9.3%), and real estate (5.9%).

Proprietors' Income and Employment

In 2022, proprietors employed over 216,000 people in the sanctuary community, making up 24.0% of total employment in the sanctuary community. This is an increase from the 19.8% of total employment in 2010. Proprietors in the sanctuary community collectively earned \$6,521,000,000 in 2022, which comprised 10.6% of total income earned by place of work in the sanctuary community that year.

Tourism

In 2019, a total of 10.4 million visitors came to the state by either air service or cruise ship (primarily air service), spending an average of \$196 per person per day (Hawai'i Tourism Authority, 2020a). The busiest month for tourists was July for 2019 (286,419 visitors per day). The eastern U.S. and Japanese markets contributed 2.3 and 1.6 million tourists in 2019 respectively, participating in sightseeing activities such as self-guided driving, visiting communities, and visiting natural landmarks (Hawai'i Tourism Authority, 2020b).

Fishery Resources

Detailed socioeconomic data describing commercial fisheries is often warranted for analysis of impacts from sanctuary designation. Because commercial fishing is prohibited within the Monument, lost opportunities, transfer of effort, and lost jobs and revenue, among other typical concerns, would not vary by alternatives and therefore are not relevant for this action. Further, NMFS and WPRFMC prepared the impact analysis for the federal action to manage non-commercial fishing in the MEA, per the result of the NMSA 304(a)(5) process for the proposed designation.

4.6.2 Human Uses of the Monument

Access to the Monument, and therefore the areas of the proposed sanctuary is regulated through the permitting system described in Section 4.2.5. Permit criteria requires that there is no practicable alternative to conducting the activity within the Monument and the end value of the activity outweighs its adverse impacts on Monument resources, qualities, and ecological integrity. Other criteria and permit-specific conditions (e.g., BMPs, listed in Appendix B) strive to ensure that the activity is conducted in such a way as to reduce adverse impacts to Monument resources. As such, human uses are restricted by the permit types and specific criteria detailed in 50 CFR § 404. 11 and Section 4.2.5.

Permitted Activities in the Monument

Permitted activities constitute the majority of the human use in the Monument, with many activities directly related to addressing threats described in Section 4.2.7, including marine debris removal, invasive species monitoring, and research to understand how climate change is impacting the environment.

From 2007–2021, a total of 442 Monument permits have been issued (NOAA ONMS, 2022). This includes a diverse range of activities conducted by co-managers, filmmakers, cultural practitioners, community members, and researchers within the area of the proposed sanctuary. Activities occur across the entire chain. In 2021, 19 permits were issued, with 16 for activities solely within PMNM, two for activities across the Monument, and one for activities solely within the MEA.

Research

Roughly 50% of PMNM permits have been for research-related activities. Research permits are for activities that enhance the understanding of the proposed sanctuary’s resources and improve resource management decision-making. The types of activities that may be conducted under research permits include biological inventories, ecosystem-based research, habitat characterization, and archaeological research, including the two-week expedition for sunken aircraft and vessels commemorating the 75th Anniversary of the Battle of Midway.

During the section 106 consultation process for this proposed designation, a concern was raised that certain research could be harmful, both to the ecosystem and to the sacredness of the place to Native Hawaiians. The concern referred to activities conducted prior to Monument designation, and was related to scientific research conducted to further an outside research program and not research to improve conservation and management based on identified needs (NHPA section 106 Meeting Notes, August 23, 2022).

Education

Education permits are for activities that further the educational value of Papahānaumokuākea. These activities may help a broader audience understand the ecosystems within the Monument, share lessons learned in resource management with outside partners, promote Native Hawaiian knowledge and values, or aid in outreach with schools and community groups. Permits are considered for activities that have clear educational or public outreach benefits and that aim to “bring the place to the people,” rather than the people to the place. Examples of education

projects include teacher-at-sea programs, distance learning projects and university field classes. Approximately 6% of the permits were issued for educational activities.

Ka‘ena Point on the North Shore of O‘ahu shares similar ecosystem, plant, and animal features as those of Papahānaumokuākea. Ka‘ena Point is often used as an interpretive site to teach students and other groups about Papahānaumokuākea as they gain an understanding of the unique cultural, ecological, and geographic features of Ka‘ena Point while highlighting the similarities with Papahānaumokuākea.

In addition to permitted activities occurring in the Monument, the educational initiatives for the Monument include welcoming school groups to the Mokupāpapa Discovery Center, conducting and attending community events, producing educational materials for the public, and fostering an educational component for many of the activities occurring in the Monument.

Conservation and Management

Conservation and Management permits are for activities that enable the general management of PMNM. These activities may include field station operations, marine debris removal, development and maintenance of infrastructure, and long-term resource monitoring programs such as monitoring of endangered species, seabird populations, and terrestrial native plant communities. Conservation and Management permits also provide a mechanism for response and follow-up to urgent events in the Monument that may not have been anticipated, such as vessel groundings, coral bleaching episodes and invasive species outbreaks. Twenty-one percent of the permits were issued for Conservation and Management. Midway requires the highest number of permanent staff to assist with conservation and management, with an average of 50 people at the atoll at any given time. Hōlanikū sees the next most activity, with a permanent six-person team stationed at the atoll year-round.

Native Hawaiian Practices

Native Hawaiian Practices means cultural activities conducted for the purposes of perpetuating traditional knowledge, caring for and protecting the environment, and strengthening cultural and spiritual connections to the Northwestern Hawaiian Islands that have demonstrable benefits to the Native Hawaiian community. This may include, but is not limited to, the non-commercial use of monument resources for direct personal consumption while in the Monument. Permit conditions and guidelines are developed by the co-trustees and OHA in consultation with the CWG and the broader Native Hawaiian community. Native Hawaiian Practices consisted of 7% of the issued permits.

Since 2007, there have been 34 Native Hawaiian Practices permits submitted, marking a consistent interest in Hawaiian cultural practices, with at least eight ongoing cultural initiatives occurring on 27 separate expeditions. These activities contribute towards active management and are closely aligned to the Monument’s goals (OHA et al., 2021). Identifying appropriate biocultural management strategies within the NWHI requires inclusion of Native Hawaiians in all aspects of management, research, and policy. The following examples illustrate a mosaic of Native Hawaiian activities weaving diverse knowledge systems and multi-disciplinary teams to grow their understanding of Papahānaumokuākea and the relationships that bind ‘Ōiwi to this biocultural seascape.

Native Hawaiian access strengthens pilina to Papahānaumokuākea as an extension of the work of the communities of people and places in the main Hawaiian Islands (OHA et al., 2021). Their work includes:

- Traditional voyaging navigator apprenticeship and training.
- Archaeological and cultural resource research that helped to document, assess, and protect Hawaiian cultural sites (Kikiloi, 2012; Kanahale & Nuuhiwa, 2015; Monahan et al., 2019).
- Integrated cultural and scientific ecosystem monitoring (Andrade, 2022b).
- Cultural observations of natural cycles and seasonal changes to document traditional ecological knowledge (Andrade, 2022a).
- Resource gathering including bird feathers/bones (Cody et al., 2022) and subsistence harvesting of fish, algae, and invertebrates.
- Utilization of the place as a living classroom for university courses on language and cultural studies (OHA et al., 2021).

In general, Native Hawaiian subsistence gathering and harvesting activities are dependent on the keen observations of kilo that determine appropriate conduct. This is an essential element of Native Hawaiian knowledge, values, and practices fundamental to cultivating healthy reciprocal relationships to the ocean (Kikiloi et al., 2017). Traditionally, Native Hawaiian subsistence gathering and harvesting practices do not equate to harvesting the maximum allowable amount. The maximum allowable harvest is never nearly approached because harvest depends on what is available and if it is culturally appropriate.

Papahānaumokuākea is highly significant as a source of cultural resources unavailable in the inhabited islands in the southeast of the archipelago. A few local communities have requested permits to use resources from the area to produce symbolic and spiritually significant items to perpetuate traditional practices. Permits have also been issued for non-extractive Native Hawaiian practices including hula, mele, oli, paintings, drawings, prints, clothing, and films. Examples of these permits include:

- Moananuiākea Voyage (2021)- a 42-month, 41,000-mile circumnavigation of the Pacific. The goal of this voyage was to develop 10 million new crew members, navigators, and leaders focused on the vital importance of oceans, nature, and indigenous knowledge.
- Intertidal Monitoring Cruise (2011-2018)- a diverse research group composed of Native Hawaiian community members, fishers, scientists, and managers combined work under research and Native Hawaiian permits to better understand the holistic health of intertidal ecosystems and ‘opihi (limpet) populations through kilo, an ‘Ōiwi observational methodology (Andrade, 2022a, 2022b).
- Kānaka ‘Ōiwi scientists conducted sea level rise research and intertidal surveys at Lalo and Nihoa, weaving traditional knowledge systems of the natural habitat and cycles with climate change science (2021).

Management activities in the Monument are bridging a historical divide between traditional and scientific resource management approaches that has persisted in Hawai‘i for over a century. The empowerment and co-agency allyship of Kānaka ‘Ōiwi access represents a vital component of successful co-management of this UNESCO Mixed Cultural and Natural World Heritage site.

Creating accessible and diverse opportunities to increase ‘Ōiwi participation in diverse roles as a multi-disciplinary team is crucial to supporting the management of this biocultural seascape through inclusivity of ‘Ōiwi worldviews (OHA et al., 2021). One of these partnerships with co-management agencies has been building the capacity of Native Hawaiians from the CWG to complete the resource monitor training facilitated through the MMB. This has massive potential to continue uplifting the success of diverse knowledge systems through increasing participation of Native Hawaiians in all aspects of management, research, and field camp opportunities.

Special Ocean Use

Special Ocean Use permits are for activities or uses of the PMNM engaged in to generate revenue or profits for one or more of the persons associated with the activity or use, which do not destroy, cause the loss of, or injure PMNM resources. This includes ocean-based ecotourism and other activities such as educational and research activities that are engaged in to generate revenue, but does not include commercial fishing for bottomfish or pelagic species conducted pursuant to a valid permit issued by NOAA. Since the designation of the Monument, 15% of the permits have been issued for Special Ocean Use.

Access for general visitation purposes was previously allowed at Midway Atoll National Wildlife Refuge. However, due to recent reductions in refuge staff and operational capacity, historical and eco-tour access is currently not offered. Internet users can virtually visit the remote islands and atolls using Google Street View, the Ka‘ena Point mobile app, and other interactive material created by FWS and NOAA. Through these resources, visitors can stroll among millions of seabirds and various historic sites on Kuaihelani, or encounter monk seals and green sea turtles basking along the shores of Kapou and Kamole.

Recreation

Recreation permits are for activities conducted for personal enjoyment and are limited to the Midway Atoll Special Management Area. Recreation activities must not result in the extraction of Monument resources or be involved in a fee-for-service transaction. Examples of activities that may be permitted include snorkeling, wildlife viewing, and kayaking. Restrictions may be placed on recreation permits in accordance with the Midway Atoll NWR Visitor Services Plan. Only 1% of the permits issued were for recreation.

Recreational activities have historically been extremely limited. Kuaihelani served as a base for an ecotourism operation from 1996 until its closure in 2012. Prior to the closure, visitors participated in historic preservation service projects, guided tours, diving and snorkeling trips, and fishing operations (extractive and non-extractive). In addition, Kuaihelani was a destination for a limited number of cruise ships. Since 2006, only one recreation permit, in 2010, has been issued. This was for FWS to administer their Visitor Services Program.

Sustenance Fishing

Sustenance fishing is defined in 50 CFR § 404.3 as “means fishing for bottomfish or pelagic species in which all catch is consumed within the Monument, and that is incidental to an activity permitted under this part.” This activity is regulated through the permitting process for PMNM, which limits gear types and requires data reporting. Native Hawaiian subsistence fishing (State waters) and sustenance fishing (federal waters) occurs at low levels in PMNM.

Native Hawaiian Practices permits allow for the authorization of individuals listed on a permit to perform subsistence and sustenance fishing within PMNM alongside other native Hawaiian practices. Between 2007 and 2021, 33 Native Hawaiian Practices permits were awarded (Table 4.2), with 26 including the provision to fish. Permittees report the type of gear used and the number and type of fish caught. Permittees reported catching 35 fish, including 17 ‘ahi (yellowfin tuna), 12 uku (gray snapper), three ono (wahoo), and two mahimahi (dolphinfish). Some permit recipients elected not to fish despite their permit authorization (NOAA ONMS 2022).

Because of the higher human presence on Kuaihelani, the Midway-specific compatibility determination provides explicit conditions for sustenance fishing. This includes catch limits (maximum take of 300 fish per year), BMPs, and reporting requirements (PMNM, 2012).

Fishing in the Monument Expansion Area

In 2016, Presidential Proclamation 9478 extended the prohibition of commercial fishing from PMNM to include the MEA. This area had been occasionally used by the Hawai‘i longline fleet, although longlining had been prohibited in the waters of PMNM since 1991, after the creation of the Protected Species Zone (50 CFR § 665.806). The Hawaiian federally managed commercial bottom fishery and Pelagic trolling fishery were almost exclusively conducted within the waters of PMNM until they were phased out in 2011 by Presidential Proclamation 8031. Since 2016, there has been no reported commercial or non-commercial fishing within the Monument. Prior to the establishment of the Monument, recreational fishing had taken place at Kuaihelani and near Nihoa, although catch and effort data are unavailable for those activities.

The NOAA Office of Law Enforcement and USCG monitor fishing vessel activity 24 hours a day through a variety of electronic systems, including NOAA’s domestic fishing vessel monitoring system, international regional fisheries management organizations’ vessel monitoring systems, and automatic identification system reporting. Additionally, opportunistic and directed aerial and surface law enforcement patrols are conducted by the USCG in coordination with the NOAA Office of Law Enforcement. Between 2009–2019, these efforts identified a number of illegal fishing incidents within PMNM, including four domestic cases involving Hawai‘i-based longline vessels that resulted in initial assessments totaling over \$154,000 (NOAA Office of General Counsel 2020).

Military and Homeland Security Activities

Activities and exercises of the Armed Forces, including those of the USCG law enforcement, and activities necessary to respond to emergencies are exempt from the prohibitions provided in the Presidential Proclamations. U.S. Navy vessels sometimes support missile defense tests, occasionally operating in the proposed sanctuary for those operations or other training exercises. Communication between the military and Monument managers generally occurs shortly before operations begin, to ensure a particular area is free of permitted activities and vessels conducting passage without interruption. A complete description of the U.S. Navy’s activities that occur within and around the Monument (a relatively small percentage of their area of operations) and an analysis of their impacts can be found at Hawaii-Southern California Training and Testing Final Environmental Impact Statement/Overseas Environmental Impact Statement (U.S. Department of the Navy. 2018). The Navy is in the process of preparing a

follow-on NEPA analysis to support renewal of current federal regulatory permits and authorizations that expire in December of 2025.

USCG maintains Aids to Navigation buoys around Kuaihelani and periodically enters the Monument to maintain those assets and/or to support other homeland security activities. The size, remote location, and hazardous navigational conditions present significant enforcement challenges. The USCG has long been the primary enforcement agency conducting surface and aerial patrols. However, with their broad mandates and large enforcement area, the USCG has limited resources to allocate to Monument patrols. USCG operations in this region cover a broad range, including search and rescue, servicing aids to navigation, response to oil and hazardous chemical spills, inspecting commercial vessels for safety and environmental regulations compliance, interdiction of illegal narcotics and migrants, and enforcement of fisheries management laws (Mathers, 2005). NOAA, the State of Hawai‘i, and FWS also have authority to enforce regulations within PMNM and are expected to share resources to fulfill the purpose, scope, and guiding principles discussed in the December 2006 Co-trustee Memorandum of Agreement to promote coordinated management of the Monument (Memorandum of Agreement, 2006).

Overview of Vessel and Air Traffic in the Monument

Vessel Traffic

With the exception of a few small boats at Lalo, Kuaihelani and Hōlanikū, no vessels have home ports in the NWHI. Therefore, almost all marine traffic consists of transiting merchant vessels, research ships, and fishing vessels. Cruise ships, USCG and U.S. Navy vessels, and recreational vessels visit the Monument infrequently. Prior to mandatory ship reporting for certain vessels with the designation of the PSSA (Section 4.2.1), a voluntary reporting system identified 545 vessels inside what became the PMNM boundary between 1994 and 2004. These vessels were mostly freighters and tankers (>65%) over 600 feet in length. Data from the reporting system collected from 2007 - 2023 provided a yearly average of approximately 200 vessels transiting through PMNM. The majority of these vessels are container ships, tankers, and military vessels.

Ship traffic within the Monument is cyclical, peaking from November through February, when the NWHI experiences high-energy large wave events from the northwest. Vessels deviate from their regular great circle routes to take advantage of more favorable sea conditions in the lee of the NWHI. During this period, 77% of transiting vessels pass between Manawai and Kapou. This is one of three routes through PMNM that provides uninterrupted and safe north-south passage through the proposed sanctuary. The other two routes, between Kamokuokamohoali‘i and ‘Ōnūnui/‘Ōnuiki and between Mokumanamana and Nihoa, are used much less frequently. Remaining areas between the islets and atolls are designated as Areas To Be Avoided.

Monument co-managers purchased a one-year dataset of the IMO’s Automatic Identification System, a satellite-based reporting system required of all vessels 300 or more tons and all passenger ships regardless of size (SOLAS regulation V/19). The Automatic Identification System provides an accurate picture of overall ship traffic and an estimate of how many ships comply with voluntary reporting and guidance. The Automatic Identification System could also be used to identify vessels that transit the more ecologically sensitive areas of the proposed sanctuary. Based on a comparison of the Automatic Identification System dataset and the

reports sent to the Monument, the ship reporting system may be underreporting vessel activity by as much as 50%. This dataset also showed 17 vessels transiting through the Areas To Be Avoided without interruption, including 12 cargo vessels, three tankers, a research vessel, and a tug.

In 2021, there were 16 permitted vessel entries into the Monument done by nine vessels. Vessels supporting permitted activities include large research vessels, supply/cargo ships, fishing vessels used for conservation and management and research, USCG buoy tenders, U.S. Department of Defense vessels, and voyaging canoes. Research vessels permitted since 2017 include NOAA's *Oscar Elton Sette*, *Hi'ialakai*, *Rainier*, and *Reuben Lasker*. Seven additional university or privately-owned research vessels also operated in the Monument during this period. Two supply/cargo ships, *Imua* and *Kahana II*, were employed for resupplying field camps and Kuaihelani operations, as well as used as chartered research platforms. Three fishing vessels were used for field camp deployment, bird relocations, and sailfish tagging research. Barges and tugboats operated within the area inconsistently on an as-need basis. Finally, three voyaging canoes, *Hōkūle'a*, *Hikianalia*, and *Makali'i*, have operated within the area.

NOAA maintains a small boat program, which includes its own priorities and action plans. NOAA establishes policies and procedures that promote a safe small boat program. The program provides operator training, staffing guidance, and engineering assistance to support NOAA's program needs. While NOAA's small boats are owned, maintained, and operated by individual line offices, the Small Boat Program Office provides administrative oversight and is the point of contact for support regarding engineering, inspections, and policy. All NOAA small boats are transported on one of the large research vessels that operate in the proposed sanctuary.

Ships allow access, making activities possible in this vast and remote area. Vessels, however, introduce specific hazards to the marine environment, including groundings and fuel, chemical, and oil spills. Vessel activities can also have biological impacts, including the introduction of non-indigenous species through hull fouling or ballast water discharge, and from interactions with protected marine species. Other environmental threats from vessels include waste, effluent, bilge water discharge, light and noise pollution, and anchor damage. Managers address these threats through applying the prohibitions, permit conditions, and the application of BMPs, though mechanical failure and human error continue to present dangers. Vessel groundings and cargo spills occur infrequently, and response to such emergencies has required exceptional collaborative interagency effort and resources to minimize effects on the fragile reef ecosystems. Responses to vessel hazards and groundings include prevention, research, removal, and salvage. Strategies for prevention include developing protocols and practices for safe vessel operations; informing users about hazards, regulations, permit requirements, and compliance regarding vessel operations; investigating domestic and international shipping designations; working with NOAA and USCG to update nautical charts and notices to mariners; and risk assessment. Monument management agencies respond to groundings to the extent possible.

Global trade utilizes large container ships to move cargo between Asia and North America. Thousands of shipping containers were lost in the vicinity of the proposed sanctuary in 2020 and 2021. Efforts were made to locate these containers utilizing satellite imagery and oceanographic modeling. Staff at Hōlanikū began reporting suspicious marine debris on

February 18, 2021, and staff on Kuaihelani reported similar items starting on February 26, 2021. Items included: brand new Crocs with plastic display hangers, brand new WILSON volleyballs, children's sippy cups in new packaging, packages of toy "slime," latch-seal mason jars, medical respirator masks, drinking straws, bicycle helmets and unopened groceries. These events came less than three months after the *Maersk Eindhoven*, the *MSC Aries*, the *Maersk Essen* and the *ONE Apus* lost 260, 41, 732, and 1,816 containers respectively near the proposed sanctuary. Monument staff found additional debris matching these descriptions as far down as Lalo in 2021 (Freightwaves, 2021).

Air Traffic

Kuaihelani has the only operational airstrip in Papahānaumokuākea, a 1.5-mile-long runway constructed for the former naval airbase. The airfield is FAA-certified, operating as an ETOPS (Extended-range Twin-engine Operations Performance Standards) emergency landing strip for commercial aircraft crossing the Pacific. The airfield serves regular biweekly flights carrying agency personnel, equipment, and supplies to and from Kuaihelani. FWS, in partnership with FAA, is responsible for the operation and maintenance of the airfield (FWS, 2022). In 2021 there were 31 permitted flights to and from Kuahelani.

Chapter 5: Environmental Consequences

This chapter analyzes the potential environmental impacts of the proposed action and alternatives on the human environment. It evaluates changes in existing laws and management, the anticipated environmental impacts on physical and biological resources, and the anticipated environmental impacts to cultural and historic resources, human uses, and socioeconomic resources. A discussion of cumulative projects and impacts is presented in Section 5.6.

5.1 Approach to Impact Analysis

Selecting No Action would maintain the current management regime, with relevant factors presented in Section 4.2. This analysis assumes that existing activities would continue at current levels under all alternatives. The following analysis of the environmental consequences of the alternatives is based on review of existing literature and studies, information provided by experts, including NHPA section 106 Consulting Parties, and the best professional judgment of NOAA staff.

Impact analysis for No Action (Section 5.2) describes the impacts of the status quo to provide a baseline for beneficial and adverse impact determinations of the alternatives. NOAA expects that implementation of the No Action Alternative would not result in any change to existing management or uses of the area, and therefore no beneficial or adverse impacts would occur from the No Action Alternative. Impacts presently occurring would continue to occur.

Impact analysis for the action alternatives (sections 5.3, 5.4, and 5.5) is developed through consideration of the beneficial and adverse impacts on specific resources affected by the set of actions, based on the location of the resources and whether these resources occur within or outside each alternative's proposed sanctuary boundary. Impacts to human uses, including the regulatory and management burden of the alternatives, are evaluated based on the level of activity that occurs inside or outside of the boundary, and not necessarily specific locations within the proposed sanctuary. The proposed regulations are consistent for all of the alternatives and alternatives only vary in geographic extent. Alternative 1 is the largest, while sanctuary designation is not proposed for the MEA (50–200 nmi) in Alternative 2 and includes the MEA but excludes the NWR waters for Alternative 3. Alternatives 2 and 3 would have the same effects as Alternative 1 on those resources that occur within their respective proposed sanctuary boundary, because the proposed regulations would not change between these alternatives. Where alternatives exclude specific areas, regulation in the excluded areas would have predominantly the same effect as No Action. In addition, the impact of regulatory complexity associated with these boundary alternatives and their effect on human uses will be discussed. Otherwise, the discussion of impacts under Alternatives 2 and 3 will refer to the relevant analyses of No Action and Alternative 1.

5.1.1 Scope of Impact Analysis

Most sanctuary designations require extensive analysis of the proposed action, since the benefits of resource protection identified in the Purpose and Need must be adequately weighed against potential adverse socio-economic impacts from regulatory measures that may restrict access or use, creating lost opportunities. This includes restricted fishing and recreational access, as well as higher costs due to stricter regulations while operating within a sanctuary, such as insurance requirements, vessel inspections, discharge restrictions, and permit conditions, to name a few. Because of the existing management measures and protections enacted over the years, presented in Section 4.2, the proposed sanctuary designation primarily supplements existing protections and imparts only a few new restrictions and requirements on users. Sanctuary designation would not remove Monument designation or accompanying regulations. Rather, it would give NOAA the authority to provide more protection than is already provided under the Monument management regime. Due to the remote location and the low level of activity across the proposed sanctuary, available data on human impacts are sparse. When there is incomplete or unavailable information during the evaluation of impacts, CEQ NEPA regulations allow in 40 CFR § 1502.21, the agency to make evaluations based upon reasonably foreseeable causations and impacts. The reasonable conclusions of the environmental impacts and effects would be adequately identified and evaluated in the following sections to meet the full requirement (40 CFR § 1502.21). As the occurrence of illegal activity, permit violations, and loss or injury to sanctuary resources in the future cannot be predicted, impacts of enhanced enforcement and authority to respond to and hold financially liable any person who destroys, causes the loss of, or injures any sanctuary resource are described qualitatively rather than quantitatively.

Resources within the Monument boundaries have received some protections through previous actions, as described in Sections 1.2.2 and 4.2. Public access and activities are managed currently under No Action. The scope of the impact analysis focuses on minor changes proposed to improve consistency of regulations across the area of the proposed sanctuary and additional protections imparted by a sanctuary designation.

The draft SMP describes strategies to meet the proposed sanctuary's goals and objectives and not specific activities. Any future permitted activities conducted in the proposed sanctuary would require individual environmental analysis as part of the permit review process. As the scope, nature, location, and timing of any specific future projects are currently unknown and will receive individual NEPA review before they are undertaken, they are not analyzed here.

This analysis also addresses the triggers, where applicable, for environmental review under Chapter 343, HRS (HEPA):

- Propose any use of state or county lands or the use of state or county funds.
- Propose any use within any land classified as a conservation district.
- Propose any use within any historic site as designated in the National Register or Hawai'i Register.

5.1.2 Determining Significance and Quality of Impacts

NOAA's analysis of the environmental consequences of the alternatives is based on review of existing literature and studies, information provided by experts, and the best professional judgment of NOAA staff.

CEQ defines "effects" or "impacts" to mean "changes to the human environment from the proposed action or alternatives that are reasonably foreseeable" and include direct, indirect, and cumulative effects.

Type of Impact. To facilitate meaningful analysis and to provide clarity to the public about the nature of the potential effects to the human environment that are reasonably foreseeable, CEQ directs agencies to divide the potential effects of the proposed action and alternatives into three categories: direct, indirect, and cumulative. NOAA applies the following meaning to these terms, consistent with historical practice and case law:

- Direct effects: A known or potential impact caused by the proposed action or project that occurs at the time and place of the action.
- Indirect effects: A known or potential impact caused or induced by the proposed action or project that occurs later than the action or is removed in distance from it but is still reasonably expected to occur.
- Cumulative effects: A known or potential impact resulting from the incremental effect of the proposed action added to other past, present, or reasonably foreseeable future actions.

Duration of Impact. NOAA describes the duration of potential impacts as either short term, long term, or permanent. This indicates the period of time during which the resource would be impacted. Duration considers the permanence of an impact and is defined as:

- Short-term: A known or potential impact of limited duration, relative to the proposed action and the environmental resource. For the purpose of this analysis, short-term impacts may be instantaneous or may last minutes, hours, days, or up to five years.
- Long-term: A known or potential impact of extended duration, relative to the proposed action and the environmental resource. For the purpose of this analysis, long-term impacts would last longer than five years.
- Permanent Impact: A known or potential impact that is likely to remain unchanged indefinitely.

Significance of Impact. The various levels of impact used in this analysis are:

- No Impact: No effect would occur on the resource.
- Negligible: Impacts on a resource can barely be detected and are therefore discountable. Negligible impacts are not qualified as beneficial or adverse.
- Minor: Impacts on a resource that might be perceptible but are typically not measurable. Impacts would generally be localized and temporary and would not alter the overall condition of the resource from the status quo. For organisms, individuals may be affected but population-level impacts would not occur.

- **Moderate:** Impacts on a resource that are more perceptible and, typically, more amenable to quantification or measurement. They can be localized or widespread and could alter the overall, fundamental condition of the resource from the status quo. Impacts would not rise to the level of significance as defined below.
- **Significant:** Impacts resulting in a substantial structural or functional alteration of the state of a resource. Long-term or permanent impacts or impacts with a high intensity or frequency of alteration to a resource, whether beneficial or adverse, would be considered significant. For organisms, a significant impact may mean that population-level impacts would occur. The significance threshold is evaluated on a case-by-case basis, taking into consideration the potentially affected environment and degree of the impact(s).

Quality of Impact. Potential impacts are described as either beneficial or adverse as follows:

- **Beneficial impact:** Impacts that promote favorable conditions for the resource.
- **Adverse impact:** Impacts that are likely to be damaging, harmful, or unfavorable to one or more of the resources.

5.1.3 Guiding Questions and Assumptions for Impact Analysis

The limited changes to management, permitting, and regulations that are entailed in the alternatives confines the analysis to a few specific issues. For each resource, the following questions were considered, and where relevant, directed NOAA's analysis:

- What threats are facing the resource and how do the proposed regulations address those threats by providing protection?
- How does the spatial extent of the proposed sanctuary affect the resources, natural environment, cultural heritage, and human uses in and around the proposed sanctuary?
- What new administrative and operational burdens associated with access are anticipated?
- How do the proposed changes in the management structure affect public access, user opportunities, conservation measures, and enforcement?

Based on the remoteness of the proposed sanctuary (nearly 300 miles at its closest point from the main Hawaiian Islands), the proposed action is not expected to increase the level of human activity, including permitted activity, in the area of the proposed sanctuary.

5.1.4 Identify Routes of Effect or Impact Producing Factors

The nature of existing conditions in Papahānaumokuākea is based upon available literature and the direct knowledge of the Monument staff and scientists who assisted in the preparation of this DEIS. Where location-specific information is available, these data are utilized, and when lacking, general conditions of the ecosystem are utilized with appropriate qualifications. For regulatory and management measures proposed within the proposed sanctuary, the methodology used to determine whether effects on the physical and biological environment and human environment would occur is described in the subsequent sections.

Laws and Management

The analysis of the alternatives' impact on the Monument management system includes the key changes, the rationale for these changes, the effect these changes have on the management of proposed sanctuary resources, and how that management is affected by the various boundary alternatives. The steps taken to evaluate how each alternative would impact laws and management is as follows:

- Analyze the impacts on resources and resource uses under existing State and federal authorities (No Action) and under existing State and federal authorities plus the NMSA (action alternatives).
- Analyze the impact of the minor regulatory changes to management.
- Analyze how the personnel and administrative support may change.
- Analyze how law enforcement may change.
- Analyze the impact of the Sanctuary Management Plan on management.

Physical Resources: Water Quality and Habitat

Physical resources within the proposed sanctuary with the potential for impact include habitat and water quality. Habitat consists of both abiotic and biotic components. Abiotic components include sand, rocks, fossil reef, and coral skeleton. Biotic components are principally living coral, the foundation of the coral reef community. Analyses pay specific attention to the carbonate reef structure and other nearshore benthic habitat. In many cases, threats to habitat and living coral are the same and potential impacts from the alternative are often identical. Potential impacts to habitat can result from both poor water quality (e.g., sedimentation, pathogens) and physical damage (e.g., vessel groundings, marine debris). Impacts to water quality from vessel discharge and other marine-based human activities in Papahānaumokuākea are analyzed. The steps taken to evaluate how each alternative would impact water quality and habitats is as follows:

- Evaluate activities and threats described in Chapter 4 to identify the potential effect on marine water quality, emphasizing nearshore waters and benthic habitats.
- Review available literature on the anthropogenic causes of nearshore habitat degradation, assess the level at which these are occurring under No Action, and evaluate if each alternative affects the anthropogenic causes.

Biological Resources

Biological resources within the proposed sanctuary include marine plants, corals, benthic invertebrates, fish, mobile invertebrates, sea turtles, marine mammals and seabirds. Potential impacts to biological resources can result from natural and anthropogenic causes, both of which are critical to monitor and address. This includes degradation of the coral reef from storms and marine debris, impacts from passive (e.g., drifting within marine debris) and accidental introduction of invasive species, ship groundings, and other anthropogenic activities occurring on land and in the waters of the proposed sanctuary. The steps taken to evaluate how each alternative would impact these resources is as follows:

- Review and evaluate activities and threats to identify the action's potential impact on biological resources.

- Evaluate each alternative, identifying its potential to affect the ecosystem and individual biological resources within the proposed sanctuary, including damage to the coral reef and associated habitats, excessive disturbance of marine life, presence of introduced species, and depletion of species from directed harvest.
- Assess the compliance of each alternative with applicable federal, State, or local regulations and laws, including the Hawai‘i Department of Land and Natural Resources (DLNR) regulations, ESA, and Marine Mammal Protection Act (appendices C and E).

Maritime Heritage and Cultural Resources

Maritime Heritage constitutes a wide variety of tangible properties on the seafloor, inclusive of the historic battlefield associated with the Battle of Midway. As described in Section 4.5.1, cultural resources consist of the place- sea, land, sky, and the natural resources therein. Native Hawaiian culture in Papahānaumokuākea is living—past, present, and future. It is with these differing lenses that maritime heritage and cultural resources are analyzed. The concerns evaluated to determine how a sanctuary alternative would impact these resources are:

- Review the National Register of Historic Places, archaeological survey data, and relevant inventories of historic places for pre-contact and historic resources.
- Review cultural resources reports, permit reports, and discussions with subject matter experts to assess how the action’s potential impact determines appropriate (pono¹³) future activities and conduct of permittees.
- Identify activities that could affect those resources, and determine how the alternative affects the type and magnitude of potential direct and indirect impacts.
- Consider how access issues and proposed regulations affect future Native Hawaiian and Maritime Heritage projects.
- Identify the risks and benefits of the study of these resources to enhance protection and appreciation.
- Review protections granted under the NHPA and other legislation (see appendices C and E).

In the document *E Ho‘i I Ke Au A Kanaloa* (Nohopapa Hawai‘i 2023), consultees identified various potential impacts to cultural resources by the proposed sanctuary designation. Effects on historic properties were identified through the NHPA section 106 process. These potential impacts include both positive and negative impacts as well as potential impacts by actions outside of sanctuary designation. This DEIS analysis focuses on potential impacts to cultural resources by sanctuary designation, including impacts relating to access for cultural practices, culturally sensitive management and research, protection of resources, and perpetuation of Hawaiian culture. Consultees also provided recommendations regarding mitigation of adverse impacts to cultural resources that could be carried out both within and outside of the proposed sanctuary designation. This DEIS analysis focuses on feasible recommendations regarding mitigation of adverse impacts to cultural resources by sanctuary designation such as improving support of Native Hawaiian agency and authority in management and research within Papahānaumokuākea, fostering access for Native Hawaiian cultural practices and stewardship,

¹³ 50 CFR § 404.3 “Pono” means appropriate, correct, and deemed necessary by traditional standards in the Hawaiian culture.

improving protection of resources, enhancing outreach to Native Hawaiian communities, and elevating indigenous science. Please see the document E Ho‘i I Ke Au A Kanaloa prepared by Nohopapa Hawai‘i, LLC for more information and actual consultee responses.

Socioeconomics, Human Uses, and Environmental Justice

For activities proposed within the sanctuary or intended to improve management of the sanctuary, the methodology used to determine how an alternative would impact socioeconomic resources and environmental justice is as follows:

- Review and evaluate ongoing and past activities, including non-commercial fisheries, tourism, education, and outreach efforts within and outside the action area, to identify the action’s potential to affect socioeconomic within the Hawaiian Islands.
- Review and evaluate additional permitting and operational burdens for activities within the proposed sanctuary, identifying their potential to affect access and opportunities for human use of the area and resources within Papahānaumokuākea.
- Review and evaluate the potential disproportionate effects on low-income or minority populations and the potential for increased adverse health risks to children.

The criteria to determine the environmental consequences associated with socioeconomic, demographic, and environmental justice are based on federal, State, and local standards and regulations. Environmental justice involves disproportionate impacts on low income or minority populations. Impacts are considered to be significant if the action alternatives were to result in:

- Substantial changes in unemployment rate.
- Substantial changes in total income.
- Substantial changes in business volume.
- A conflict or inconsistency with established land use plans (e.g., county plans).
- A substantial change in existing land uses.
- An interference with the public’s right of access to the sea.
- A long-term preemption of a recreational use or substantial temporary preemption during a peak use season.
- Substantial changes to the status of low-income and minority populations, as well as to the health and well-being of children.

The method of analysis applied to the socioeconomic and environmental justice issue areas is primarily qualitative since there is very little quantitative information to assess the proposed action and alternatives.

5.2 Impacts of the No-Action Alternative

Under No Action, NOAA would not designate a national marine sanctuary, and the current Monument management structure would remain. Regulations and permitting authority would exist for PMNM, but not for the MEA. Continuation under No Action would not result in any change in the existing uses of the Monument. The lack of implementing regulations to permit activities in the MEA could lead to future impacts from unregulated activities. No Action would forgo the beneficial and adverse impacts of implementing Alternative 1 (Section 5.3), Alternative

2 (Section 5.4), and Alternative 3 (Section 5.5) on the resources and human activities in the Monument.

5.2.1 Impacts on Laws and Existing Management

Under No Action, the regulations and management described in Section 4.2 would remain in effect. Threats to Monument resources would continue to be the focus of research and conservation actions. Actions taken to address these threats would still be permitted and undergo comprehensive environmental reviews.

Activities authorized by the co-trustees in PMNM would continue to operate under the regulatory authority of 50 CFR part 404, including access restrictions and permitting requirements as described in Section 4.2.5. Activities occurring within the MEA must remain consistent with the requirements of Presidential Proclamation 9478, although there are no codified regulations, including permit requirements or access restrictions. Activities not listed as prohibited could be conducted without NOAA permits or other management conditions. Further, NOAA does not have the authority to issue civil penalties related to violations of Presidential Proclamation 9478 in the MEA. While NOAA has not documented direct negative impacts to MEA resources based on the lack of permitting and penalty authorities, it is reasonable to conclude that there is a higher potential for user violations that adversely affect natural resources in areas where NOAA lacks these authorities.

Monument management, including the various working groups that provide the foundation of cooperative management, would continue to operate effectively and address emerging and ongoing management issues. Defined roles among the co-trustees and co-managers would remain, providing continuity of management.

5.2.2 Impacts on Physical Resources

The study area would remain the same as the status quo and would not be subject to the proposed regulations and draft management plan described in Chapter 3. NOAA anticipates that the No Action Alternative would result in the continuation of existing impacts, including ongoing impacts of climate change, and potential future impacts as described in Section 4.3.

Discharge regulations for PMNM, which restrict the release of harmful pollutants, protect water quality. The regulation prohibiting disturbance of the seafloor protects rare and fragile habitats. These are enforced by regulation and permit in PMNM but are not enforced in the MEA. These represent gaps in effective management of threats to Monument physical resources, including in the area of the proposed sanctuary that overlaps with the MEA.

As stated above, NOAA does not have the authority to issue permits or civil penalties for the MEA. While NOAA has not documented direct negative impacts to MEA resources based on the lack of permitting and penalty authorities, it is reasonable to conclude there is potential for user actions that adversely affect physical resources.

The No Action Alternative forgoes specific resource protection measures provided with sanctuary designation, including damage assessment authority and emergency response funds. These impacts are characterized as benefits in Sections 5.3.2 and 5.3.3.

5.2.3 Impacts on Biological Resources

The study area would remain the same as the status quo and would not be subject to the proposed regulations and draft management plan described in Chapter 3. NOAA anticipates that the No Action Alternative would continue the existing impacts, including ongoing impacts of climate change, marine debris, derelict fishing gear, and deteriorated seawalls, primarily impacting corals, sea turtles, and Hawaiian monk seals. The ongoing threats to habitat and water quality summarized in 5.2.2 have similar consequences for corals and other benthic biological resources. As stated above, NOAA does not have the authority to issue permits or civil penalties for the MEA. While NOAA has not documented direct negative impacts to MEA resources based on the lack of permitting and penalty authorities, it is reasonable to conclude there is potential for user actions that adversely affect biological resources.

The No Action Alternative forgoes specific resource protection measures provided with sanctuary designation, including damage assessment authority and emergency response funds. These impacts are characterized as benefits of Alternative 1 in Sections 5.3.2 and 5.3.3.

5.2.4 Impacts on Cultural and Historical Resources

The study area would remain the same as the status quo and would not be subject to the proposed regulations and draft management plan described in Chapter 3. As biological resources are also considered cultural resources to many Hawaiians, the ongoing and future potential impacts to biological resources described above affect the cultural significance as well.

Threats to the maritime heritage resources include illegal salvage/looting, anchoring damage, and other intentional or inadvertent human impacts, as well as degradation over time, potentially exacerbated by impacts from climate change. NOAA anticipates that the No Action Alternative would result in the continuation of these existing impacts and potential future impacts as described in Section 4.5.

Cultural heritage has been of primary importance in management since the designation of the Reserve in 2000. The integration, promotion, and awareness of Hawaiian culture, history, traditional knowledge systems, religion, mythology, and spirituality, as well as Papahānaumokuākea's connection to the greater Pacific Ocean and associated cultures, has been a fundamental principle of Monument management since its designation. Every Monument permit application is reviewed by the Cultural Working Group, who provide recommendations to ensure adherence to this principle. The RAC, the Cultural Working Group, the Mai Ka Pō Mai guidance document, cultural training for permittees, employment of biocultural resource monitors, and numerous other initiatives will continue to guide Monument management under the No Action Alternative.

Historic resources within PMNM, specifically maritime heritage military and nonmilitary wrecks, are protected through access restrictions, permit requirements, and codified regulations, which supplement protections for U.S. military resources provided through the Sunken Military Craft Act. Proclamation 9478, the guiding document for the MEA, does not explicitly restrict access to the MEA, nor does it include exploration for sunken artifacts as one of the activities subject to permitting. While NOAA has not documented direct negative impacts to MEA resources based on the lack of permitting authorities for exploration of maritime

heritage resources of the MEA, it is reasonable to conclude that these resources may be adversely impacted by unregulated activity.

5.2.5 Impacts on Socioeconomic Resources, Human Uses, and Environmental Justice

The study area would remain the same as the status quo and would not be subject to the proposed regulations and draft management plan described in Chapter 3. Under the No Action Alternative, the impacts from the proposed sanctuary designation would not be realized. For example, the No Action Alternative would prevent NOAA from implementing additional resource protections and access and permitting requirements that would impact human uses.

5.3 Impacts of Alternative 1

This section describes the beneficial and adverse impacts from implementing Alternative 1, which includes the following components, described in detail in Chapter 3:

- 1) Sanctuary boundary.
- 2) Regulations and permitting process.
- 3) Sanctuary management plan and program support.

For the purposes of the analysis, the primary focus is on the impacts caused by the differences between Alternative 1 compared to existing management under the No Action Alternative.

5.3.1 Impacts on Laws and Existing Management

As stated in the Purpose and Need for the proposed action, alternatives must supplement and complement, rather than supplant, the existing management structure. As such, the proposed regulations, permitting process, and draft SMP have been developed to minimize impacts to the laws and existing management. Rationale for changes to these impacts are discussed below.

Beneficial Impacts on Laws and Existing Management

Under Alternative 1, regulations promulgated under the NMSA would largely be consistent with existing Monument regulations. Minor changes in the proposed regulations would remove discrepancies and gaps in prohibitions, regulated activities, and permitting across the PMNM and MEA (see Section 3.4.2). Vessels conducting passage without interruption would be required to comply with new discharge restrictions in the area of the proposed sanctuary that overlaps with the MEA. Vessels wishing to conduct regulated activities within the area of the proposed sanctuary that overlaps with the MEA would be required to obtain a permit and adhere to all regulations and permit conditions, including installing VMS that remains on and working when in sanctuary waters. Extending the VMS requirement to the MEA provides NOAA with a tool to track vessel activity to ensure permit compliance, provide information for USCG or other entities to know the location of an incapacitated vessel and react quickly, and manage sanctuary resources through spatial analysis of activities.

The scope and goal of management actions under Alternatives 1 would be similar to No Action. Both are guided by the same goals and objectives and permit criteria. The research, education and outreach, maritime heritage, and cultural resources programs are supported by the same

staff and would operate consistently under all action alternatives. Ongoing Maritime Heritage and Cultural Resources programs would continue to add to the knowledge gained over the past 18 years and continue to strive to uphold the sacred nature of Papahānaumokuākea. Current efforts to address the threats of climate change, invasive species, and marine debris would continue. The proposed sanctuary designation is not expected to increase the number of annual permits issued, or the level of vessel traffic or person-hours within the action area.

Possibly the most significant difference between No Action and Alternative 1 is the enactment of National Marine Sanctuary Program Regulations (15 CFR part 922), allowing ONMS to supplement existing authorities through: 1) emergency regulations; 2) penalties; and 3) authorities to respond to and hold financially liable those responsible for destruction or loss of, or injury to sanctuary resources. Emergency regulations give ONMS the power to implement immediate temporary regulations where necessary to prevent or minimize the loss or injury to a sanctuary resource. A penalty schedule provides law enforcement with a new tool for violations of sanctuary regulations, potentially improving compliance. The response cost and damage regulation make any person (or vessel) who destroys, causes the loss of, or injures any sanctuary resource liable for response costs and damages resulting from such destruction, loss, or injury. These proposed regulations may have been effective for past events in PMNM, such as the vessel groundings described in Section 4.3.1 and the lost cargo containers in Section 4.6.2. In addition, funds collected from penalties and response costs and damages are available to conduct restoration for damaged resources and comparable resources within the sanctuary.

These additional authorities provide ONMS with new tools to improve management and compliance, and address impacts to sanctuary resources, providing a direct, long-term, moderate beneficial impact to laws and existing management, based on NOAA's experience with implementing these authorities.

Adverse Impacts on Laws and Existing Management

While ONMS is a co-manager of the Monument and current management would remain largely unchanged, for activities in the MEA, Alternative 1 imparts a new management authority in addition to the authorities described in Section 4.2.2. These changes could require the co-trustees of the Monument to develop a new Memorandum of Agreement to address this additional management authority. *These changes are anticipated to have negligible impacts on laws and management in the action area.*

Under all of the alternatives, NMSA section 304(d) would require consultation for any federal agency action that is likely to destroy, cause the loss of, or injure any sanctuary resource. This requirement applies to all federal agencies. Based on NOAA's experience administering NMSA section 304(d), this requirement to engage in consultation is not likely to cause an adverse impact.

Summary of Impacts on Laws and Existing Management

NOAA has determined that implementing Alternative 1 would have **direct, long-term, moderate beneficial impacts** on laws and existing management.

5.3.2 Impacts on Physical Resources

Given the nature of the proposed action, most physical resources, including noise, air quality, geology, and view planes, will not be affected and are not analyzed. Potential impacts to water quality will be analyzed, as it relates to vessel discharge, a proposed regulated activity. Habitat, which can be impacted by both natural events and human activity, will also be analyzed.

As noted in Section 5.1, the low level of activity and available data on impacts to physical resources requires a theoretical approach to potential but reasonably foreseeable impacts from future threats.

Beneficial Impacts on Physical Resources

Implementing Alternative 1 would benefit physical resources in the action area, addressing the threat of user violations by creating a stronger deterrent to permit and regulatory violations through the supplemental penalty authority specific to the proposed regulations, as well as providing a mechanism to conduct damage assessments and hold the permittee or vessel liable for response costs and damages resulting from such destruction, loss, or injury. Passage without interruption is known to be conducted by large container ships (Section 4.6.2) crossing through Areas To Be Avoided, with voluntary reporting. This partially documented activity poses a rare but significant risk to physical resources within the Monument, with minimal ability to hold vessels that accidentally or negligently run aground accountable. *Implementation of a penalty schedule and ONMS' damage assessment authority is expected to provide a direct, long-term, moderate beneficial impact to the physical resources of the proposed sanctuary, based on NOAA's experience with implementing these authorities.*

Under Alternative 1, NOAA would implement regulations and expand the existing permitting system to protect resources in the MEA. While the area of the proposed sanctuary that overlaps with the MEA consists primarily of pelagic water overlying deep abyssal plains, numerous banks and seamounts occur throughout. These seamounts act as important habitats in primarily pelagic waters, attracting fish and other large predators that are supported by the increased productivity. In addition, recruitment of pelagic larval organisms, including corals, to isolated seamounts is often a rare event (Crochelet et al., 2020), which results in slower recovery of damaged habitat than nearshore habitats. Anchoring and the dragging of anchor chains, deployment of tethered equipment, and unregulated fishing, among other activities, can result in damage to habitat, scarring and reducing the complexity necessary to support biodiversity. In depths at which these seamounts occur, an anchor and other tethered equipment could drag across a huge area. Regulations, including the prohibition to alter the seabed by modification or placement of materials, except for scientific instruments in the area of the proposed sanctuary that overlap with the MEA, provide new protections for these limited and sensitive habitats.

Under Alternative 1, access through permitting would allow for managers to review methodologies and monitor permittees, protecting these banks and seamounts. These measures would also protect alteration of the deep seabed of the MEA. *While minimal user contact with the seafloor occurs or is anticipated in the area of the proposed sanctuary that overlaps with the MEA, these resources are rare and extremely vulnerable to disturbance. As such, implementing these new regulations in the Alternative 1 boundary area provides direct, long-term, minor benefit to physical resources of the MEA.*

Under Alternative 1, discharge would be regulated for vessels conducting passage without interruption throughout the proposed sanctuary, extending the existing regulation from PMNM to the area of the proposed sanctuary that overlaps the MEA. The regulation of vessel discharge would benefit water quality in the MEA, although given the pelagic nature of this vast area and low vessel presence, this benefit would be negligible related to most vessel activity. For example, container ships with only a few crew members generate minimal sewage and graywater. Conversely, cruise ships could impart a moderate adverse impact to sanctuary resources. A cruise ship with 3,000 people on board generates 150,000 gallons of sewage and greywater per day as well as hazardous wastes such as oily bilge water and bio-waste containing viruses (Ahmed, 2022). These vessels would now be prohibited from discharging anything other than deck wash, approved marine sanitation device effluent, cooling water, and engine exhaust throughout the Alternative 1 boundary area. Discharge would continue to be regulated through permitting as is done under No Action, allowing for flexibility in managing discharge. For example, permit conditions for discharge would likely differ between a large research vessel and a Hawaiian sailing canoe, while still protecting sanctuary resources. *This proposed regulation provides a direct, long-term, moderate benefit to water quality throughout the Alternative 1 boundary area.*

Adverse Impacts on Physical Resources

Implementing Alternative 1 would produce no potential adverse impacts on physical resources because the proposed management measures are protective in nature, primarily providing regulations (e.g., discharge limitations) and enforcement deterrents (e.g., penalties for infractions) to limit impacts to the physical environment. In addition, existing regulations and the remote nature of the site effectively limit an increase in human and vessel presence.

Summary of Impacts on Physical Resources

Overall, NOAA determined that implementing Alternative 1 would have **direct, long-term, moderate beneficial impacts** on physical resources.

5.3.3 Impacts on Biological Resources

Biological resources include a diversity of shallow-water coral reef species, deep-water fish and invertebrates, and pelagic fish, as well as protected species of seabirds, sea turtles, dolphins, whales, and the ‘īlioholoikauaua (Hawaiian monk seal). The co-trustees and partner agencies conduct active management for many of these species, with potential impacts from specific projects assessed through the Monument permitting system. The following analysis addresses how proposed management measures impact external threats, accidents, and permit and regulatory violations.

As noted in Section 5.1, the low level of activity and available data on impacts to biological resources requires a theoretical approach to potential but predictable impacts from future threats.

Beneficial Impacts on Biological Resources

Implementing Alternative 1 would benefit biological resources in the action area. Under Alternative 1, the proposed sanctuary boundary includes all marine waters starting at the

shoreline of the Northwestern Hawaiian Islands and extending to the boundary of the U.S. EEZ. This is notable, as the potential for impact to biological resources is greater in the shallow areas of the proposed sanctuary. Further, threats and potential impacts are also higher where human presence is greatest. For example, the introduction and spread of non-indigenous species, accidental groundings, and general disturbance of the biological resources increase with increased human presence (Halpern et al., 2008). Kuaihelani and Hōlanikū experience the highest annual average of human presence, constituting 83% and 11% of the total presence in the proposed sanctuary, respectively (NOAA ONMS, 2020). While safeguards to protect biological resources exist under No Action, sanctuary designation offers additional benefits for the marine waters around Kuaihelani and Hōlanikū as well as around other islands and atolls. It is reasonably foreseeable that NMSA regulations may better inform users and dissuade user violations by creating a stronger deterrent to permit and regulatory violations through the supplemental penalty authority specific to the proposed regulations. Sanctuary designation would also provide a mechanism to impose liability for destruction, loss of, or injury to sanctuary resources. *Under Alternative 1, implementation of a penalty schedule and ONMS' damage assessment authority provides a direct, long-term, moderate beneficial impact to the biological resources of the Alternative 1 boundary area based on NOAA's experience with implementing these authorities.*

Illegal fishing incidents within PMNM, described in Chapter 4, resulted in significant fines (NOAA Office of General Counsel, 2020). Given the current lack of codified regulations, enforcement of domestic illegal fishing in the MEA does not carry the same penalties and may result only in a warning to violators. *Under Alternative 1, law enforcement would be strengthened in the MEA, including the option to impose civil penalties throughout the Alternative 1 boundary area, providing a direct, long-term, moderate beneficial impact to biological resources.*

There are known and potential maritime heritage resources in the waters of the MEA. These underwater resources are often the only hard substrate in the MEA for dozens or hundreds of miles, and ecosystems and biological resources often build up around them. Disturbing these heritage resources also disturbs these habitats and biological resources, which may not be protected from private ventures searching for, potentially damaging, or claiming recovery rights to wrecks or artifacts. Under Alternative 1, access restrictions would require these private ventures to obtain a sanctuary permit, abide by permit conditions including accommodating a resource monitor, and provide reports on their activities. *Under Alternative 1, these requirements would reduce the rare threat of user violations and accidents at these sites. As such, implementing these new regulations in the Alternative 1 boundary area provides direct, long-term, minor benefit to biological resources at these deep-water isolated sites of the MEA.*

While no threats to species protected under the ESA, Marine Mammal Protection Act, or the Migratory Bird Treaty Act from past permitted activities have been identified (NOAA ONMS, 2020), Presidential Proclamation 9478 explicitly notes the importance of the MEA for the protection of endangered species, including the 'īlioholoikauaua, cetaceans, and seabirds. NMSA regulations would provide additional statutory authority to ensure future activities are consistent with these statutes to achieve this goal of the Proclamation. *The additional protection measures provided under Alternative 1 provide negligible impacts for protected species.*

Adverse Impacts on Biological Resources

While all permitted activities cause disturbance to wildlife, through vessel noise, placement of equipment and instruments, and general human presence, the number of permitted activities and people operating in the Alternative 1 boundary area has been falling over the past 15 years (NOAA ONMS, 2020). As the Monument is already globally-renowned, sanctuary designation is unlikely to increase research and other permitted activities. *While any increase in permitted activity would be speculative, the potential impact on biological resources would likely be short-term and negligible.*

Summary of Impacts on Biological Resources

Overall, NOAA determined that implementing Alternative 1 would have **direct, long-term, moderate beneficial impacts** on biological resources.

5.3.4 Impacts on Cultural and Historical Resources

Native Hawaiians view Papahānaumokuākea as a biocultural seascape, where the sea, land, and other components within are integral to their cultural heritage (Kikiloī, 2010). As such, direct impacts described for physical and biological resources are relevant to the cultural resources analysis but will not be repeated. As described in the analysis of the No Action Alternative, cultural heritage is a primary focus of Monument management, ensuring use of appropriate protocols, employing biocultural resource monitors on permitted activities, and numerous other measures to protect tangible and intangible cultural resources. These efforts, described below, would continue throughout sanctuary waters under Alternative 1.

Numerous maritime heritage resources (including World War II American and Japanese military vessels and aircraft) occur in unknown locations across the deep northwestern waters of the Monument. Effects of Alternative 1 on maritime resources are described below.

Beneficial Impacts on Cultural and Historical Resources

Cultural Resources

As described in Section 4.5.1, access to and interaction with Papahānaumokuākea directly affects the living Native Hawaiian culture and its people. This includes spiritual well-being, survival of religious and cultural practices, and preservation of sites of historical importance. This cultural and historic heritage was further emphasized in 2010 by UNESCO World Heritage designation, and is integrated into Monument management, ensuring that permitted activities respect, acknowledge, and care for all biocultural resources and the perpetuation of Native Hawaiian culture. Sanctuary designation under Alternative 1 ensures that this perspective continues to be achieved in the MEA through regulations, a permitting system, and guidance of cultural practitioners. The CWG would continue to review all permit applications, ensuring that activities proposed in the area of the proposed sanctuary that overlaps with the MEA would be subject to cultural goals and objectives, promote Native Hawaiian knowledge, expand community involvement, and encourage proper cultural respect by all. *Under Alternative 1, the assurance of the perpetuation of Native Hawaiian culture throughout the Alternative 1 boundary area would have a minor beneficial impact on cultural resources in the MEA.*

The care for Native Hawaiian cultural resources and responsibility for historic properties merge in the heritage management of Papahānaumokuākea. NOAA's Maritime Heritage Program would assist, where appropriate and mutually beneficial, with protection of cultural resources in the proposed sanctuary's marine environment as part of preservation efforts defined by NHPA for all heritage resources under ONMS management. The Maritime Heritage Program would maintain an inventory of historic properties as defined and required by NHPA. This collaborative approach addresses the comprehensive preservation of all public heritage (cultural, archaeological, and historical) resources managed by ONMS in a manner consistent with NHPA and with the values of sanctuary management:

- Kuleana: respect for Hawaiian cultural foundations throughout all resource preservation initiatives.
- Mālama: stewardship of the broad range of tangible and intangible heritage resources.
- Pono: comprehensive inventory and preservation efforts for all (inclusive of Hawaiian and Western).
- 'Imi 'ike: the braiding of traditional and western knowledge in the protection of heritage resources.¹⁴

Permit criteria, cultural awareness training, and implementation of BMPs included under No Action would be maintained under Alternative 1, addressing concerns raised during the NHPA section 106 consultation process and in E Ho'i I Ke Au A Kanaloa, and resulting in no difference in the protection of cultural resources, including potential adverse effects of research and other activities on the integrated cultural, spiritual, and ecological health of Papahānaumokuākea (Nohopapa Hawai'i 2023). *Under Alternative 1, the continuation of integrating cultural heritage into management, currently being practiced by Monument managers, would continue to provide a minor beneficial impact already demonstrated under the No Action Alternative.*

Maritime Heritage Resources

The proposed sanctuary designation and the proposed regulations provide protection for maritime heritage resources, specifically the military vessels and aircraft from the Battle of Midway. The NMSA provides supplemental protection with substantial penalties for harm to maritime heritage resources. Historic properties with both known and unknown locations within the MEA may not be protected from private ventures searching for, potentially damaging, or claiming recovery rights to wrecks or artifacts. Alternative 1 would supplement management and protection of maritime heritage resources by: 1) providing long-term federal protection of heritage properties under NMSA; 2) addressing current management and protection ambiguities for heritage properties within both PMNM and the MEA (e.g., Japanese sunken military aircraft carriers, cruisers, and aircraft located beyond the 24-mile contiguous zone); and 3) ensuring projects exploring for, characterizing, and documenting sanctuary resources are permitted and include appropriate oversight, enforceable conditions, and reporting requirements. *These additional protective measures within the Alternative 1 boundary area*

¹⁴ The English translations and interpretations of these Hawaiian words do not completely describe or define the unique meanings of the Hawaiian language or the qualities and demonstrated actions of the Hawaiian cultural value system.

provide a direct, long-term, moderate beneficial impact for maritime heritage resources, primarily for those within the MEA.

Under Alternative 1, NOAA would protect underwater maritime heritage resources in the proposed sanctuary from injury and disturbances through regulations and implementation of a long-term, comprehensive SMP for both PMNM and the MEA. Sanctuary regulations in the area that overlaps with the MEA would provide protections through restricted access and prohibitions on alteration of the seafloor, anchoring, and the removal of any sanctuary resource. Future proposed projects would only be authorized if they meet the goals and objectives of the sanctuary and would be subject to permit criteria and requirements of any equipment used in operations. NOAA's proposed regulations would complement existing federal and State regulations to increase preservation and provide uniform protection for all underwater maritime resources throughout the sanctuary. These regulations would be complemented by management principles that emphasize an in-situ management approach for the long-term protection of site information and integrity, as well as other preservation methods and activities outlined in the ONMS policy guidance document *Monitoring and Management of Tangible Maritime Heritage Resources* (NOAA ONMS, 2021). *Under Alternative 1, management and resource expertise brought through designation and new regulations in the area of the MEA provide a direct, long-term, moderate beneficial impact for maritime heritage resources.*

Adverse Impacts on Cultural and Historical Resources

Cultural Resources

Certain activities could adversely affect the cultural and spiritual value of Papahānaumokuākea. During NHPA section 106 consultation meetings, as well as through the State's CIA process, constituents raised concerns regarding the potential adverse effects from scientific research and non-commercial fishing on the sacredness of Papahānaumokuākea. While an activity may not generate significant impacts to natural resources and may meet the established permit criteria and goals and objectives of the sanctuary, the activity may still be regarded as inappropriate, damaging, and disrespectful to some members of the Native Hawaiian community. Natural resources are cultural resources, and the entire area encompasses a connection to the genealogy, history, and spirituality of the Hawaiian people (Kikilo'i 2012). Many of those consulted for the CIA believe a broader cultural viewpoint is necessary during the permit approval process (Nohopapa Hawai'i, 2023). Under Alternative 1, the sanctuary would be responsible for issuing or denying permits for potentially controversial projects. Under both Alternative 1 and No Action, co-managers and relevant working groups work to address specific concerns as part of the permitting process. These procedures include but are not limited to 1) required cultural briefings for permitted individuals, and 2) several permit BMPs for accessing sensitive areas such as marine areas around Nihoa and Mokumanamana, ultimately reducing the potential of adverse impacts. *As cultural resource management is effectively unchanged from No Action, this ongoing concern would be no different from No Action.*

Maritime Heritage Resources

Maritime Heritage activities, including those conducted or permitted by ONMS, are generally non-invasive in nature (i.e., they do not disturb the seafloor, alter wrecks, or have other lasting impacts) and do not pose a risk of damaging these resources. PMNM BMP #017 (Appendix B)

would be extended to the area of the MEA for future maritime heritage projects. Field work consists of 1) locating maritime heritage resources within the sanctuary; 2) identifying these historic properties; 3) assessing their condition and stability; and 4) providing protective measures. ONMS practices in situ management, identified by the Advisory Council on Historic Preservation as a protective measure (NOAA ONMS, 2021). *As such, implementing Alternative 1 would produce no potential adverse impacts on maritime heritage resources.*

Summary of Impacts on Cultural and Historical Resources

Overall, NOAA determined that implementing Alternative 1 would have a **minor beneficial impact** on cultural resources and **direct, long-term, moderate beneficial impacts** on maritime heritage resources.

5.3.5 Impacts on Socioeconomic Resources, Human Uses and Environmental Justice

This section evaluates the impacts of implementing Alternative 1 related to socioeconomics, environmental justice, access, and uses. In evaluating this alternative against the criteria above, the following determinations were made:

- Alternative 1 would not change the population of the sanctuary community. Sanctuary designation is unlikely to increase the amount of visitation, research, or other activities within the boundary of the proposed sanctuary. While the Monument is already internationally recognized, Alternative 1 would result in a sanctuary designation that may increase the amount of visitation to interpretive centers, exhibits, and other educational opportunities. These opportunities would result in negligible changes for socioeconomic resources across Hawai‘i.
- Alternative 1 would not lead to any negative impacts on underserved and underrepresented communities. In fact, the establishment of a sanctuary in this region is likely to positively impact underserved and underrepresented communities, as a result of actions proposed in the draft SMP. Examples include: working with Native Hawaiian groups to increase their participation and engagement; and working with local and regional organizations to promote biological, cultural, and historical value of the sanctuary through education and outreach activities and events.
- Alternative 1 is expected to result in long-term beneficial impacts on Hawaiian residents (including low-income and minority populations), as well as on the health and well-being of children. The protection of, and access to, the area are considered to be of major importance for mental well-being and health of the Native Hawaiian community (Kikiloi, 2006, Kikiloi, 2010, Kikiloi et al., 2017).
- Alternative 1 would not conflict with federal, State or local plans, policies, or regulations, including county land use plans. The proposed sanctuary is intended to offer additional resource protection, consistent with existing federal and State policy.
- Under Alternative 1, there would be no anticipated change over No Action in the number of permits issued, positions for staff of the co-trustee agencies, or total operational budget, because permits are required under the current management regime and an increase in permitted activity is not anticipated under sanctuary designation.

The above five determinations are the same for Alternatives 2 and 3 and will not be repeated in those sections.

Beneficial Impacts on Socioeconomic Resources and Human Uses

Understanding the ecological, cultural and historic significance of this fragile area, the Monument co-trustees have always worked to bring the place to the people. Designation as a national marine sanctuary and implementing the strategies outlined in the draft SMP would draw visitors and tourists to the learning centers associated with Papahānaumokuākea, enhancing their experiences in the Hawaiian Islands through their enjoyment from outreach and interpretive services. Alternative 1 also would continue to provide benefits to those permittees who experience the sanctuary through perpetuation of Native Hawaiian practices and who depend on a functioning, healthy, and resilient ecosystem for cultural practices and livelihoods.

Proposed discharge regulations would help reduce potentially harmful pollutants such as oil, sewage, and other hazardous materials from injuring sanctuary resources. Enhancing management through the expanded permit system and measures to address damages to sanctuary resources would further secure long-term protection. *Under Alternative 1, the increased protection of resources is expected to result in indirect, long-term, negligible impacts on tourism, and direct, long-term, minor beneficial impacts for permitted uses of the sanctuary.*

While the scientific and conservation value of Papahānaumokuākea has been apparent to researchers, conservationists, and educators for decades, sanctuary designation may impart a minor beneficial impact on research and education, in addition to minor positive socioeconomic impacts, if designation spurs novel research and education projects. Designation may enhance support for educational activities inside and outside Papahānaumokuākea, including teacher and student training and outreach through interpretive centers, exhibits, and multiple types of media.

Sanctuary designation can provide alternative sources of funding to support education initiatives and programs in Hawai'i (outside the waters of the proposed sanctuary), including from Friends Groups, the National Marine Sanctuary Foundation, and other non-profit organizations, including the Ocean Exploration Trust, a close collaborator of the Monument. Friends Groups are typically charitable, non-profit organizations whose mission is geared to support a specific marine protected area. The National Marine Sanctuary Foundation, who is currently partnering with the Monument at the Mokuāpāpapa Discovery Center, is the chief national charitable partner supporting the work and mission of the National Marine Sanctuary System. The National Marine Sanctuary Foundation is authorized under the NMSA and has generated more than \$12 million for programs and initiatives across the system in research, conservation, education, citizen science, outreach, and community engagement. The National Marine Sanctuary Foundation also advocates for policymakers to strengthen the protection of the sanctuary system. *These additional funding sources provide opportunities to develop new connections and strengthen the public's appreciation of this area, providing an indirect, long-term, minor beneficial impact to socioeconomic resources.*

Adverse Impacts on Socioeconomic Resources and Human Uses

Alternative 1 would regulate activities in the area of the proposed sanctuary that overlaps with the MEA. Activities with no nexus to the proposed permit categories, or activities that do not meet the permit findings criteria, such as tourism and aquaculture, would likely not be approved under Alternative 1. *While it is speculative to anticipate future opportunities in the area of the proposed sanctuary that overlaps with the MEA, designation of the Alternative 1 boundary area represents a potential indirect, long-term, minor adverse impact on socioeconomic resources.*

The permit process under No Action, required for activities within PMNM, would be expanded to the area of the MEA under Alternative 1. In order to conduct regulated activities in the area of the proposed sanctuary that overlaps with the MEA, users would be required to apply for a sanctuary permit. While eight permits through Letters of Authorization have been issued in the MEA since 2016, all but one permittee has conducted activities in both PMNM and the MEA. As such, seven of these eight permittees experienced no additional burden in cost or labor to apply for and meet permit requirements. For any additional permits issued in the area of the proposed sanctuary that overlaps with the MEA, the annual wage burden of the information collection for permits to a user has been estimated to be \$549.30 and five hours of labor for a general permit, and \$1,224.90 and 10 hours of labor for a special ocean use permit. Therefore, expansion of a permitting process to the area of the proposed sanctuary that overlaps with the MEA would impose only minor administrative costs and project delays, but would not result in significant effect on the operations of permit users. *This administrative burden already exists for activities in PMNM under No Action, and presents a direct, long-term, negligible impact on human uses in the MEA.*

Under the existing Monument management framework, as a condition of a permit, permittees are required to have a NOAA OLE type-approved VMS on board when operating within the PMNM. The proposed rule includes this requirement throughout the proposed sanctuary, meaning it would be a new requirement in areas that overlap with the MEA. The cost of a VMS unit is \$3,150. Annualized over 3 years, the life of the unit, the cost per year is \$1050.00 per year with an additional \$100 in annual maintenance costs, and \$192 in VMS report transmission costs (\$1.28 daily cost based on a vessel averaging 150 days per year in the Monument). Many government and large research institutions have vessels already equipped with a VMS unit, while ONMS maintains two VMS units that they can loan to permittees for vessels without VMS units. The proposed rule is not expected to result in an increase in the number of permit requests, and the majority of users operate in both the area of the proposed sanctuary that overlaps with PMNM and the MEA. *This administrative burden already exists for activities in PMNM under No Action, and presents a direct, long-term, negligible impact on human uses in the MEA.*

The establishment of new regulations in the area of the proposed sanctuary that overlaps with the MEA would provide an overall beneficial impact by limiting pollutants and addressing invasive species concerns in the ocean environment (see Section 5.3.1), but may represent a burden to vessels operating within the sanctuary. Vessels without a USCG-approved Marine Sanitation Device are currently required by permit condition to transit outside PMNM (up to 100 nmi round trip) to discharge their effluent. Under Alternative 1, these vessels may be

required to transit beyond the boundary of the sanctuary (up to 400 nmi round trip) to discharge their effluent. Conversely, vessels could be retrofitted with an approved Marine Sanitation Device to avoid this permit condition. The cost to retrofit a vessel with either a holding tank or a Marine Sanitation Device varies depending on the vessel, with installing a holding tank in a recreational vessel estimated at \$4,000, and the cost to retrofit a large commercial vessel with a Type III Marine Sanitation Device estimated at \$150,000 (WA Department of Ecology, 2016). This is an unlikely cost for most large vessels that are originally built with these systems, while discharge permit conditions could be tailored by sanctuary managers for users with small vessels and small crews to avoid this expense while still protecting water quality in the sanctuary. As noted above, most past permittees have either worked solely within the PMNM or in both the PMNM and the MEA, requiring compliance with the existing regulation. Only a single large research vessel has requested a Letter of Authorization to operate solely in the MEA, and this vessel was already equipped with an approved Marine Sanitation Device. *Due to the low number of potential permittees affected, and the ability for flexible permit conditions for permittees with small vessels and crew, this represents a direct, long-term, minor adverse impact to human uses in the Alternative 1 boundary area.*

Permittees operating within the area of the proposed sanctuary that overlaps with the MEA would be subject to alien species risk assessments to minimize the potential for the vessel and any associated equipment to be a vector for the introduction of invasive species into the sanctuary. Risk assessments typically require a physical inspection of the vessel's hull, below waterline niche surfaces, small boat launches, ballast water records, and other ancillary equipment. Monument co-trustee agencies conduct these assessments in coordination with the permit requirements. In instances where a vessel will not begin its sanctuary activities from Hawaii (e.g., a vessel traveling directly to Papahānaumokuākea from the west coast), Monument managers have provided flexibility in that the permittee can conduct a photographed and/or video inspection of the hull from their home port and submit this report to agency permit coordinators to meet this requirement. While the inspection cost would be borne by the permittee, this avoids the time and fuel costs of traveling to Hawaii prior to conducting their activity. This would only be a new requirement for permittees operating solely in the MEA. For permittees operating in PMNM, there would be no additional cost over No Action. *Due to the low number of potential permittees affected, and the ability to avoid a larger cost of requiring a hull inspection only in Honolulu, the requirement of hull inspections for permitted vessels operating throughout the Alternative 1 boundary area represents a direct, long-term, minor adverse impact to human uses in the portion of the proposed sanctuary that overlaps with the MEA.*

Under Alternative 1, sustenance fishing in PMNM would continue to be allowed as a term or condition of a permit and would be newly managed by permit in the MEA. Sustenance fishing allowed as a condition of a permit has been a minor activity over the past 15 years, with a total of 35 fish reported caught and consumed (NOAA ONMS, 2020). In order to sustenance fish in the area of the proposed sanctuary that overlaps with the MEA, permittees would need to request the ability to sustenance fish when applying for a general or special use permit, and abide by permit-specific requirements, including reporting number of people who fish, number and species of fish caught, and gear used. *Under Alternative 1, this management measure presents*

a direct, negligible impact to sanctuary users, specifically for permittees operating in the portion of the proposed sanctuary that overlaps with the MEA.

Summary of Impacts on Socioeconomic Resources and Human Uses

Overall, NOAA determined that implementing Alternative 1 would have **indirect, minor adverse impacts** on socioeconomics and human uses.

5.3.6 Summary of Impacts on All Resources for Alternative 1

Overall, NOAA determined that implementing Alternative 1 would have **direct, long-term, moderate beneficial impacts** for laws and management, physical, biological, and maritime heritage resources, **direct, long-term, minor beneficial impacts** for cultural resources, and **indirect, long-term, minor adverse impacts** for socioeconomic resources and human uses for the largest proposed sanctuary area of the three alternatives.

5.4 Impacts of Alternative 2

Alternative 2 would designate a sanctuary in the marine environment from the shoreline of the islands and atolls to 50 nmi, while the MEA would continue to be managed as in No Action. No expansion of the permit system and no new sanctuary regulations in the MEA would be promulgated. Under Alternative 2, Presidential Proclamation 9478 would continue to guide management in the MEA. Alternative 2 would implement the draft SMP, while management of non-commercial fishing in the expansion area would remain under the purview of NMFS. The impacts to the area designated as a sanctuary (0–50 nmi, PMNM) would be the same as under Alternative 1, while the impacts to the area not designated as a sanctuary (50–200 nmi, MEA) would be the same as No Action. NOAA would not have sanctuary permitting authority in the MEA. Specific details are provided in the analyses for those alternatives, with only summaries for each of the resources below.

5.4.1 Impacts to Laws and Existing Management

Beneficial Impacts on Laws and Existing Management

Under Alternative 2, the laws and management would closely resemble that of No Action. Regulations would only be slightly altered from what currently exists for PMNM, as described in Chapter 3. As described in Alternative 1, management would be largely consistent with the existing management framework for the Monument. Relative to No Action, Alternative 2 only provides the benefits of Alternative 1 for PMNM. The National Marine Sanctuary Program Regulations (emergency response, penalties, and damage assessment authority) would be valid for PMNM, where most of the permitted activities occur, providing enhanced enforcement capabilities and authority to impose liability for destruction, loss of, or injury to sanctuary resources. *These additional authorities provide a direct, long-term, minor beneficial impact on laws and existing management for the Alternative 2 boundary area.*

Permittees would see little to no difference in application requirements, permit review, or permit conditions compared to No Action. NOAA would not have permit authority for the area of the MEA. Because the MEA is excluded, neither this benefit nor any other benefits described

in Alternative 1 would carry over to the pelagic realm of the MEA. This limits the benefit of sanctuary designation in Alternative 2 relative to Alternative 1.

Adverse Impacts on Laws and Existing Management

As described under Alternative 2, current management would remain largely unchanged. However, the addition of NMSA could require the co-trustees of the Monument to develop a new Memorandum of Agreement to address this added management authority. *Under Alternative 2, there is a negligible adverse impact on laws and existing management.*

Summary of Impacts on Laws and Existing Management

Given the exclusion of the MEA from the Alternative 2 boundary area, NOAA determined that implementing Alternative 2 would have only **direct, long-term, minor beneficial impacts** on laws and existing management.

5.4.2 Impacts on Physical Resources

Beneficial Impacts on Physical Resources

The resource protection measures provided with sanctuary designation, including the ability to impose liability for destruction, loss of, or injury to sanctuary resources and providing natural resource damage assessment authorities for destruction, loss of, or injury to any sanctuary resource; emergency response funds; and law enforcement's capacity to implement a penalty schedule and impose penalties for permit and regulatory violations provide the beneficial impacts described in Alternative 1. These authorities provided by NMSA are most valuable in PMNM, particularly for the shallow reef habitat where natural resources are highest and threats described in the No Action analysis have the greatest potential for impact. *These additional protections provide the direct, long-term, moderate beneficial impacts on physical resources described in Alternative 1 for the Alternative 2 boundary area, based on NOAA's experience with implementing these authorities.*

The exclusion of the MEA from the Alternative 2 boundary area reduces the beneficial impact of protection for physical resources (e.g., water quality and seamount habitat resources) compared to Alternative 1. Similarly, the NMSA authorities (e.g., penalty schedule, damage assessment) would not apply to physical resources of the MEA, providing less protection than Alternative 1. *However, as human use and ecological threats to physical resources are much lower in the MEA than in the shallow waters of PMNM, sanctuary designation still imparts a moderate benefit to physical resources within the Alternative 2 boundary area.*

Adverse Impacts on Physical Resources

Two factors limit the adverse impact to physical resources. First, threats to physical resources beyond the Alternative 2 boundary area within the MEA are limited because the area is almost exclusively deep-water habitat, as described in Section 4. Second, the low activity level lessens the potential for human impacts, as indicated by the issuance of a single permit (via letter of authorization from FWS) since 2016 for one project operating solely within the MEA.

Implementing the proposed management measures within the Alternative 2 boundary area would produce no potential adverse impacts on physical resources as they are protective in

nature, primarily providing regulations (e.g., discharge limitations) and enforcement deterrents (e.g., penalties for infractions). In addition, existing regulations and the remote nature of the site effectively limit an increase in human/vessel presence.

Summary of Impacts on Physical Resources

Overall, NOAA determined that implementing Alternative 2 would have **direct, long-term, moderate beneficial impacts** on physical resources.

5.4.3 Impacts on Biological Resources

Beneficial Impacts on Biological Resources

The resource protection measures provided with sanctuary designation, including the ability to impose liability for destruction, loss of, or injury to sanctuary resources; provide natural resource damage assessment authorities for destruction, loss of, or injury to any sanctuary resource; and law enforcement's capacity to implement a penalty schedule and impose penalties for permit and regulatory violations, provide the beneficial impacts for biological resources described in Alternative 1. These authorities provided by NMSA are most valuable in the shallow reef habitat of PMNM, where natural resources are highest and identified threats, particularly vessel groundings, marine debris, and other natural and human disturbance have the greatest potential for impact to corals and other benthic organisms. The penalty schedule provides law enforcement with a new and effective tool, which could deter violations of regulations designed to protect the sanctuary's biological resources. *These impacts, detailed in Alternative 1, would provide direct, long-term, moderate benefits for the more vulnerable nearshore biological resources within the Alternative 2 boundary area, but would not benefit the waters of the MEA, based on NOAA's experience with implementing these authorities.*

Under Alternative 2, biological resources of the MEA would receive the same protections as No Action, including the Monument management framework and prohibitions and regulations described in Proclamation 9478. As noted above, this limits the overall effectiveness of the sanctuary designation as compared to Alternative 1. However, activity level in the MEA has been less than in PMNM and biological resources are subject to fewer and less intense threats. *Therefore, Alternative 2 maintains much of the beneficial impacts on biological resources, which still imparts a moderate beneficial impact.*

Adverse Impacts on Biological Resources

As described in Alternative 1, the proposed action primarily provides additional protections, which impart no adverse impacts to biological resources. *Under Alternative 2, any increase in permitted activity due to the increased visibility from a sanctuary designation would be speculative, and any impacts would likely be short-term and negligible.*

Summary of Impacts on Biological Resources

Overall, NOAA determined that implementing Alternative 2 would have **direct, long-term, moderate beneficial impacts** on biological resources.

5.4.4 Impacts on Cultural and Historical Resources

Beneficial Impacts on Cultural and Historical Resources

As noted in both the No Action and Alternative 1 analysis, the integration of cultural heritage and awareness will likely remain a high management priority under No Action and the alternatives, building on the efforts made over the past two decades. Most of the beneficial impacts described for maritime heritage resources were for resources found in the MEA, and these would not carry over under Alternative 2, as the MEA is excluded under this boundary alternative. As such, *Alternative 2 would provide no beneficial impacts for cultural resources and negligible impacts for historical resources within the Alternative 2 boundary area.*

Adverse Impacts on Cultural and Historical Resources

There are no adverse impacts on cultural and historical resources compared to No Action.

Summary of Impacts on Cultural and Historical Resources

Overall, NOAA determined that implementing Alternative 2 would have **no impact** on cultural resources and **direct, long-term, negligible impacts** on maritime heritage resources.

5.4.5 Impacts on Socioeconomic Resources, Human Uses, and Environmental Justice

In general, impacts to socioeconomic resources do not change due to boundary configurations. Sanctuary designation provides administrative and budget stability and public exposure that may attract tourists and resource users, irrespective of the three boundary alternatives. The impacts on human uses are altered based on the additional regulatory aspects, which are fully described under No Action and Alternative 1. Impacts related to Environmental Justice are the same as those described for Alternative 1. Relevant impacts are mentioned below.

Beneficial Impacts on Socioeconomic Resources and Human Uses

Alternative 2 would provide the same socioeconomic benefits as described in Alternative 1, including potential increases in education and outreach efforts, potential economic gains from Sanctuary Friends Groups, and training and development of a workforce in conservation, protection, and restoration. *This would provide an indirect, long-term, minor beneficial impact on socioeconomic resources.*

Adverse Impacts on Socioeconomic Resources and Human Uses

The minor adverse impacts described in Alternative 1 would not apply to Alternative 2, as they are related to new operational requirements (insurance, VMS, vessel inspections, discharge restrictions) of the MEA, and exist under No Action for the Alternative 2 boundary area. *As such, Alternative 2 imparts no adverse effects on socioeconomic resources and human uses.*

Summary of Impacts on Socioeconomic Resources and Human Uses

Overall, NOAA determined that implementing Alternative 2 would have an **indirect, long-term, minor beneficial impact** on socioeconomic resources and human uses.

5.4.6 Summary of Impacts for Alternative 2

Overall, for the areas of the proposed sanctuary that overlaps PMNM, NOAA determined that implementing Alternative 2 would have **direct, long-term, minor beneficial impacts** on laws and management, **direct, long-term, moderate beneficial impacts** on physical and biological resources, **no impact** on cultural resources, **negligible impacts** on maritime heritage resources, and **direct, long-term, minor beneficial impacts** on socioeconomic resources and human uses. The beneficial impact is reduced compared to Alternative 1.

5.5 Impacts of Alternative 3

Alternative 3 would designate a sanctuary in the marine environment from the shoreline of the islands and atolls seaward to 200 nmi, excluding the marine environment within the Midway Atoll NWR and Hawaiian Islands NWR. The seaward boundary of this alternative is the same as that of Alternative 1. The inner boundary of this alternative is the seaward boundary of all NWR waters of Papahānaumokuākea. NWR waters would be managed as in No Action, with remaining proposed sanctuary waters managed as in Alternative 1. Relative to No Action, Alternative 3 imparts the same beneficial and adverse impacts of Alternative 1, except within NWR waters, where no benefits of sanctuary designation will be realized. The impacts analysis provided in Alternative 1 for the areas seaward of the NWR boundary will not be repeated.

5.5.1 Impacts on Laws and Existing Management

The exclusion of refuge waters in Alternative 3 creates a boundary division across a continuous ecosystem where various activities occur on both sides of this boundary, including conservation and management, research, and Native Hawaiian practices. These permitted activities occur and would continue to be conducted within and outside of NWR waters. The impacts to laws and management relate to the ambiguity that would result from activities occurring across this boundary. As noted above, the impacts seaward of the NWR boundaries are identical to those described in Alternative 1.

Beneficial Impacts on Laws and Existing Management

Under Alternative 3, laws and management would closely resemble No Action. Regulations would only be slightly altered from what currently exists for PMNM, as described in Chapter 3. As described in the analysis for Alternative 1, management would be largely consistent with the existing management framework for the Monument. Codified regulations and permit authority for the area of the proposed sanctuary that overlaps with the MEA would benefit laws and management over No Action. *NOAA determined that Alternative 3 would impart minor beneficial impacts on laws and existing management.*

Adverse Impacts on Laws and Existing Management

Seaward Hawaiian Islands NWR boundaries are not defined. Coordinates do not exist to inform people operating within the Hawaiian Islands NWR or enforcement personnel who would be tasked with determining where sanctuary regulations would and would not apply. Hawaiian Islands NWR waters overlap but do not fully encompass the Special Preservation Areas of the Monument and the Areas To Be Avoided of the PSSA. The Special Preservation Areas are

discrete, biologically important areas that were designated to reduce concentrations of uses that could result in declines in species populations or habitat, to reduce conflicts between uses, and to protect areas that are critical for sustaining important marine species or habitats. The authorities to impose liability for destruction, loss of, or injury to sanctuary resources and provide natural resource damage assessment for destruction, loss of, or injury to any sanctuary resource provided through sanctuary designation could be complicated under Alternative 3 due to the ambiguity of the sanctuary boundary. This is particularly relevant in these shallow waters where anchor damage, vessel groundings, and damages from identifiable marine debris (e.g., lost shipping containers) are most likely to happen. Further, the penalty schedule provided by the NMSA is a strong deterrent against illegal activities, and implementation of this deterrent would be similarly complicated for actions occurring across the undefined Hawaiian Islands NWR boundary, which would also be the landward boundary for the proposed sanctuary. *Under Alternative 3, potential ambiguity of where NMSA regulations can be enforced, specifically within and adjacent to the Hawaiian Islands NWR, presents a direct, long-term, moderate adverse impact on laws and existing management.*

Under Alternative 3, National Marine Sanctuary Program Regulations (emergency response, penalties, response costs, and damages) would not be applicable in Midway Atoll NWR. As the Midway Atoll NWR has an unambiguous boundary that encompasses a cohesive ecosystem, including all near shore and adjacent deeper reefs of the atoll, individually-permitted activities are more likely to occur within the NWR boundary and regulations would be consistent. As such, exclusion of Midway Atoll NWR from sanctuary designation does not impart an adverse impact on the laws and management within the Alternative 3 boundary area.

Conversely, a variety of permitted activities, including research, conservation and management, marine debris removal, and Native Hawaiian practices occur within and outside of the Hawaiian Islands NWR for an individual permit. Projects conducted across multiple islets of the Hawaiian Islands NWR are expected to continue in the future. This may potentially require permittees to obtain two permits, one for the activity that falls within the area of the sanctuary, and another for the area that falls outside the sanctuary but within the NWR. *These permits could have differing conditions and regulatory authority, causing confusion for permittees, imparting direct, long-term, minor adverse impacts on laws and existing management.*

Summary of Impacts on Laws and Existing Management

NOAA determined that implementing Alternative 3, specifically by excluding the Hawaiian Islands NWR and to a lesser extent the Midway Atoll NWR, would have **direct, long-term, moderate adverse impacts** on laws and existing management.

5.5.2 Impacts on Physical Resources

The impacts to the area designated as a sanctuary would be the same as under Alternative 1, while the impacts to the areas not designated as a sanctuary would be the same as No Action, for both Hawaiian Islands and Midway Atoll NWRs.

Beneficial Impacts on Physical Resources

Alternative 3 provides the same beneficial impacts for physical resources of the area of the sanctuary that overlaps with the MEA (e.g., water quality and seamount habitat resources) as described for physical resources of Alternative 1. Similarly, the NMSA authorities (i.e., the ability to impose liability for destruction, loss of, or injury to sanctuary resources and providing natural resource damage assessment authorities for destruction, loss of, or injury to any sanctuary resource; emergency response fund; and law enforcement's capacity to impose penalties for permit and regulatory violations) would apply to physical resources of the MEA and much of the waters on PMNM. However, the Alternative 3 boundary area excludes the shallow reef habitat of the NWRs, where natural resources are highest and threats described in the No Action analysis have the greatest potential for impact. *Because human use and ecological threats to physical resources are much higher in the shallow waters of PMNM and the NWRs, and this alternative would limit NOAA's ability to respond to these threats in shallow waters, the sanctuary designation imparts only a minor benefit on physical resources within the Alternative 3 boundary area.*

Adverse Impacts on Physical Resources

Implementing Alternative 3 would produce no potential adverse impacts on physical resources because the proposed management measures are protective in nature, primarily providing regulations (e.g., discharge limitations) and enforcement deterrents (e.g., penalties for infractions) to limit impacts to the physical environment. In addition, existing regulations and the remote nature of the site effectively limit an increase in human/vessel presence.

Summary of Impacts on Physical Resources

As physical resources in the shallow-waters of the NWRs would be afforded the same protections as No Action, while resources seaward of these waters would benefit from additional protections, NOAA determined that implementing Alternative 3 would have **direct, long-term, minor beneficial impacts** on physical resources.

5.5.3 Impacts on Biological Resources

The impacts on biological resources for the area designated as a sanctuary would be the same as under Alternative 1.

Beneficial Impacts on Biological Resources

The resource protection measures provided with sanctuary designation, including damage assessment authority, emergency response funds, and law enforcement's capacity to impose penalties for permit and regulatory violations are most valuable in shallow reef habitat, where natural resources are highest and identified threats, particularly vessel groundings, marine debris, and other natural and human disturbance have the greatest potential for impact to corals and other marine life. The enhanced enforcement capability to issue penalties for regulatory and permit condition infractions under the NMSA, an important deterrent for violators, would be unavailable for activities within NWR waters under Alternative 3. Because NWR waters are excluded in this alternative, neither these benefits nor any other benefits described in Alternative 1 would carry over to these excluded areas. *Due to these limitations, Alternative 3*

would only provide direct, long-term, minor beneficial impacts on biological resources within the Alternative 3 boundary area.

Adverse Impacts on Biological Resources

Implementing Alternative 3 would produce no potential adverse impacts on biological resources because the proposed management measures are protective in nature, primarily providing regulations and enforcement deterrents to limit impacts to biological resources.

Summary of Impacts on Biological Resources

NOAA determined that implementing Alternative 3 would have **direct, long-term, minor beneficial impacts** on biological resources of the proposed sanctuary.

5.5.4 Impacts on Cultural and Historical Resources

Direct impacts described for physical and biological resources are relevant to the cultural resources analysis but are not repeated. As described in the No Action analysis, cultural heritage is a primary focus of Monument management, ensuring use of appropriate protocols, employing biocultural resource monitors on permitted activities, and numerous other measures to protect tangible and intangible cultural resources. These efforts would be maintained within and outside sanctuary waters under Alternative 3.

Regulatory protection of maritime heritage resources within the NWRs is the same as No Action, while protection of maritime resources in sanctuary waters would be the same as described under Alternative 1. Effects of Alternative 3 on maritime resources are described below.

Beneficial Impacts on Cultural and Historical Resources

As cultural protocols would extend to the MEA as described in Alternative 1, Alternative 3 imparts a minor beneficial impact on cultural resources.

As described in Alternative 1, the NMSA provides supplemental protection to maritime heritage resources by requiring sanctuary permits for projects exploring these resources. These impacts, detailed in Alternative 1, would benefit the area of the MEA, but would not benefit the waters of the Midway Atoll and Hawaiian Islands NWRs. Under Alternative 3, maritime heritage resources in the NWRs would receive the same level of protection as No Action. Specifically, maritime heritage resources are well protected by existing statutory and regulatory protections, including the Sunken Military Craft Act as well as a Monument permit system. As the maritime heritage resources in the MEA are the most in need of additional protections, *these regulatory protections provide a similar direct, long-term, moderate beneficial impact for maritime heritage resources within the Alternative 3 boundary area as described for Alternative 1.*

Adverse Impacts on Cultural and Historical Resources

There are no adverse impacts on cultural and historical resources compared to No Action.

Summary of Impacts on Cultural and Historical Resources

Alternative 3 would have **a minor beneficial impact on cultural resources**. While protections of maritime heritage resources are similar between Alternatives 1 and 3, the potential loss of resources allocated within the NWRs under Alternative 3 reduces the overall

benefit, creating a **direct, long-term, moderate beneficial impact on maritime heritage resources.**

5.5.5 Impacts on Socioeconomic Resources, Human Uses, and Environmental Justice

In general, most impacts to socioeconomic resources do not change due to boundary configurations. Sanctuary designation provides administrative and budget stability and public exposure that may attract tourists and resource users, irrespective of the three boundary alternatives. The impacts on human uses are altered based on the additional regulatory aspects, which are fully described under No Action and Alternative 1. Impacts related to Environmental Justice are the same as those described for Alternative 1. Relevant impacts are mentioned below.

Beneficial Impacts on Socioeconomic Resources and Human Uses

Alternative 3 would provide the same socioeconomic benefits as described in Alternative 1, including potential increases in education and outreach efforts, potential economic gains from Sanctuary Friends Groups, and training and development of a workforce in conservation, protection, and restoration. *This would provide an indirect, long-term, minor beneficial impact on socioeconomic resources.*

Adverse Impacts on Socioeconomic Resources and Human Uses

The socioeconomic and human use impacts from new regulatory requirements in the MEA, including access restrictions, discharge regulations, and permittee requirements are the same as described for Alternative 1. *These would be direct, long-term, and minor adverse impacts based on the minimal additional administrative and regulatory burden, coupled with the low overall activity within the MEA.*

Summary of Impacts on Socioeconomic Resources and Human Uses

Overall, NOAA determined that implementing Alternative 3 would have **indirect, long-term, minor adverse** impacts on socioeconomics and human uses.

5.5.6 Summary of Impacts for Alternative 3

While beneficial impacts described in Alternative 1, including penalties for violations and authorities to respond to and hold financially liable those responsible for destruction or loss of, or injury to sanctuary resources, would not be available to protect resources and manage permittees within Midway Atoll and Hawaiian Islands NWRs, this impact is the same as No Action, reflecting a lesser beneficial impact compared to Alternative 1, but imparting no adverse impacts. *Under Alternative 3, the waters with the greatest need for comprehensive protection would not be included within the boundary area, and therefore would obtain fewer beneficial impacts than waters of the surrounding ecosystem within the boundary area.*

There are three specific adverse impacts from the exclusion of Hawaiian Island NWR waters under Alternative 3:

- The undefined boundary of the Hawaiian Islands NWR may create permitting conflicts and enforcement ambiguities, and limit the effectiveness of damage assessment authorities, as described in adverse impacts on laws and existing management.
- NMSA protections would not be consistently applied where permittees operate in contiguous areas that straddle the Hawaiian Islands NWR seaward boundary.
- Exclusion of Hawaiian Islands NWR waters excludes approximately 327 square miles of State waters within Papahānaumokuākea, which is not consistent with the recommendation of the State of Hawai‘i to include state waters in this action.

There is one specific adverse impact due to the exclusion of Midway Atoll NWR waters under Alternative 3:

- Exclusion of Midway Atoll NWR waters may reduce the capacity to conduct maritime heritage-related research and produce associated educational products in an area known to have dozens of historic vessels and aircraft.

NOAA determined that implementing Alternative 3 would have direct, long-term, moderate adverse impacts on laws and management, direct, long-term, minor beneficial impacts on physical resources, direct, long-term, minor beneficial impacts on biological resources, indirect, minor beneficial impact on cultural resources, direct, long-term, moderate beneficial impacts on maritime heritage resources, and indirect, long-term, minor adverse impacts on socioeconomic resources and human uses. This determination equally represents the independent impacts to both the Midway Atoll NWR and the Hawaiian Islands NWR.

5.6 Cumulative Impact Analysis

The CEQ regulations for implementing the provisions of NEPA define “effects” and “impacts” as changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and include direct effects, indirect effects, and cumulative effects. Cumulative effects are defined at 40 CFR § 1508.1(g)(3) as “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR § 1508.1(g)). As explained in Section 5.1.2, NOAA divided the reasonably foreseeable effects of the proposed action and alternatives into three categories—direct impacts, indirect impacts, and cumulative impacts—to facilitate the most meaningful analysis and to provide clarity to the public about the nature of those effects.

This section presents the methods used to evaluate cumulative impacts, lists projects that may have cumulative effects when combined with the impacts from the proposed action or alternatives discussed in this DEIS, and evaluates potential cumulative impacts.

5.6.1 Cumulative Impact Assessment Methods

CEQ’s cumulative effects guidance identifies several different methods for assessment of cumulative impacts, such as checklists, modeling, forecasting, and economic impact assessment (CEQ, 1997). In general, past, present, and future foreseeable projects are assessed by topic area.

Cumulative effects may arise from single or multiple actions and may result in additive or interactive effects. Interactive effects may be countervailing, where the adverse cumulative effect is less than the sum of the individual effects, or synergistic, where the net adverse effect is greater than the sum of the individual effects (CEQ, 1997). For the purposes of this analysis, NOAA considered cumulative effects to be significant if they exceed the capacity of a resource to sustain itself and remain productive. The geographic scope of the cumulative effects analysis is the boundaries of the proposed sanctuary under each action alternative, and the marine boundaries immediately adjacent to the proposed sanctuary boundaries. The temporal scope of the cumulative analysis is from five years prior to the publication of the DEIS to 10 years after designation.

The project area is isolated from almost all human activity, with an average of 60 people working under permit-controlled conditions within the Monument on any given day. Virtually all commercial activities are prohibited under No Action, with additional prohibitions proposed under Alternatives 1 and 3 that would further restrict activities within the area of the proposed sanctuary that overlaps with the MEA. The number and types of projects listed in Table 5.1, all of which are currently occurring or are anticipated to occur in the reasonably foreseeable future (10 years) within the study area, were analyzed, along with the proposed action. These projects are limited to the extent of the potential impact as well as NOAA's cumulative impact analysis, which considers the effects of these actions in combination with the impacts of the proposed action to determine the overall cumulative impact on the human environment.

5.6.2 Past, Present, and Reasonably Foreseeable Future Projects

Table 5.1 lists the other federal and non-federal actions in the study area that could contribute to cumulative impacts. This list was compiled based on input from cooperating and partnering agencies, along with NOAA staff knowledge, of other existing or planned activities occurring in and around the proposed sanctuary. Many of these other federal and non-federal actions relate to management and research of shoreline habitat and resources. The projects expected to contribute to cumulative impacts would likely affect similar resources to those that are affected by the proposed action or are large enough to have far-reaching effects on a resource.

As the proposed action for the designation of Papahānaumokuākea National Marine Sanctuary is a regulatory and management action rather than an implementation level action, the cumulative effects are related primarily to local and regional management of marine resources in the study area. For the purposes of this cumulative effects analysis, NOAA assumed that any of the actions in Table 5.1 that have not already been implemented would be approved and implemented within the time period for this analysis.

As described in detail in the subsections below, NOAA found that the combination of implementation of the alternatives with the actions in Table 5.1 would result in minor indirect cumulative beneficial impacts to legal/management/enforcement, physical and biological resources, cultural and historical resources, and socioeconomic and human resources along with environmental justice in the study area.

Table 5.1 Actions with potential to contribute to cumulative impacts

Project Title	Location	Project Lead	Project description	Estimated Completion Timeline
Endangered Species Conservation	U.S. federal waters	NOAA, NMFS, and FWS	NMFS and FWS developing and implementing recovery plans and conducting five-year status reviews for ESA-listed species. Consulting on federal actions that may affect a listed species or its designated critical habitat. Issuing permits that authorize scientific research on listed species.	Ongoing
Fisheries Management Actions	U.S. federal waters	NMFS, Western Pacific Fishery Management Council	Implementing and amending fishery management plans and associated fishing regulations, issuing exempted fishing permits, modifications to EFH and Habitat Areas of Particular Concern, enforcing fisheries regulations.	Ongoing
Military activities	Monument-Wide	U.S. Department of Defense, USCG	Military readiness, training, inspections, missile defense tests, servicing aids to navigation buoys, and law enforcement	Ongoing
Commercial Shipping Traffic	Commercial shipping lanes within Monument	International Maritime Organization	Transit of the proposed sanctuary	Ongoing
Seawall removal at French Frigate Shoals	Lalo (French Frigate Shoals)	Co-managers, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency	Planning options include complete removal, partial removal and repair to minimize entrapment of wildlife, including seals, turtles and seabirds.	Unknown
Implementation of Midway Atoll Comprehensive Master Plan	Midway Atoll	FWS	Habitat Restoration; Inner Harbor improvements; South seawall repairs; Wastewater treatment system improvements	10 years

5.6.3 Description of Cumulative Impacts on Laws and Existing Management

Of the actions listed in Table 5.1, two (endangered species conservation by NMFS and FWS, and fisheries management actions by NMFS) have the potential to affect the laws and management structure of Papahānaumokuākea. These actions are intended to designate critical habitat for corals and manage non-commercial fisheries in the MEA and would create new requirements and restrictions for users in the Monument.

Legal protection as a national marine sanctuary, pursuant to NMSA, would complement and supplement these regulatory authorities to provide needed protections for otherwise vulnerable ocean resources. A purpose and policy of the NMSA is to provide authority for comprehensive and coordinated conservation and management of marine areas, and activities affecting them, in a manner which complements existing regulatory authorities (16 U.S.C. § 1431(b)(2)).

- See Section 3.3.1 for an overview of proposed sanctuary regulations and appendices C and E for a comprehensive list of existing federal and State authorities that NMSA would complement and supplement.
- See Section 4.4 for further discussion of protected species and habitats.
- See Section 4.5 for discussion of cultural and historic resources in the proposed sanctuary.
- See Sections 5.3.1, 5.4.1, and 5.5.1 for summaries of the impact to laws and existing management.

When the expected impacts of the proposed action on the regulatory environment are combined with the impacts of endangered species conservation and fisheries management actions, NOAA does not anticipate any significant cumulative impacts, as the proposed rule would supplement and complement the existing laws and management of the Monument. The presidential proclamations that designated the Monument and the area's existing regulations served as benchmarks for the proposed sanctuary. The proposed sanctuary would only add to and not diminish Monument management measures and protections. NOAA has adopted the management measures from these benchmarks, and in a few places, added onto those measures to allow for consistency in regulation and management across the proposed sanctuary. The proposed rule unifies management of the area by removing discrepancies and gaps in prohibitions, regulated activities, and permit criteria.

Due to the complementary nature of the regulatory and management actions by NMFS and FWS and the low level of activity within the proposed sanctuary in which users would be subjected to the regulations of the proposed action and alternatives, the cumulative impact to laws and management from the proposed action and alternatives in combination with potential impacts from these other actions would be less than significant.

5.6.4 Cumulative Impacts on Physical Resources

The proposed action and alternatives would not have adverse impacts on physical resources, including water quality and habitat, as described in Section 4.3. NOAA's implementation of the proposed action and alternatives are expected to result in no increases in public use within the

boundaries of the Sanctuary, and minimal to no increase in management activities occurring within the boundaries.

Of the actions listed in Table 5.1, four (commercial shipping, military activities by the U.S. Department of Defense and USCG, seawall removal by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency, and implementation of Midway Atoll Comprehensive Master Plan by FWS) have the potential to affect the physical resources within the boundary alternatives.

The seawall removal and Midway Atoll Comprehensive Master Plan would have short term adverse impacts on physical resources, but would have long term beneficial impacts on physical resources, as the overall purpose of these actions are for conservation, species protection, and habitat restoration, complementing the beneficial impacts of the proposed action. While unlikely, commercial shipping may cause adverse impacts, such as from minimal levels of pollution generated and low risks from invasive species introduction, to physical resources.

As described in Section 4.6.2, the U.S. Navy conducts a few of their testing and training exercises within the southeastern portion of the Monument, with potential impacts and mitigation measures provided in the associated EIS (U.S. Department of Navy, 2018). According to the EIS, “it is possible that Navy stressors would combine with non-Navy stressors, particularly in nearshore areas and bays” but the “impacts may temporarily intermingle with other inputs in areas with degraded existing conditions, most of the Navy impacts on water quality and turbidity are expected to be negligible, isolated, and short term, with disturbed sediments and particulate matter quickly dispersing within the water column or settling to the seafloor and turbidity conditions returning to background levels.” As a result, “the relatively minute concentrations of Navy stressors are not likely to combine with other past, present, or reasonably foreseeable activities in a way that would cumulatively threaten the water and sediment quality within the Study Area” (U.S. Department of the Navy, 2018).

The proposed action and alternatives would not make a substantial contribution to these adverse impacts. Rather, the beneficial impacts on physical resources from the proposed action and alternatives could offset some of the potential adverse impacts caused by the anticipated activities described above. The resource protections provided by sanctuary designation would result in beneficial impacts on physical resources, primarily due to the proposed sanctuary’s regulatory protections prohibiting seafloor disturbance and discharges, thereby preventing degradation of physical resources.

Due to the limited extent of activities undertaken by the U.S. Department of Defense, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and FWS, and the commercial shipping industry, the remote location of the proposed sanctuary, and the overall benefits of the proposed action on the physical environment, the cumulative impact to physical resources from the proposed action and alternatives in combination with potential impacts from these other actions would be less than significant.

5.6.5 Cumulative Impacts on Biological Resources

The proposed action and alternatives would not significantly contribute to any adverse impacts on biological resources, as described in Section 4.4. NOAA's implementation of the proposed action and alternatives are expected to result in no increases in public use and management activities occurring within the proposed boundaries.

All six of the actions listed in Table 5.1 (endangered species conservation by NMFS and FWS, fisheries management actions by NMFS, military activities by U.S. Department of Defense and USCG, commercial shipping, seawall removal at French Frigate Shoals by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency, and the implementation of Midway Atoll Comprehensive Master Plan by FWS) have the potential to affect the biological resources within the boundaries of the proposed sanctuary. Any activity requiring the use of vessels and/or a human presence in the proposed sanctuary may cause short-term, minor local adverse effects on biological resources. However, these negligible impacts would be mitigated by NOAA's implementation of BMPs and other regulatory and management activities that would protect the sanctuary from any potential biological disturbances.

The endangered species conservation and fisheries management actions propose critical habitat designation for corals and non-commercial fisheries regulations in the MEA, respectively, benefiting these resources through improved management and potentially creating new conservation requirements and restrictions for users in the area in the future. While unlikely, commercial shipping may cause adverse impacts to biological resources, such as from minimal levels of pollution generated and low risks from invasive species introduction. The seawall removal and Midway Atoll Comprehensive Master Plan would have short-term adverse effects on biological resources but would have long-term beneficial impacts through habitat restoration which would minimize entrapment of wildlife (including seals, turtles, and seabirds).

The Navy conducts limited testing and training exercises within the southeastern portion of the Monument, including readiness, training, operations, and law enforcement (U.S. Department of Navy, 2018). These activities are considered short term in duration, and are not expected to have significant adverse impacts. The Navy's EIS acknowledges that these activities "contribute incremental effects on the ocean ecosystem" but are "not anticipated to meaningfully contribute to the decline of these (marine mammals and sea turtles) populations or affect the stabilization and recovery thereof" (U.S. Department of the Navy, 2018).

The proposed action and alternatives would not make a substantial contribution to these adverse cumulative impacts. Rather, the beneficial impacts on biological resources from the proposed action and alternatives could offset some of the potential adverse impacts caused by the anticipated activities described above. The resource protections provided by sanctuary designation would result in beneficial impacts on biological resources, primarily due to the proposed sanctuary's regulations, which include a prohibition on removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any sanctuary resource. In addition, research, resource protection, education, and management activities are expected to be coordinated with the activities of other agencies and jurisdictions. Several other organizations, including federal, State, and local government entities, are involved in the protection of biological resources in the designation area.

Due to the limited extent of activities described above (including those beneficial to biological resources), the remote location of the proposed sanctuary, and the overall benefits of the proposed action on the environment, the cumulative impact to biological resources from the proposed action and alternatives in combination with potential impacts from these other actions would be less than significant.

5.6.6 Cumulative Impacts on Cultural and Historic Resources

The proposed action and alternatives would not significantly contribute to any adverse impacts on cultural and historic resources, as described in Section 4.5. NOAA's implementation of the proposed action and alternatives are expected to result in no increases in public use and management activities occurring within the proposed boundaries.

Of the actions listed in Table 5.1, three (military activities by the U.S. Department of Defense and USCG, seawall removal at French Frigate Shoals by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency, and implementation of Midway Atoll Comprehensive Master Plan by FWS) have the potential to affect the cultural and historic resources within the boundaries of the proposed sanctuary.

The seawall removal and Midway Atoll Comprehensive Master Plan would likely have no adverse effects on cultural and maritime heritage resources, and would have long term beneficial impacts through the protection of any cultural and historic resources on land, as well as the protection of marine life as a cultural resource.

Military readiness activities may adversely impact cultural resources within the boundary alternatives. With regards to maritime heritage resources, the Navy's EIS notes that "stressors, including explosive and physical disturbance and strike stressors, associated with the" Navy Hawaii-Southern California Training and Testing action "would not affect submerged prehistoric sites and submerged historic resources in accordance with section 106 of the National Historic Preservation Act because mitigation measures have been implemented to protect and avoid these resources" (U.S. Department of the Navy, 2018).

The proposed action and alternatives provide beneficial impacts for cultural and maritime heritage resources, which could offset some of the potential adverse impacts caused by the anticipated activities described above. The resource protections provided by sanctuary designation would result in beneficial impacts on cultural and maritime heritage resources, primarily due to regulations that provide uniform protection for all underwater maritime resources, management principles that emphasize an in situ management approach for the long term protection of site information and integrity, as well as other preservation methods and activities outlined in the ONMS policy guidance document *Monitoring and Management of Tangible Maritime Heritage Resources* (NOAA ONMS, 2021). NOAA would mitigate any potential impacts to underwater cultural and historic resources from potential human activities through compliance with the proposed sanctuary regulations, collaboration with State officials, and compliance with the NHPA for any potential impacts to historic properties within the sanctuary.

Due to the limited extent of activities undertaken by the U.S. Department of Defense, the remote location, and the overall benefits of the proposed action and other actions described above, the

cumulative impacts to cultural and maritime heritage resources from the proposed action and alternatives in combination with potential impacts from these other actions would be less than significant.

5.6.7 Cumulative Impacts on Socioeconomic Resources, Human Uses, and Environmental Justice

The proposed action and alternatives would have long-term minor adverse (Alternatives 1 and 3) to minor beneficial (Alternative 2) impacts to socioeconomic resources, human uses, and environmental justice, as described in Section 4.6. NOAA's implementation of the proposed action and alternatives are expected to result in no increases in public use within the boundaries of the Sanctuary, and minimal increase in management activities within the boundaries.

Of the actions listed in Table 5.1, only fisheries management actions by NMFS have the potential to affect socioeconomic resources, human uses, and environmental justice. As commercial fishing is already prohibited throughout all proposed boundary alternatives, only fishery management actions on forms of non-commercial fishing in the MEA may impact socioeconomic resources and human uses. There are currently no anticipated activities within the proposed sanctuary that could have adverse effects on socioeconomic resources, human uses, and environmental justice as the area is extremely remote, nearly 300 miles at its closest point from the main Hawaiian Islands, and very few entities operate there.

The cumulative impact of this action with fishery management actions in the MEA is only relevant to Alternatives 1 and 3, as the action occurs beyond the proposed sanctuary boundary of Alternative 2. Given the remote nature of this area, few users are anticipated to conduct non-commercial fishing activities within the proposed sanctuary. Impacts to these users would primarily relate to the effort required to obtain a permit and ensure they meet the proposed vessel and reporting requirements.

As permitted non-commercial fishing could not be conducted simultaneously with any permitted sanctuary activity, and permitted non-commercial fishing users would be exempt from sanctuary regulations, the cumulative impact to socioeconomic resources, human uses, and environmental justice from the proposed action and alternatives in combination with potential impacts from the regulatory requirements for non-commercial fishing would be less than significant.

Chapter 6: Conclusions

6.1 Comparison of Impacts of the Alternatives

As noted throughout this draft EIS, the proposed designation of Papahānaumokuākea National Marine Sanctuary is principally an administrative action, with the same protective measures to all resources within each alternative's boundary. All identified beneficial and adverse impacts have been categorized as negligible, minor, moderate, or significant.

Table 6.1. Comparison of the Aggregate Average Impacts for Each Alternative

Resource/Action	Alternative 1 (Preferred)	Alternative 2	Alternative 3
Laws and Existing Management	++ Long term <u>Direct Moderate Benefits</u>	+ Long term <u>Direct Minor Benefits</u>	xx Long term <u>Direct Moderate Adverse Impact</u>
Physical Resources	++ Long term <u>Direct Moderate Benefits</u>	++ Long term <u>Direct Moderate Benefits</u>	+ Long term <u>Direct Minor Benefits</u>
Biological Resources	++ Both short and long term <u>Direct Moderate Benefits</u>	++ Long term <u>Direct Moderate Benefits</u>	xx Long term <u>Direct Minor Benefits</u>
Cultural Resources	+ <u>Direct Minor Benefits</u>	O <u>No Impact</u>	+ <u>Direct Minor Benefits</u>
Maritime Heritage Resources	++ Long term <u>Direct Moderate Benefits</u>	O Long term <u>Direct Negligible Benefits</u>	++ Long term <u>Direct Moderate Benefits</u>
Socioeconomics, Human Uses, and Environmental Justice	x <u>Indirect Minor Adverse Impacts</u>	+ Long term <u>Indirect Minor Benefits</u>	x Long term <u>Indirect Minor Adverse Impacts</u>

Key to Symbols:

xxx (or greater)	Significant Adverse Impact
xx	Moderate Adverse Impact
x	Minor Adverse Impact
O	No Impact or Negligible Impact
+	Minor Beneficial Impact
++	Moderate Beneficial Impact
+++ (or greater)	Significant Beneficial Impact

6.2 Unavoidable Adverse Impacts

Pursuant to NEPA, an EIS must describe any adverse environmental effects which cannot be avoided should the proposed action be implemented (42 U.S.C. § 4332(C)(ii)). The environmental impacts of each alternative are fully described in Chapter 5. The potential impacts from the sanctuary designation include numerous beneficial impacts, as well as adverse impacts that range from negligible to moderate. These adverse impacts are expected to result even when the activities are carried out responsibly and while observing all practicable mitigation measures, and therefore represent unavoidable adverse impacts. NOAA's analysis found that implementing the action alternatives would not result in any unavoidable significant adverse impacts.

6.3 Relationship of Short-Term Use and Long-Term Productivity

NEPA requires that federal agencies consider the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity (42 U.S.C. § 4332(C)(iv)).

The short-term uses of the environment relating to each of the action alternatives would be limited to the on-site management activities that are not currently taking place or planned under the No Action Alternative. These management activities would not harm, degrade, or otherwise adversely affect the long-term productivity of the environment. Conversely, they are designed to preserve and enhance this long-term productivity, either directly (such as through invasive species management) or indirectly (such as through education).

6.4 Irreversible and Irretrievable Commitment to Resources

NEPA requires discussion of commitments of nonrenewable resources that would be irreversible or irretrievable if the proposed action is implemented (42 U.S.C. § 4332(C)(v)). The mission of a national marine sanctuary is to conserve resources for future users, but implementing routine management activities and protective regulations may require some irreversible and irretrievable commitments of resources.

Irreversible commitments of natural resources include the consumption or destruction of nonrenewable resources or degradation of renewable resources over long periods of time. The proposed action would result in the following irreversible commitments of natural resources:

- Nonrenewable resources that would be consumed during management and research activities include fuel, water, power, and other resources necessary to maintain and operate the vessels used for sanctuary management and permitted activities, as well as potential future sanctuary offices.
- Ongoing operation of facilities operated by NOAA would continue to consume power, an irreversible use of resources, if derived from a nonrenewable electrical power source (e.g., natural gas or nuclear energy).

Irretrievable commitments of resources include opportunities foregone, expenditure of funds, loss of production, and restrictions on resource use. The proposed action and alternatives could result in the following irretrievable commitments of natural resources:

- Monetary funds would be expended to support management activities in the purchase of fuels, electricity, water, and other nonrenewable supplies, for wages and rents and for potential construction of facilities
- Natural resources may be used in construction of sanctuary facilities and structures, such as buildings and signs

The irreversible and irretrievable commitment of resources would be minimized and mitigated by best management practices and staff training.

6.5 Environmentally Preferable Alternative

As the regulatory regime is the same across the three alternatives, the key difference is where new protections would be applicable. NOAA has determined Alternative 1 as the preferred alternative for the following reasons:

- Meets all goals and objectives, including designating a national marine sanctuary that would complement and supplement existing State and federal resources protection laws to manage nationally significant resources.
- Includes State waters as requested by the State (the co-action agency).
- Provides implementing regulations to protect resources in the MEA (in contrast to Alternative 2, where the MEA is excluded from the proposed sanctuary).
- Provides new protections for the shallow habitats, where threats are highest (in contrast to Alternative 3, where the NWRs are excluded from the proposed sanctuary).

Glossary

‘Āina Akua – Realm of the gods

‘Āina Momona – Healthy and thriving communities of people and place

Ali‘i – Native Hawaiian chiefs

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.

Ao – Realm of the light and living

Biocultural – A dynamic, integrative approach to understanding the links between nature and culture and the interrelationships between humans and the environment (Maffi & Woodley, 2012).

Hula – Traditional Native Hawaiian dance

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.

Kānaka ‘Ōiwi, Kānaka Hawai‘i, Kānaka Maoli – Various terms that refer to 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.

Ke Alanui Polohiwa a Kāne – Traditional Native Hawaiian term referring to the Tropic of Cancer

Ke Ala Polohiwa a Kanaloa – Winter solstice

Ke Ala Polohiwa a Kāne – Summer solstice

Kilo – Native Hawaiian observational methodologies of the environment

Kinolau – A myriad of physical forms manifested in spiritual deities of nature

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.

Kūpuna – Elder(s), ancestor(s)

Kūpuna Islands – Ancestral or elder islands

Leina – Spiritual portal where the spirits of people who have passed return to

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

Mana – Supernatural/divine power, authority

Mele – Song(s)

Moananuiākea – Pacific Ocean

Mo‘olelo – Stories and narratives

‘Ōiwi – A term referring to Native Hawaiians

‘Ōlelo Hawai‘i – Native Hawaiian language

‘Ōlelo no‘eau – Native Hawaiian proverb or wise saying

Oli – Traditional Hawaiian chant

Papahānaumokuākea – Papahānaumoku is considered a motherly figure personified by the earth and all things that “give birth,” including plants, animals, humans, and even one’s consciousness. Wākea is a father figure personified as an expanse, or a greater space, such as the sky; the two are honored and highly recognized as ancestors of Native Hawaiian people. Their union is also referenced as the creation, or birthing, of the entire Hawaiian archipelago. The name Papahānaumokuākea was chosen for the Marine National Monument as a combination of these two entities and to emphasize their relationship and importance to Hawaiian culture.

Pilina – Relationship(s)

Pō – Darkness/realm of the ancestors

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Appendix A: Proposed Papahānaumokuākea National Marine Sanctuary Draft Management Plan



A Hawaiian voyaging canoe travels through Papahānaumokuākea. Photo: NOAA

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 walū a Kanaloa
 I pa’a i ka maka
 I ka maka walū 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 maila 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).

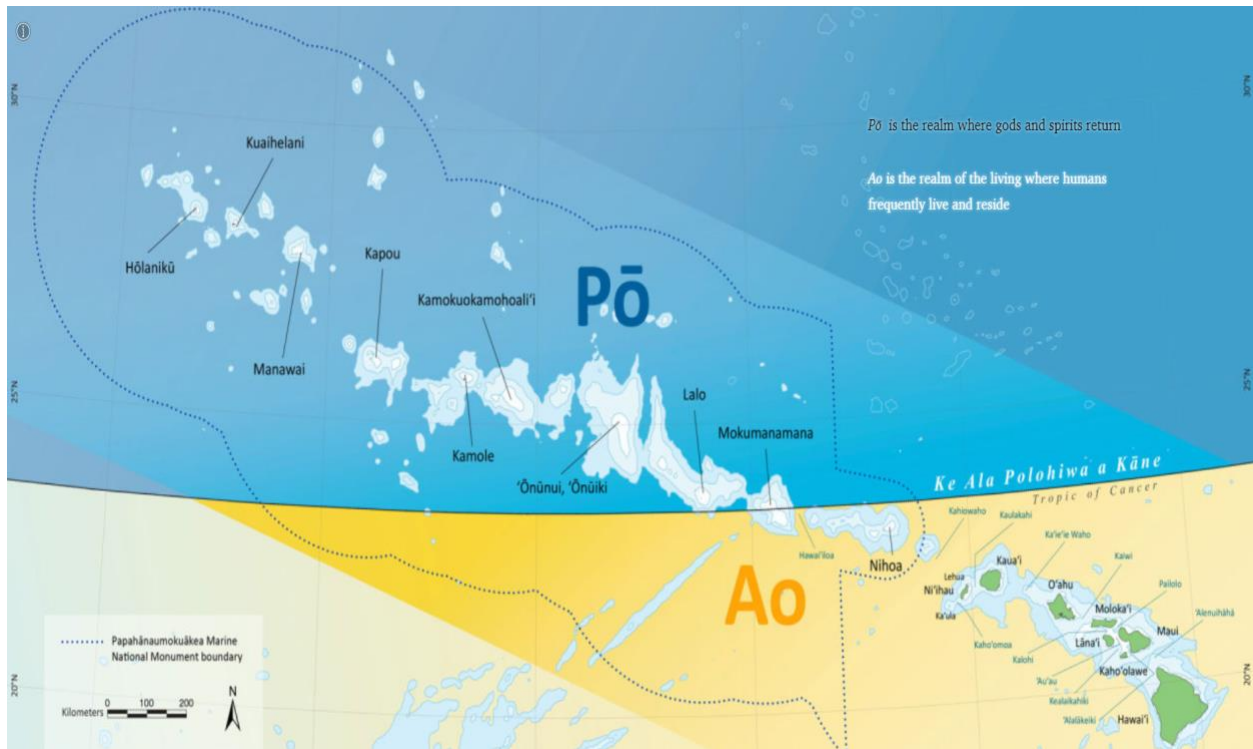


Figure 2. Map of the Hawaiian universe from the eastern edge to the northwestern extent of the Hawaiian Archipelago. Image: NOAA

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. 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; and describes sanctuary regulations if appropriate.

This 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 (FWS), the State of Hawai‘i through the Department of Land and Natural Resources (DLNR), and the Office of Hawaiian Affairs (OHA). These organizations are collectively committed to realizing the mission of Papahānaumokuākea. Advantages of cooperative management, as delineated in a 2017 Co-Trustee Memorandum of Agreement, 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.

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, which will be updated in the future to include the MEA that was established 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.

To ensure consistency of protections between the sanctuary and the overarching monument, the monument management plan components were utilized for this draft 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, the strategies in this sanctuary management plan will be incorporated into the future monument management plan update, along with strategies and other plan requirements of the other Papahānaumokuākea co-trustees. This draft sanctuary management plan is focused on the range of actions that would be undertaken by NOAA’s Office of National Marine Sanctuaries (ONMS), building upon the strategies already being implemented by ONMS for the monument.

This draft sanctuary management plan is being issued as a part of a sanctuary proposal package that also includes a draft environmental impact statement (EIS) and proposed regulations. Companion documents include the terms of the proposed designation, resource studies, and other required analyses. The draft sanctuary management plan is included within the draft EIS as an appendix.

In writing this draft 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 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 NOAA's Office of National Marine Sanctuaries, 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 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 additionally 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.

Objectives of Sanctuary Designation

The sanctuary designation objectives are reflected in the management plan elements. These objectives reflect NOAA priorities within the process of sanctuary designation, and the broader need for a sanctuary within the National Marine Sanctuary System. The sanctuary objectives guide 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 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 (NMSA) requires the preparation of a draft sanctuary management plan for a proposed national marine sanctuary. This draft 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 draft 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 Report*, the *Papahānaumokuākea Natural Resources Science Plan 2011-2015*, and other management documents.

The core elements and framework for the draft sanctuary management plan were designed in coordination with the monument's co-trustees, in order to ensure concurrence of plans between the sanctuary and the overarching monument. The core elements of this draft 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 draft 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 draft 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 draft 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 draft 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 co-trustees 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 Hawaiian and other methods, understandings, and perspectives to holistically care for this place.
3. **Governance:** Management of Papahānaumokuākea resources is accomplished by multiple 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 draft sanctuary management plan. The goals developed by the co-managers are summarized below.

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

Co-managers 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 the Office of National Marine Sanctuaries 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 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 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.

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 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 and uphold sanctuary regulations and policies.

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 ‘Ōiwi knowledge systems through meaningful inclusivity and engagement of ‘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 ʻŌiwi (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 ʻŌiwi (Native Hawaiian) and Pacific Islanders who are severely underrepresented in STEM and Ocean Sciences

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

The Office of National Marine Sanctuaries provides 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, the Office of National Marine Sanctuaries’ governance and operations will contribute toward the broader co-management of Papahānaumokuākea.

Strategies

Strategy 3.1. Central Operations Planning: Conduct and coordinate annual site operations planning, budgeting, and implementation.

Strategy 3.2. Central Operations Capacity: Assess and enhance human resources and organizational capacity.

Strategy 3.3. Central Operations Assets: Conduct and coordinate the management of field equipment, vessels, vehicles, accountable property, and other assets.

Strategy 3.4. 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 3.5. Cooperative Co-Management: Conduct cooperative, coordinated management with the Papahānaumokuākea Marine National Monument co-trustees for the proposed national marine sanctuary.

Strategy 3.6. Culturally Integrated Management Approach: Continue to conduct and improve programs and initiatives to increase internal cultural capacity and proficiency.

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 ‘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: 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 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-managers. 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.

The Office of National Marine Sanctuaries’ 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-managers, 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 Native Hawaiian educators and organizations to weave in ‘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 for each person to actively engage in stewarding the places that care for them.

Strategies

Strategy 5.1. Awareness and Information in Bilingual Formats: Conduct programs; develop and disseminate materials in Hawaiian and English language for 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 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 the general public 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 kükulu (pillars of management). These indicators and measures provide a means to track implementation of the 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 heritage resources.

Table 1. Performance Indicators and Measures

Kükulu	Indicator	Measures
1. Resource Protection and Conservation	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. Trend: - = +	<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	1.b. The condition of habitats and biocultural resources in the sanctuary is assessed, and measures are developed to maintain or improve them. Trend: - = +	<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	2.a. Area of the sanctuary seafloor where efforts to survey, map, ground truth, characterize, or analyze habitats have been completed. Trend: - = +	<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	2.b. Support collaborative and coordinated management through timely sharing of data. Trend: - = +	<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	3.a. Resources and organizational capacity are sufficient to implement core operations and priority programs. Trend: - = +	<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	4.a. Involve communities and volunteers in sanctuary management issues and ocean conservation. Trend: - = +	<ul style="list-style-type: none"> • Attendance at events, public meetings, and events (e.g., open houses, advisory council meetings, MDC 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	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. Trend: - = +	<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 proposed 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 creation and 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 Native Hawaiian 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 Native Hawaiian 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

‘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, Kānaka Hawai‘i, Kānaka Maoli – Various terms that refer to 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).

NOAA – National Oceanic and Atmospheric Administration. A Papahānaumokuākea Marine National Monument co-trustee.

‘Ōlelo Hawai‘i – Native Hawaiian language.

‘Ōiwi – A term referring to Native Hawaiians.

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.

Acknowledgements

The sanctuary designation process was conducted in cooperation with the Papahānaumokuākea Marine National Monument co-trustees: the National Oceanic and Atmospheric Administration (NOAA), the U.S. Fish and Wildlife Service, State of Hawai‘i, and the Office of Hawaiian Affairs. This designation builds on existing management and programming in the marine portions of Papahānaumokuākea Marine National Monument, by adding the conservation benefits of a national marine sanctuary. The co-management structure that is a hallmark of the monument will continue.

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 management plan. NOAA acknowledges and thanks its co-managing partners and advisory council members for their individual and collective contributions to this process.

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Appendix A1: Terms of Designation and Proposed Regulations

The Terms of Designation can be found in the Proposed Rule. Refer to the [Papahānaumokuākea sanctuary webpage](#) for a link to the Federal Register Notice to review and comment on the proposed Terms of Designation and Proposed Regulations. Should the sanctuary designation be finalized, the final Terms of Designation and a link to the regulations will be added here.

Appendix B: Field Activities Table and Best Management Practices

As noted in Chapter 3, implementation of the draft management plan would involve conducting the categories of field activities summarized in the table below. Although the exact number, location, and timing of future field activities is not known at this time, Table B.1 provides a rough estimate of the magnitude of possible field activities, based on NOAA's experience with the research and management needs of Papahānaumokuākea.

Table B.1 Summary of estimated field activities in the sanctuary to implement draft management plan

Category of Activity	Estimated Activity Level
Vessel use and maintenance (number of vessels; days at sea/year)	Up to 5 small vessels ; up to 40 feet in length. Up to 90 total vessel days at sea/year for research, monitoring, emergency response, alien species management, and education/outreach.
Scuba diving (dives/year)	Up to 3,000 dives/year between May and October for documentation, collection and monitoring of: species, habitats, and heritage resources; installation/recovery of scientific equipment; and support for sanctuary activities.
Deploying research and monitoring equipment or buoys (deployments/year)	Up to 5 buoy deployments/year for maritime heritage management Up to 20 deployments/year for passive acoustic monitoring Up to 16 deployments/year of small research and monitoring equipment (i.e., weighted markers, moorings for temperature, oxygen, CO ₂ sensors). Deployments range from 3 to 12 months.
Sampling organisms (deployments/year)	Up to 50 deployments/year of sampling equipment (e.g., small beam trawl) for collecting organisms (e.g., algae plankton, fish).
Collecting artifacts for time-sensitive maritime heritage resource protection needs (collections/year)	Up to 1 collection every five years for time-sensitive emergency situations to protect cultural, historical, or archaeological resources from loss, destruction, or injury.
Removing materials (removals/yr)	Up to 4 removals/year of materials (e.g., marine debris and nets)
Deploying uncrewed aerial systems (UAS)	Up to 20 UAS deployments/year for invasive species, climate change, damage assessments and other research

NOAA would implement the following self-imposed best management practices and standing orders as part of conducting field activities:

Vessel Use and Maintenance

- [BMP001](#) Marine Alien Species Inspection Standards for Maritime Vessels
- [BMP004](#) Best Management Practices (BMPs) for Boat Operations and Diving Activities
- [BMP011](#) Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment
- [BMO020](#) Best Management Practices (BMPs) to Minimize the Spread of Nuisance Algae

Scuba Diving

- [BMP004](#) Best Management Practices (BMPs) for Boat Operations and Diving Activities
- [BMP011](#) Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment
- [BMO020](#) Best Management Practices (BMPs) to Minimize the Spread of Nuisance Algae

Deploying Research and Monitoring Equipment or Buoys

- [BMP011](#) Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment
- [BMO020](#) Best Management Practices (BMPs) to Minimize the Spread of Nuisance Algae

Sampling Organisms

- [BMP006](#) General Storage and Transport Protocols for Collected Samples
- [BMP011](#) Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment
- [BMO020](#) Best Management Practices (BMPs) to Minimize the Spread of Nuisance Algae

Collecting Artifacts for Time-Sensitive Maritime Heritage Resource Protection Needs

- [BMP017](#) Best Management Practices (BMPs) for Maritime Heritage Sites

Removal of Materials (e.g., marine debris and nets)

- [BMP020](#) Best Management Practices (BMPs) to Minimize the Spread of Nuisance Algae. *Requires a separate biosecurity plan and review for the removal of marine debris from areas with known nuisance algae distributions.*

Deploying uncrewed aerial systems (UAS) for research

- The Monument's Resource Protection Working Group is working on a generalized SOP/BMP for UAS operations.

Appendix C:

Compliance with Additional Regulatory Requirements

This section presents the existing additional statutory and regulatory environment of the proposed action and describes the consultation requirements and compliance completed for the proposed action. This section also includes the agencies or persons consulted regarding these requirements.

Federal Statutory Consultations

Consultations under the National Marine Sanctuaries Act

Under section 303(b)(2) of the National Marine Sanctuaries Act (NMSA), NOAA is required to conduct a series of consultations with Congress, federal and state agencies, and other interested agencies. Per this requirement, upon publication of this draft EIS, NOAA will send consultation letters with a copy of the draft EIS to the following parties:

- U.S. House of Representatives Natural Resources Committee
- U.S. Senate Committee on Commerce, Science, and Transportation
- Department of Defense
- Department of State
- Department of Transportation
- Department of the Interior

NOAA will also send copies of this draft EIS to the following agencies and organizations, consistent with NEPA requirements for inviting comments (40 CFR 1503.1):

- Office of Hawaiian Affairs
- State of Hawai'i
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Coast Guard
- U.S. Department of Defense

NOAA consulted with the Western Pacific Regional Fishery Management Council (Council) as required in accordance with NMSA section 304(a)(5). Through this consultation, NOAA provided the Council with the opportunity to recommend any draft fishing regulations it deemed necessary to implement the proposed sanctuary designation. NOAA initiated the consultation on [November 19, 2021](#). On [March 22, 2022](#), the Council agreed to develop fishing regulations for the proposed sanctuary. NOAA participated in six public meetings hosted by the Council on November 1st, 3rd, 4th, 5th, 8th, and 10th of 2022, which were focused on the development of fishing regulations for the area of the proposed sanctuary that overlaps with the MEA. At its 193rd meeting in December of 2022, the Council provided a final [recommendation](#). NOAA found that the final recommendation, in part, did not fulfill the purposes and policies of the

NMSA and the goals and objectives of the proposed designation ([February 22, 2023](#)). The Council amended their recommendation during their 194th meeting in March of 2023, and submitted a revised final recommendation to NOAA on [April 14, 2023](#).

In May of 2023, NOAA accepted the majority of the Council’s recommendation as it fulfilled the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation. However, the Council’s recommendation for the disposition of Native Hawaiian Subsistence Practices Fishing catch, providing permit applicants the ability to request limited cost recovery by selling their catch in the permit application process through a statement of need for cost recovery along with expected costs, failed to fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation, and was rejected by NOAA via a decision letter dated [May 31, 2023](#). As NOAA explained in the letter, any recommendation for the allowance of “sale” is inconsistent with the proposed sanctuary’s goals and objectives. NOAA prepared regulations under the Magnuson-Stevens Fishery Conservation and Management Act and the NMSA to reflect the outcome of the NMSA section 304(a)(5) process.

National Historic Preservation Act of 1966 (54 U.S.C. §§ 300101 et seq.) – Section 106 Consultation

Section 106 of the National Historic Preservation Act (NHPA, 54 U.S.C. 306108) requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment with regard to the undertaking. Pursuant to 36 CFR 800.16(l)(1), the term “historic property” means “any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places maintained by the Secretary of the Interior.” This term includes artifacts, records, and material remains that are related to and located within such properties, including properties of traditional religious and cultural importance to an Indigenous nation or tribe or Native Hawaiian organization (36 CFR 800.16(l)). This includes:

- Locations associated with the traditional beliefs concerning religion, origins, cultural history, or the nature of the world;
- Locations where native religious practitioners have historically gone, or were thought to go, and are known to go today, to perform ceremonial activities in accordance with traditional cultural practices; and
- Locations where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

The regulations implementing Section 106 of the NHPA (36 CFR 800) establish a process requiring federal agencies to (i) determine whether the undertaking is a type of activity that could affect historic properties; (ii) identify historic properties in the area of potential effects; (iii) assess potential adverse effects; and (iv) resolve adverse effects. The regulations require that federal agencies consult with states, tribes, and other interested parties for actions that may affect historic properties. The National Park Service and the Presidential Advisory Council on Historic Preservation provide guidance to federal agencies on collaborative management and

preservation of TCPs with Indigenous and Native Hawaiian Organizations (NPS Bulletin 38; ACHP, 2020).

NOAA has determined that designation of a national marine sanctuary and related rulemaking for sanctuary-specific regulations meet the definition of an undertaking as defined at 36 CFR 800.16(y). In fulfilling its responsibilities under Section 106 of the NHPA, NOAA initiated the review with the State via a letter to the State Historic Preservation Division through the Hawai‘i Cultural Resource Information System on November 21, 2021, requesting Section 106 consultation for the proposed sanctuary designation. Background data on historic properties was included. ONMS also gave notice to the Advisory Council on Historic Preservation (ACHP) on November 21, 2022. These letters and supporting documentation identified the Area of Potential Effect (APE) and began the process to identify consulting parties (CP). Appropriate briefing materials were prepared and invitations were sent to over 500 families and organizations who have lineal and cultural connections to Papahānaumokuākea, including cultural practitioners, Native Hawaiian Organizations, fishers (subsistence, recreational, and commercial), government agencies, and others. As of January 21, 2023, NOAA received 31 responses to be a CP for the proposed project and NOAA officially recognized the 31 CPs.

NOAA will complete the identification of historic properties in the area of potential effects and the assessment of the effects of the undertaking on such properties in consultations with recognized consulting parties. NOAA seeks public input, particularly in regard to the identification of historic properties within the proposed area of potential effect. As this is a joint federal-State action, the State is preparing a Cultural Impact Assessment (CIA).

To date, ONMS has conducted six meetings with Recognized Consulting Parties:

- August 23, 2022 (6pm–8pm HST)
 - NOAA convened the first CP consultation meeting virtually and discussed historic properties, maritime heritage resources, and Hawaiian cultural resources. All Recognized CPs were invited. Consultation meeting notes are on file.
- October 25, 2022 (6pm–8pm HST)
 - NOAA convened the second CP consultation meeting with a focus on Hawaiian cultural resources. All Recognized CPs were invited. Consultation meeting notes are on file.
- October 27, 2022
 - NOAA conducted a one-on-one consultation with a lineal descendant of Nihoa Island (a Recognized CP). Consultation meeting notes are on file.
- October 28, 2022 (7am–9am HST)
 - NOAA convened the third CP consultation meeting with a focus on maritime heritage resources. All Recognized CPs were invited. Consultation meeting notes are on file.
- October 31, 2022
 - NOAA conducted a one-on-one consultation with Akifumi Iwabuchi of Tokai University, Japan to discuss Japanese military craft. Consultation meeting notes are on file.
- January 24, 2023 (6pm–8pm HST)

- NOAA convened the fourth CP consultation meeting covering maritime heritage resources and Hawaiian cultural resources. All Recognized CPs were invited. Consultation meeting notes are on file.

Parties expressed interest in identifying the APE as a potential Traditional Cultural Property. Issues of potential concern raised by CPs during consultations to date included: 1) access by the Japanese government and its representatives to sunken Japanese vessels and aircraft within the proposed sanctuary; 2) concern that scientific research could be inappropriate given the cultural significance of the area to Native Hawaiians; 3) protection of seascapes and historic Polynesians transit routes; and 4) ensuring NOAA is engaging with lineal and cultural descendants who have knowledge of the traditional and customary practices of Papahānaumokuākea.

The NHPA Section 106 review is ongoing. Further consultations will be held following the public release of the draft EIS and draft management plan.

The State of Hawaii's CIA and Legal Analysis are triggered by requirements of the Hawai'i Environmental Policy Act (HEPA), Hawai'i Revised Statutes (HRS) §343, and are conducted parallel to the Section 106 process.

Sunken Military Craft Act of 2004 (amended 2022)

The Sunken Military Craft Act of 2004 (SMCA; Pub. L. 108-375, Title XIV, sections 1401 to 1408; 10 U.S.C. 113 note) preserves and protects from unauthorized disturbance all sunken military craft that are owned by the United States government, as well as foreign sunken military craft that lie within United States waters, as defined in the SMCA. Thousands of U.S. sunken military craft lie in waters around the world, many accessible to looters, treasure hunters, and others who may cause damage to them. These craft, and their associated contents, represent a collection of non-renewable and significant historical resources that often serve as war graves, carry unexploded ordnance, and contain oil and other hazardous materials. By protecting sunken military craft, the SMCA helps reduce the potential for irreversible harm to these nationally important historical and cultural resources.

The 1942 naval aviation Battle of Midway occurred both at Midway Atoll, as well as some 100–150 nautical miles north of the atoll in the northwestern portion of Papahānaumokuākea. Aircraft carriers from the historic conflict have also been located in the deep ocean, and multiple aircraft and sunken military vessels have been surveyed within the Midway Atoll Special Management Area, as well. Yet, hundreds of aircraft, and several other aircraft carriers and destroyers from the battle, remain to be discovered in Papahānaumokuākea.

Sunken military craft fall under the jurisdiction of a number of federal agencies, such as the U.S. Navy and the U.S. Coast Guard. NOAA would coordinate with the U.S. Navy and any other applicable federal agency, or State agency if found within State waters, regarding activities directed at sunken military craft discovered within the sanctuary. [SMCA amendments of December 2020](#) (SMCA Sec. 1027) allow the Department of the Navy to withhold information regarding sunken military craft, if such disclosure would increase the risk of the unauthorized disturbance of one or more sunken military craft.

ONMS has a long-standing ad hoc coordination/communication with colleagues in the Naval History and Heritage Command regarding the SMCA and other relevant issues. ONMS maritime heritage staff have been regular participants with the Naval History and Heritage Command in the Inter Agency Working Group on Underwater Cultural Heritage (IAWG UCH) along with other federal agencies, including the National Park Service and Bureau of Ocean Energy Management (BOEM).

Coastal Zone Management Act (16 U.S.C. §§ 1451 et seq.) – Federal Consistency

In 1972, Congress enacted the Coastal Zone Management Act (CZMA; 16 U.S.C. 1456) to encourage coastal states, Great Lake states, and U.S. territories and commonwealths to preserve, protect, develop, and, where possible, to restore or enhance the resources of the nation’s coastal zone. Section 307 of the CZMA is known as the “federal consistency” provision. The federal consistency provision requires federal actions (inside or outside a state’s coastal zone) that affect any land or water use or natural resource of a state’s coastal zone, to be consistent to the maximum extent practicable with the enforceable policies of the state coastal management program.

Section 307 of the CZMA requires federal agencies to consult with a state’s coastal program on potential federal agency activities that affect any land or water use or natural resource of the coastal zone. To comply with this law, NOAA will submit a copy of the proposed rule and supporting documents, including this draft EIS, to the State of Hawai’i Office of Planning and Sustainable Development for evaluation of federal consistency under the CZMA. This EIS provides the backbone of the analysis necessary for that determination. NOAA will publish the final rule and designation only after completion of the federal consistency process under the CZMA, including correspondence from the State indicating their concurrence. The federal consistency regulations can be reviewed at 15 CFR part 930.

Endangered Species Act (16 U.S.C. §§ 1531 et seq.) – Section 7 Consultation

The Endangered Species Act (ESA) of 1973, as amended, provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. The ESA directs all federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the act. NOAA Fisheries works with USFWS to manage ESA listed species. Generally, NOAA Fisheries manages marine species, while USFWS manages land and freshwater species.

The ESA requires action agencies to consult or confer with the USFWS and/or NOAA Fisheries when there is discretionary federal involvement or control over the action. When a federal agency determines that their action “may affect” an ESA-listed species, that agency is required to consult formally with NOAA Fisheries or USFWS, as appropriate (50 CFR § 402.14 (a)). Federal agencies are exempt from this general requirement if they have concluded that an action “may affect, but is not likely to adversely affect” endangered species, threatened species, or designated critical habitat and NOAA Fisheries or the USFWS concurs with that conclusion (50 CFR §

402.14 (b)). This is commonly referred to as “informal consultation.” This finding can be made only if all of the reasonably expected effects of the proposed action will be beneficial, insignificant, or discountable. If NOAA Fisheries or USFWS agrees that the action’s effects on ESA-listed species will be beneficial, insignificant, or discountable, they provide a letter of concurrence, which completes informal consultation.

Potential impacts from use of multibeam, split beam, bottom profile, and other sonar techniques during sanctuary management actions have been assessed programmatically by the National Ocean Service (NOS) pursuant to NEPA, covering a period of five years, 2023 through 2027. This included an informal section 7 ESA consultation with NOAA Fisheries and a formal consultation with USFWS. Although specific future management activities are not within the scope of this draft EIS, ONMS would comply with all required mitigation when conducting activities under this NOS Surveying Programmatic Environmental Impact Statement (PEIS) within the proposed sanctuary. NOS Surveying PEIS is available [online](#).

Section 4.4.11 identifies 16 ESA-listed marine species (five turtles, seven marine mammals, three fish, and one seabird) under NOAA Fisheries and/or USFWS jurisdiction that are potentially present in the action area, along with the designated critical habitat for the Hawaiian monk seal. NOAA then evaluated which of these species and habitat would likely be present in the action area and affected by implementing the proposed action and described any potential impacts in sections 5.3–5.5.

As detailed in Section 5.3 of the draft EIS, ONMS believes implementation of Alternative 1 or other action alternatives identified in the draft EIS is not likely to adversely affect any species listed as threatened or endangered, or habitats critical to such species, under the ESA.

Concurrent with public review of this draft EIS, ONMS will consult with NOAA Fisheries and USFWS under section 7 of the ESA to ensure that the preferred alternative for sanctuary designation will be compliant with the ESA. ONMS has apprised NOAA Fisheries and USFWS of the details of this federal action, which includes no new field activities, and requires permits for all activities occurring in the Action Area for which ESA consultations are conducted. Because ONMS has determined that all effects on ESA-listed species from the preferred alternative will be beneficial, insignificant, or discountable, an informal consultation on the proposed action is anticipated. ONMS will update this section in the final EIS to include any correspondence transpiring between the issuance of this draft EIS and the final EIS.

Marine Mammal Protection Act of 1972 (16 U.S.C. §§ 1361 et seq.)

The Marine Mammal Protection Act (MMPA), as amended, prohibits, with certain exceptions, the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. The MMPA defines “take” as: “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal” (16 U.S.C. § 1362(13)). Harassment means any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not

limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment) (16 U.S.C. § 1362).

Section 101(a)(5)(A–D) of the MMPA provides a mechanism for allowing, upon request, the “incidental,” but not intentional, taking, of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing or directed research on marine mammals) within a specified geographic region. The NOAA Fisheries Office of Protected Resources processes applications for incidental takes of small numbers of marine mammals. Authorization for incidental takes may be granted if NOAA Fisheries finds that the taking would be of small numbers, have no more than a “negligible impact” on those marine mammal species or stocks, and not have an “unmitigable adverse impact” on the availability of the species or stock for “subsistence” uses. NOAA Fisheries issuance of an incidental take authorization also requires NOAA Fisheries to make determinations under NEPA and section 7 of the ESA.

Effect Determination for Marine Mammals for the Proposed Action

NOAA/ONMS determined that implementing the proposed action would result in beneficial impacts on marine mammals as described in Section 5.3.3 of the draft EIS. Section 4.4.10 describes the marine mammals potentially occurring in the study area, with analyses of potential impacts of the proposed action in Chapter 5. While vessel operations create the possibility for collision with a marine mammal or for temporary disturbance of a marine mammal, no collisions have been reported in the 15 years of Monument management. NOAA requires all permitted vessels to use Best Management Practices described in Appendix B of the draft EIS, including maintaining awareness, managing vessel speed, and work stoppage protocols.

The contribution of noise to the sanctuary soundscape from conducting sanctuary management and research activities would be minor and short-lived, due to the low level of expected future management and research activities in the region. Any acoustics effects on living marine resources from engine noise, movement of equipment through the water, and other underwater sound generated from propulsion machinery or depth sounders would be minor and temporary. Potential impacts from use of multibeam, split beam, bottom profile, and other sonar techniques during sanctuary management actions are anticipated to be limited to temporary behavioral disturbances of marine mammals within the mid- and higher- frequency hearing range (e.g., dolphins, monk seals). Most sonars are narrow-beam and sound exposures are typically less than one minute. ONMS’ multibeam and other active acoustic activities have been assessed programmatically pursuant to NEPA with those of other National Ocean Service (NOS) programs, covering a period of five years, 2023 through 2027. As noted above in the ESA compliance actions, NOS completed a PEIS for these activities under NEPA which included ESA consultations with NOAA Fisheries and USFWS.

Past permitted activities within the Monument which utilized methodologies that had the potential to impact marine mammals were required to assess these potential impacts to marine mammals and ESA-listed species as part of the permit process. Should ONMS conduct, permit, or authorize any future activities, NOAA/ONMS would evaluate the environmental impacts from such activities on a case-by-case basis and would seek any necessary authorizations from NOAA Fisheries and/or USFWS prior to conducting the proposed activity.

Migratory Bird Treaty Act (16 U.S.C. §§ 703 et seq.)

The Migratory Bird Treaty Act of 1918 (MBTA) implements the U.S.' commitment to bilateral treaties, or conventions, with Great Britain, Canada, Japan, Russia, and Mexico for the protection of shared migratory bird resources. The MBTA establishes that it is unlawful to pursue, hunt, take, capture, kill, or sell migratory birds unless authorized by a permit issued by USFWS. Take is defined in regulations as: "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect" (50 CFR § 10.12). The statute does not discriminate between live or dead birds, and gives full protection to any bird parts including feathers, eggs and nests. The MBTA protects over 800 species of birds that occur in the U.S., and the list of migratory bird species protected by the MBTA is set forth in 50 CFR § 10.13. Of these migratory bird species protected under the MBTA, 21 species of seabirds nest on the islets within the proposed sanctuary, while an additional 47 species of shorebirds may be found transiting, resting, or foraging within the study area. USFWS issues permits for scientific collecting, banding and marking, falconry, raptor propagation, depredation, import, export, taxidermy, waterfowl sale and disposal, and special purposes. USFWS has also developed, and continues to develop, voluntary guidance that helps project proponents reduce incidental take of migratory birds.

MBTA Effects Determination for the Proposed Action

NOAA/ONMS determined that the proposed action would not cause the take of any migratory bird species protected under the MBTA. Section 4.4.9 of the draft EIS describes the most common of the 68 migratory bird species that may be found transiting, resting, or foraging within the study area, with potential impacts of the proposed action analyzed in Chapter 5. The proposed action is anticipated to have a minor beneficial impact on migratory birds, through the limitation of fishing activities, while impacts from vessel traffic or other activities in support of the sanctuary management, such as research or educational activities, would be no different than under No Action. Any disturbances that did occur would be negligible and would not rise to the level of take under the MBTA. Should NOAA/ONMS conduct, permit, or authorize any future activities that would cause the take of any species protected under the MBTA, NOAA/ONMS would evaluate the environmental impacts from such activities on a case-by-case basis.

Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §§ 1801 et seq.) – Essential Fish Habitat Consultation

In 1976, Congress passed the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The MSA fosters long-term biological and economic sustainability of the nation's marine fisheries out to 200 nautical miles from shore. Key objectives of the MSA are to prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable supply of seafood. The MSA promotes domestic commercial and recreational fishing under sound conservation and management principles and provides for the preparation and implementation, in accordance with national standards, of fishery management plans (FMPs).

The MSA provides Councils and NOAA Fisheries with authority to identify and designate in the FMP essential fish habitat (EFH) and Habitat Areas of Potential Concern (HAPCs). The MSA defines EFH as “those waters and substrate necessary for fish for spawning, breeding, feeding, or growth to maturity” (MSA § 3(10)). HAPCs are subsets of EFH that exhibit one or more of the following traits: (i) provide important ecological function; (ii) are sensitive to human-induced environmental degradation; (iii) are stressed by development; or (iv) are rare (50 CFR § 600.815(a)(8)).

The consultation requirements of section 305(b) of the MSA provide that:

- Federal agencies must consult with the Secretary of Commerce on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH;
- The Secretary shall provide recommendations (which may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH) to conserve EFH to federal or state agencies for activities that would adversely affect EFH; and
- The federal action agency must provide a detailed response in writing to NOAA Fisheries and to any regional fishery management council commenting under Section 305(b)(3) of the MSA within 30 days after receiving an EFH conservation recommendation.

“Adverse effect” is defined in the regulations as: “any impact that reduces quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions” (50 CFR § 600.910).

The trigger for EFH consultation is a federal action agency’s determination that an action or proposed action, funded, authorized, or undertaken by that agency may adversely affect EFH. If a federal agency makes such a determination, then EFH consultation is required. If a federal action agency determines that an action does not meet the “may adversely affect EFH” test (i.e., the action will not adversely affect EFH), no consultation is required.

The Department of Commerce’s guidelines for implementing the EFH coordination and consultation provisions of the MSA are at 50 CFR §§ 600.905–930. These guidelines provide definitions and procedures for satisfying the EFH consultation requirements, which include the use of existing environmental review processes, general concurrences, programmatic consultations, or individual EFH consultations (i.e., abbreviated, expanded) when an existing process is not available. The EFH guidelines also address coordination with the councils, NOAA Fisheries EFH conservation recommendations to federal and state agencies, and council comments and recommendations to federal and state agencies.

The proposed sanctuary action area is located within EFH for various federally managed fish species within the Fishery Ecosystem Plans for the Hawaiian Archipelago and the Pelagic Fisheries of the Western Pacific. While EFH regulations encourage regional Fishery Management Councils to designate HAPCs within areas identified as EFH to focus conservation

priorities on specific habitat areas that play a particularly important role in life cycles of federally managed fish species, no HAPCs are designated in the project area. This may be due to the prohibition of commercial fisheries within the action area. Section 4.3 of this EIS identifies EFH that overlaps with the action area following procedures established by the MSA.

Upon publication of this draft EIS, NOAA/ONMS will begin consultation with NOAA Fisheries to make an effects determination with regard to the proposed action's effects on EFH. NOAA/ONMS will update this section in the final EIS to include any correspondence transpiring between the issuance of this draft EIS and the final EIS.

National Environmental Policy Act

ONMS has prepared this EIS to evaluate the environmental effects of the proposed action of designating a new national marine sanctuary, which considered alternatives for the proposed designation of a national marine sanctuary in the waters of Papahānaumokuākea, in accordance with NEPA.

Paperwork Reduction Act (44 U.S.C. §§ 3501 et seq.)

Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to, a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, unless that collection of information displays a currently valid Office of Management and Budget (OMB) control number.

NOAA has an OMB control number (0648–0548) for the collection of public information related to the processing of Monument permit applications and reports for permits. NOAA's proposal to create a national marine sanctuary in the marine portions of the Monument is not expected to result in an increase in the number of requests for permits under this control number. A large increase in the number of permit requests would require a change to the reporting burden certified for OMB control number 0648–0548. While not expected, if such permit requests do increase, a revision to this control number for the processing of permits would be requested.

In the most recent Information Collection Request revision and approval for PMNM permits, NOAA reported approximately 74 permit respondents per year. The proposed sanctuary is not expected to increase permit requests per year. Therefore, the total annual burden hours is not expected to increase. See the proposed rule for more detailed information.

Regulatory Flexibility Act (5 U.S.C. §§ 601 et seq.)

The Regulatory Flexibility Act (RFA), as amended and codified at 5 U.S.C. 601 *et seq.*, requires federal agencies to prepare a regulatory flexibility analysis of a rule's impact on small entities whenever the agency is required to publish a notice of proposed rulemaking, unless the agency can certify, pursuant to 5 U.S.C. 605, that the action will not have significant economic impact on a substantial number of small entities.

The RFA requires agencies to consider, but not necessarily minimize, the effects of proposed rules on small entities. There are no decision criteria in the RFA. Instead, the goal of the RFA is

to inform the agency and public of expected economic effects of the proposed rule and to ensure the agency considers alternatives that minimize the expected economic effects on small entities while meeting applicable goals and objectives. The proposed rule quantifies the potential effects of a national marine sanctuary designation.

The analysis detailed in the proposed rule serves as the factual basis for and supports NOAA's decision to certify that the proposed rule will not have a significant economic impact on a substantial number of small entities. Therefore, no further analysis is needed under the RFA (5 U.S.C. 605(b)).

Executive Order 12866 – Regulatory Impact

The Office of Management and Budget (OMB) has determined this rule to be not significant within the meaning of Executive Order 12866.

State of Hawai'i Statutory Consultations

Hawai'i Historic Preservation Program

The State of Hawai'i Department of Land and Natural Resources, Historic Preservation Division (SHPD) is responsible for the State Historic Preservation Program. The program is codified under HRS Chapter 6E recognizing the State's constitutional duty to conserve and develop the historic and cultural property in the State. SHPD review includes identification and inventory of historic properties, evaluation of significance of the properties, determination of effects to significant properties, and mitigation. Pursuant to HRS § 6E-8 and HAR § 13-275-3, DLNR-DAR has submitted a written request to SHPD for an agency determination letter of concurrence that no historic properties are affected. Consultation with SHPD is ongoing.

As noted above, the State of Hawai'i Cultural Impact Assessment (CIA) and Legal Analysis are triggered by requirements of the Hawai'i Environmental Policy Act (HEPA), Hawai'i Revised Statutes (HRS) §343, and are conducted parallel to the NHPA Section 106 process.

Appendix C1: List of Correspondence Related to Consultations

NMSA 304(a)(5)

- 304(a)(5) Initial letter from NOAA to the Western Pacific Regional Fishery Management Council (11.19.21)
- Western Pacific Regional Fishery Management Council NMSA 304(a)(5) Response Letter (03.22.22)
- 304(a)(5) Response letter from NOAA to the Western Pacific Regional Fishery Management Council (05.26.22)
- Western Pacific Regional Fishery Management Council - 193 Council Meeting NWHI fishing regulations recommendations (12.08.2022)
- 304(a)(5) Response letter from NOAA to the Western Pacific Regional Fishery Management Council (02.22.23)
- Western Pacific Regional Fishery Management Council Final Action (04.23.23)
- NOAA Response to Final Action (05.31.23)

Coastal Zone Management Act (16 U.S.C. §§ 1451 *et seq.*)

- Notification from the State of Hawai‘i Office of Planning and Sustainable Development to NOAA (12.01.21)

Marine Mammal Protection Act of 1972 (16 U.S.C. §§ 1361 *et seq.*)

- Letter from the Marine Mammal Commission to NOAA (01.31.22)

National Environmental Policy Act

- Letter from EPA to NOAA (01.31.22)

National Historic Preservation Act of 1966 (54 U.S.C. §§ 300101 *et seq.*)

- Invitation for Consultation under Section 106 of the National Historic Preservation Act Papahānaumokuākea Marine National Monument proposed Sanctuary Designation



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 NATIONAL OCEAN SERVICE
 Office of National Marine Sanctuaries
 1305 East-West Highway
 Silver Spring, Maryland 20910

November 19, 2021

ATTN: Taotasi Archie Soliai
 Western Pacific Regional Fishery Management Council
 1164 Bishop Street, Suite 1400
 Honolulu, HI 96813

Dear Chairperson Soliai:

On November 19, 2021, National Oceanic and Atmospheric Administration (NOAA), Office of National Marine Sanctuaries published a notice of intent in the Federal Register to initiate the process to consider designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary (86 FR 64904). This letter provides the Western Pacific Regional Fishery Management Council (Council) with the opportunity under section 304(a)(5) of the National Marine Sanctuaries Act (NMSA, 16 U.S.C. § 1434(a)(5)) to prepare draft fishing regulations for the proposed sanctuary within Papahānaumokuākea Marine National Monument. While the national standards set forth in section 301(a) of the Magnuson-Stevens Fishery Conservation and Management Act shall serve as guidance to the Council, the goals and objectives of the sanctuary designation (see enclosed), together with the purposes and policies of the National Marine Sanctuaries Act, as well as the existing Presidential Proclamations 8031, 8112, and 9478 specific to Papahānaumokuākea Marine National Monument, are the benchmarks against which the Council's action shall ultimately be measured.

The Council may choose one of three available actions:

1. recommend draft fishing regulations for the proposed sanctuary;
2. recommend that fishing regulations are not necessary; or
3. choose not to act (at all or in a timely manner).

Draft regulations prepared by the Council shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council's action fails to fulfill the purposes and policies of the National Marine Sanctuaries Act and the goals and objectives of the proposed sanctuary designation. The Secretary shall prepare the fishing regulations if the Council declines to make a determination with respect to the need for regulations, makes a determination which is rejected by the Secretary, or fails to prepare the draft regulations in a timely manner. Consistent with the National Marine Sanctuaries Act regulations and to provide adequate time for council meetings, NOAA is providing 120 days to conduct the 304(a)(5) consultation and requests that the Council make its recommendations, and if appropriate, prepare draft fishery regulations no later than **March 31, 2022**.

The Office of National Marine Sanctuaries has completed an initial review of Proclamations 8031, 8112 and 9478, the current fishing regulations under 50 CFR Part 404, and the goals and objectives for the proposed sanctuary. NOAA believes the Magnuson-Stevens Fishery



Conservation and Management Act is the appropriate statute for managing fishing within the proposed sanctuary.

For the area designated by Proclamation 8031, NOAA believes the current Magnuson-Stevens Fishery Conservation and Management Act regulations under 50 CFR 404 are consistent with both the relevant provisions of Proclamations 8031 and 8112 and the goals and objectives for the proposed sanctuary. However, in order to rely on Magnuson-Stevens Fishery Conservation and Management Act authority for sanctuary purposes within the Monument Expansion Area designated by Proclamation 9478, NOAA recommends the Council propose regulations for the Monument Expansion Area that are consistent with both the fishing provisions of Proclamation 9478, and the goals and objectives of the proposed sanctuary.

In order to provide both long term protection under a proposed national marine sanctuary and primary management under the Magnuson-Stevens Fishery Conservation and Management Act, NOAA may adopt a joint regulatory approach. Under this approach, National Marine Sanctuaries Act and Magnuson-Stevens Fishery Conservation and Management Act regulations would be identical, and as long as the Magnuson-Stevens Fishery Conservation and Management Act regulations remain in effect, the National Marine Sanctuaries Act regulations would not be activated.

NOAA believes this approach would allow the Magnuson-Stevens Fishery Conservation and Management Act to provide the predominant management function for fishing while assuring that NOAA continues to meet its independent obligation under the NMSA to protect sanctuary resources. However, to provide the predominant management function, the Magnuson-Stevens Fishery Conservation and Management Act regulations would have to be in place prior to the national marine sanctuary designation and be accepted by NOAA as consistent with the relevant fishing provisions of Proclamation 9478 and with the goals and objectives of the proposed sanctuary.

In summary, we appreciate the time and effort of the Council on this matter and look forward to receiving periodic updates, and ultimately your response. Please feel free to contact Athline Clark at 808-725-5800 or Athline.Clark@noaa.gov if you have any questions or require more information.

Sincerely,

John Armor
Director

Cc: Kitty Simonds, Executive Director, WPRFMC
Michael Tosatto, Regional Administrator, NMFS-PIRO
Kristina Kekuewa, Regional Director, ONMS-PIR
Athline Clark, Superintendent, PMNM

Enclosures: (1) NMSA 304(a)(5) Regulations
(2) Sanctuary Goals and Objectives

Enclosure (1)

National Marine Sanctuaries Act
Title 16, Chapter 32, Sections 1431 et seq. USC, as amended by Public Law 106-513,
November 2000

PROCEDURES FOR DESIGNATION AND IMPLEMENTATION SEC 304(a)(5) FISHING
REGULATIONS

The Secretary shall provide the appropriate Regional Fishery Management Council with the opportunity to prepare draft regulations for fishing within the Exclusive Economic Zone as the Council may deem necessary to implement the proposed designation. Draft regulations prepared by the Council, or a Council determination that regulations are not necessary pursuant to this paragraph, shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council's action fails to fulfill the purposes and policies of this chapter and the goals and objectives of the proposed designation. In preparing the draft regulations, a Regional Fishery Management Council shall use as guidance the national standards of section 302(a) of the Magnuson-Stevens Act (16 U.S.C. 1851) to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation. The Secretary shall prepare the fishing regulations, if the Council declines to make a determination with respect to the need for regulations, makes a determination which is rejected by the Secretary, or fails to prepare the draft regulations in a timely manner. Any amendments to the fishing regulations shall be drafted, approved and issued in the same manner as the original regulations. The Secretary shall also cooperate with other appropriate fishery management authorities with rights or responsibilities within a proposed sanctuary at the earliest practicable stage in drafting any sanctuary fishing regulations.

Enclosure (2)

Sanctuary Goals

Goal 1. Resource Protection & Conservation

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

Goal 2. Research & Monitoring

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

Goal 3. Governance & 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 & 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 & Interpretation

Inspire current and future generations to mālama Papahānaumokuākea's cultural and biological resources through excellence in education and mentorship.

Sanctuary Objectives

Objective 1.

Provide long term lasting protection of Papahānaumokuākea consistent with and reinforcing the provisions outlined in Executive Order (EO) 13178, Presidential Proclamations 8031, 8112, 9478, and the regulations at 50 CFR § 404 through the designation of a national marine sanctuary.

Objective 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.

Objective 3.

Support and maintain existing co-management functions within the Papahānaumokuākea Monument Management Board to ensure unified governance in the spirit of seamless integrated stewardship.

Objective 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.

Objective 5.

Manage the sanctuary as a sacred site consistent with Native Hawaiian traditional knowledge, management concepts, and principles articulated within Mai Ka Pō Mai.

Objective 6.

Enhance community engagement and involvement, including engagement of the Indigenous Hawaiian community in the development and execution of management of the sanctuary.

Objective 7.

Enhance resource protection, increase regulatory compliance, ensure enforceability and provide for consultation through National Marine Sanctuaries Act authorities and regulations.

Objective 8.

Conduct, support and promote research, characterization and long-term monitoring of marine ecosystems and species and cultural and maritime heritage resources.



**Western
Pacific
Regional
Fishery
Management
Council**

March 22, 2022

John Armor
Director
Office of National Marine Sanctuaries
National Ocean Service
1305 East-West Highway
Silver Spring, MD 20910

Dear John,

Thank you for your November 19, 2021 letter transmitting the National Marine Sanctuaries Act (NMSA) 304(a)(5) package and request for fishing regulations in the proposed national marine sanctuary for the Northwestern Hawaiian Islands. The Western Pacific Regional Fishery Management Council met virtually on March 22-24, 2022 and discussed the Council's options for developing fishing regulations in the proposed sanctuary. After discussion and comments, **the Council agreed to develop fishing regulations for the proposed NWHI sanctuary and directed staff to respond to the Office of National Marine Sanctuaries 304(a)(5) package request with preliminarily preferred options for permitting and reporting requirements for commercial (outside current monument boundaries), non-commercial, Native Hawaiian practices, and research fishing in the sanctuary boundaries.**

The Council was concerned that the boundaries for the sanctuary are unknown at this time and that sanctuary fishing regulations could extend beyond the current Papahānaumokuākea and Monument Expansion Area boundaries. This is reflected in the Council's proposed fishing regulations that include commercial fishing permits for areas outside of the current monument boundaries but within the proposed sanctuary. Also included are opportunities for non-commercial fishing, fishing for research, and native Hawaiian fishing practices. Please see the summary of fishing recommendations and preliminary draft fishing regulations enclosed.

The Council will also be working in parallel to develop fishing alternatives for the NWHI area in the Exclusive Economic Zone through an amendment to the Hawaii Archipelago Fishery Ecosystem Plan in accordance with Presidential Proclamation 9478 as well as the NMSA 304(a)(5) request. We hope that these efforts to develop sanctuary regulations and Magnuson-Stevens Act regulations will be seamless and provide minimal impact on the fishing community in Hawaii. If you have any questions or concerns, please contact me at the Council Office at (808) 522-8220.

Sincerely


Kitty M. Simonds
Executive Director

Encl: (1) Summary of fishing regulations
(2) Preliminary draft fishing regulations

cc: Kristina Kekuewa, Regional Director-Pacific Islands Region



Summary of Recommendations for Fishing Regulations in the Proposed NWHI National Marine Sanctuary

March 25, 2022

Council Decision

Under the National Marine Sanctuaries Act, Section 304(a)(5) provides an opportunity for regional fishery management councils to develop fishing regulations for a proposed national marine sanctuary. The request for fishing regulations for a proposed NWHI National Marine Sanctuary was provided on November 19, 2021 in a letter from the Office of National Marine Sanctuaries (ONMS) to the Western Pacific Regional Fishery Management Council (Council). The following fishing regulations were agreed to by the Council at its 190th Meeting held on March 22-25, 2022.

These recommendations pertain to the proposed NWHI National Marine Sanctuary only. The Council will consider separate fishing regulations under the Hawaii Archipelago Fishery Ecosystem Plan at a later date and in concert with sanctuary designation activities.

Due to the unknown nature of the proposed sanctuary boundaries, the Council provided recommendations for potential areas within the proposed sanctuary. Should the proposed sanctuary remain within the boundaries of Papahānaumokuākea and the Monument Expansion Area, fishing regulations outside those boundaries would not be necessary.

Proposed Fishing Regulations

The following are recommendations for fishing regulations in the proposed NWHI national marine sanctuary:

Commercial Fishing

- Commercial Fishing is prohibited from 0-200 miles within the Papahānaumokuākea Marine National Monument and Monument Expansion Area.
- Commercial Fishing is allowed by Federal permits with logbook reporting requirements in areas OUTSIDE of Papahānaumokuākea Marine National Monument but within any sanctuary boundaries

Non-commercial Fishing

- Non-commercial fishing is defined as fishing that does not meet the definition of commercial fishing in the Magnuson-Stevens Fishery Conservation and Management Act, and includes, but is not limited to, sustenance, subsistence, traditional indigenous, and recreational fishing (50 CFR 665.12).
- Non-commercial fishing is allowed by Federal permits with logbook reporting requirements in all areas of the NWHI national marine sanctuary.
- Research fishing is included in the definition of non-commercial fishing and shall be allowed in the sanctuary by federal permits with logbook reporting requirements.

Native Hawaiian Practices

- Fishing for Native Hawaiian practices is included in the definition of non-commercial fishing (as defined in 50 CFR 665.12) and shall be allowed by Federal permits with logbook reporting requirements in all areas of the NWHI national marine sanctuary.
- Customary Exchange, the non-market exchange of marine resources between fishermen and community residents for goods, and/or services for cultural, social, or religious reasons, shall be allowed by Federal permits with logbook reporting requirements in all areas of the NWHI national marine sanctuary. The inclusion of cost recovery through monetary reimbursements and other means for actual trip expenses, including but not limited to ice, bait, fuel, or food, that may be necessary to participate in fisheries in the western Pacific should be discussed in public for its appropriateness within the proposed sanctuary.

Preliminary Draft Fishing Regulations

Note: These proposed regulations may create regulatory uncertainty with respect to the applicability of existing NWHI bottomfish and NWHI lobster and precious coral permits. Regulatory clarity would be needed during the Council process for amending the Hawaii FEP.

*Changes highlighted in yellow

1. The authority for 50 CFR part 665 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In § 665.12, add the definition of “Northwestern Hawaiian Islands Monument Expansion Area” in alphabetical order to read as follows:

§ 665.12 Definitions

* * *

Northwestern Hawaiian Islands Monument Expansion Area means area 50-200 nm of the EEZ around the Northwestern Hawaiian Islands

3. In § 665.13, revise paragraphs (f)(2) and add paragraph (f)(2)(xiv); to read as follows:

§ 665.13 Permits and fees

* * * * *

(f) Fees.

* * *

(2) PIRO will charge a non-refundable processing fee for each application (including transfer and renewal) for each permit listed in paragraphs (f)(2)(i) through (f)(2)(xiii) of this section. The amount of the fee is calculated in accordance with the procedures of the NOAA Finance Handbook for determining the administrative costs incurred in processing the permit. The fee may not exceed such costs. The appropriate fee is specified with each application form and must accompany each application. Failure to pay the fee will preclude the issuance, transfer, or renewal of any of the following permits:

* * *

(xiv) Northwestern Hawaiian Islands non-commercial permit

4. In § 665.14, revise paragraph (b)(1)(i) and (b)(2)(i) to read as follows:

§ 665.14 Reporting and recordkeeping

(b) Fishing record forms

(1) Applicability.

- (i) **Paper records.** The operator of a fishing vessel subject to the requirements of § 665.124, § 665.142, § 665.162, § 665.203(a)(2), § 665.242, § 665.262, § 665.404, § 665.424, § 665.442, § 665.462, § 665.603, § 665.624, § 665.642, § 665.662, § 665.801, § 665.905, § 665.935, ~~or~~ § 665.965 or § 665.XX or must maintain on board the vessel an accurate and complete record of catch, effort, and other data on paper report forms provided by the Regional Administrator, or electronically as specified and approved by the Regional Administrator, except as required in

paragraph (b)(1)(ii) of this section or as allowed in paragraph (b)(1)(iv) of this section.

* * *

- (iii) Recording. The vessel operator must record on paper or electronically all information specified by the Regional Administrator within 24 hours after the completion of each fishing day. The information recorded must be signed and dated, or otherwise authenticated, in the manner determined by the Regional Administrator, and be submitted or transmitted via an approved method as specified by the Regional Administrator, and as required by this section.

(2) Timeliness of submission.

- (i) If fishing was authorized under a permit pursuant to § 665.142, § 665.162, § 665.242, § 665.262, § 665.404, § 665.442, § 665.462, 665.662, ~~or~~ § 665.801, or § 665.XX, and if the logbook information was not submitted to NMFS electronically within 24 hours of the end of each fishing day while the vessel was at sea, the vessel operator must submit the original logbook information for each day of the fishing trip to the Regional Administrator within 72 hours of the end of each fishing trip, except as allowed in paragraph (b)(2)(iii) of this section.

5. In 50 CFR part 665, add subpart J to read as follows:

Subpart J – Northwestern Hawaiian Islands Monument Expansion Area

Sec.

665.970 Scope and purpose. The regulations in this subpart codify certain provisions of the Proclamation, and govern the administration of fishing in the Monument. Nothing in these regulations shall be deemed to diminish or enlarge the jurisdiction of the State of Hawaii.

665.971 Boundaries. The Monument Expansion Area includes the following:

(a) the waters and submerged lands of the area offshore of the Northwestern Hawaiian Islands. The shoreward boundary of the Monument Expansion Area is 50 nm. The seaward boundary of the Monument Expansion Area is 200 nm.

665.972 Definitions. The following definitions are used in this subpart:

Management unit species or MUS means the Hawaii Archipelago management unit species as defined in §665.201, 665.241, and 665.261, and the pelagic management unit species as defined in § 665.800.

Monument Expansion Area means the submerged lands and, where applicable, waters of the NWHI as defined in § 665.971.

Proclamation means Presidential Proclamation 9704 of September 13, 2016, “Monument Expansion Area.”

665.973 Prohibitions. In addition to the general prohibitions specified in § 600.725 of this part, and § 665.15 and subpart D of this chapter, the following activities are prohibited in

the Monument Expansion Area and, thus, unlawful for a person to conduct or cause to be conducted.

- (a) Commercial fishing in violation of §665.974(a).
- (b) Non-commercial fishing, except as authorized under permit and pursuant to the procedures and criteria established in §665.975.
- (c) Transferring a permit in violation of § 665.975(d).
- (d) Commercial fishing outside of the Monument Expansion Area and non-commercial fishing within the Monument Expansion Area on the same trip in violation of § 665.974(c).

665.974. Regulated activities.

- (a) Commercial fishing is prohibited in the Monument Expansion Area
- (b) Non-commercial fishing is prohibited in the Monument Expansion Area, except as authorized under permit and pursuant to the procedures and criteria established in § 665.975.
- (c) Commercial fishing outside the Monument Expansion Area and non-commercial fishing within the Monument Expansion Area during the same trip is prohibited.

665.975 Fishing permit procedures and criteria.

- (a) Northwestern Hawaiian Islands non-commercial permit.
 - (1) Applicability. Both the owner and operator of a vessel used to non-commercially fish for, take, retain, or possess MUS in the Monument Expansion Area must have a permit issued under this section, and the permit must be registered for use with that vessel.
 - (2) Eligibility criteria. A permit issued under this section may be issued only to a community resident of Hawaii.
 - (3) Terms and conditions.
 - (i) Customary exchange of fish harvested within the Monument Expansion Area under a non-commercial permit is allowed, except that customary exchange by fishermen engaged in recreational fishing is prohibited. Customary exchange of fish harvested under a non-commercial fishing permit in the Monument Expansion Area may include family and friends of residents of Hawaii fishing communities.
 - (ii) Monetary reimbursement under customary exchange shall not exceed actual fishing trip expenses related to ice, bait, fuel, or food.

665.976 International law.

These regulations shall be applied in accordance with international law. No restrictions shall apply to or be enforced against a person who is not a citizen, national, or resident alien of the United States (including foreign flag vessels) unless in accordance with international law.



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 NATIONAL OCEAN SERVICE
 Office of National Marine Sanctuaries
 1305 East-West Highway
 Silver Spring, Maryland 20910

May 26, 2022

Kitty Simonds
 Executive Director
 Western Pacific Regional Fishery Management Council
 1164 Bishop Street, Suite 1400
 Honolulu, HI 96813

Dear Ms. *Kitty* Simonds:

I would like to thank you for the Western Pacific Regional Fishery Management Council's response letter dated March 22, 2022, regarding the consideration for designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary. As part of the National Marine Sanctuaries Act Section 304(a)(5) process, coordination with the Regional Fishery Management Council is a critical step in the proposed sanctuary designation and I am pleased that we continue to coordinate on how to best manage this naturally and culturally significant place.

I would also like to thank the Council for its decision to develop draft fishery regulations for the proposed sanctuary. As we prepare for the next phase of the sanctuary designation process, it is important that NOAA receives the Council's draft regulations in a timely manner. To best facilitate this timing, I have asked members of my staff to coordinate a meeting between Office of National Marine Sanctuaries (ONMS), National Marine Fisheries Service (NMFS), and Council staff to set a reasonable deadline for NOAA's receipt of draft fishery regulations and to help ONMS better understand the Council's process for amending the Hawaii Archipelago Fishery Ecosystem Plan.

As part of our commitment to transparency throughout the sanctuary designation process, I want to assure the Council that any draft regulations received by NOAA will be measured against the current requirements under Presidential Proclamations 8031, 8112, and 9478 specific to Papahānaumokuākea Marine National Monument (PMNM), as well as the goals and objectives of the proposed national marine sanctuary as detailed in our November 19, 2021 letter to Chairperson Soliai.

I appreciate the time and effort of the Council thus far and look forward to receiving your final draft regulations. Please feel free to contact Athline Clark at 808-725-5800 or Athline.Clark@noaa.gov if you have any questions or require more information.

Sincerely,

John Armor
 Director

cc: Michael Tosatto, Regional Administrator, NMFS-PIRO
 Gerry Davis, Assistant Regional Administrator NMFS-PIRO HCD
 Kristina Kekuewa, Regional Director, ONMS-PIR
 Athline Clark, Superintendent, PMNM





WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL

ACTION MEMORANDUM

193rd Council Meeting

December 5-8, 2022

Pagoda Hotel

Honolulu, Hawaii

AGENCY REPORTS

Regarding the NMFS Pacific Islands Regional Office (PIRO) Agency Report, the Council:

1. Requested NMFS to consider holding a future Leadership Council meeting in the U.S. Pacific Islands Territories of American Samoa, Guam, or CNMI.
2. Reiterated its request to U.S. Fish and Wildlife Service (USFWS) and NMFS to meet with the Territory Governments of American Samoa, CNMI and Guam to review the information at least 30 days in advance of publishing the green sea turtle critical habitat proposed rule.
3. Requested NMFS consider nominating a new vice-chair to the Northern Committee of the Western and Central Pacific Fisheries Commission (WCPFC).

Regarding the USFWS Report, the Council:

4. Requested USFWS and NOAA re-convene the Mariana Trench Monument Advisory Council (MTMAC) with expanded participation from Guam to expedite the completion of the Mariana Trench Marine National Monument (MTMNM) Management Plan.

Regarding the State Department, the Council:

5. Petitioned the U.S. State Department (DOS) to consider returning 1,200 square miles of U.S. Exclusive Economic Zone (EEZ) waters off Guam forfeited to the Federated States of Micronesia (FSM) to the patrimony of Guam.



WESTERN
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HAWAII ARCHIPELAGO AND PRIA

Regarding the Paper Inferring Spillover Benefits of the Papahānaumokuākea Marine National Monument (PMNM), the Council:

1. Requested NMFS staff to work with SSC members to evaluate the impacts of large static closed areas in the Pacific Islands Region (including the Marine National Monuments) on target and non-target species, address the SSC's concerns on a lack of reproducibility of findings by a recent paper published in *Science*, and also evaluate socioeconomic impacts.
2. Reiterated its previous recommendation from its 191st Meeting for NOAA to allocate funding support for external experts to evaluate the impacts that Marine National Monuments have on fisheries, working in collaboration with NOAA and the Council's advisory bodies.

Regarding NWHI fishing regulations for the Monument Expansion Area, the Council:

3. Recommended amending the Hawaii and Pelagic Fishery Ecosystem Plan (FEP) to prohibit commercial fishing and allow for sustainable non-commercial fishing and Native Hawaiian subsistence fishing practices in the Monument Expansion Area (MEA), including bringing back resources to the Main Hawaiian Islands (MHI). Fishing regulations would include:
 - **Commercial Fishing Prohibition:** Commercial fishing as defined in 50 CFR 665 – Western Pacific Fisheries would be prohibited in the MEA.
 - **Allowable Species:** Only Hawaii bottomfish management unit species (MUS) as defined at [50 CFR 665.201](#) and western Pacific pelagic MUS as defined at [50 CFR 665.800](#) would be allowed to be caught in the MEA. Fishing for all other Hawaii FEP MUS and Hawaii FEP ecosystem component species (ECS), as defined in [50 CFR 665 - Subpart C, Hawaii Fisheries](#) would be prohibited.
 - **Allowable Gear Types:** Only handline, hook and line, rod and reel and spear as authorized at [50 CFR 600.725 – General Prohibitions](#) would be allowed to be used to catch bottomfish MUS and pelagic MUS in the MEA. All other gear types, including longline, bottom set longline, trawl and poisons would be prohibited from use in the MEA.
 - **Catch Limits:** Establish a preliminary annual catch limit for bottomfish MUS at 350,000 lbs. and pelagic MUS at 180,000 lbs. for the MEA. NMFS and the

Council would monitor catches from within the original monument authorized by NOAA, and in the MEA authorized by NMFS towards this limit. As an accountability measure (AM), if NMFS forecasts the limit would be reached NMFS would prohibit all fishing in the MEA for the remainder of the fishing year.

- NMFS and the Council will annually report fishery performance (e.g., number of permits issued, catch and effort information, etc.) in the annual Hawaii FEP and Pelagics FEP Stock Assessment and Fisheries Evaluation (SAFE) Reports. NMFS and the Council will also evaluate fishery performance after an appropriate time not to exceed 5 years from the effective date of the fishery regulations and will continue to conduct evaluations as necessary in order to ensure the resources are managed sustainably. Such evaluations will take into consideration the best scientific information available and evaluate whether additional specific actions are necessary for the proper care and management of monument objects, including fishery resources, consistent with Proclamation 9478.
- Non-Commercial Fishing Permit and Reporting: Any person engaging in non-commercial fishing in the MEA must obtain a MEA non-commercial fishing permit and comply with reporting and record keeping requirements codified at [50 CFR 665.14 – Reporting and Recordkeeping](#), as required for all Magnuson-Stevens Act permits issued by NMFS.
- Disposition of Non-Commercial Catch: Bottomfish MUS and pelagic MUS legally caught by an individual holding a valid MEA non-commercial fishing permit may be brought back to the MHI for consumption, including community sharing. However, fish caught from within the MEA under this permit cannot enter commerce through sale, barter, or trade and may not recoup costs associated with the trip to the MEA.
- Native Hawaiian Subsistence Practices Fishing Permit and Reporting: Any person engaging in Native Hawaiian subsistence practices must obtain a Native Hawaiian Subsistence Practices Fishing Permit and comply with reporting and record keeping requirements codified at [50 CFR 665.14 – Reporting and Recordkeeping](#), as required for all Magnuson-Stevens Act permits issued by NMFS. In addition, under this alternative, there would be specific permit review and issuance processes for a Native Hawaiian Subsistence Practices Fishing Permit.
- An applicant for a Native Hawaiian Subsistence Practices Permit must complete and submit an application to NMFS that includes, but is not limited to a statement describing the objectives of the fishing activity for which a permit is needed, including a general description of the expected disposition of the resources harvested under the permit.
 - If an application contains all of the required information, NMFS will forward copies of the application to the Council, the U.S. Fish and Wildlife Service (USFWS), the Office of the National Marine Sanctuaries (ONMS), the Office of Hawaiian Affairs (OHA), and the Chair of the Hawaii Department of Land and Natural Resources (DLNR). The Council may consult with its advisory bodies to provide comments on the application.

- Following receipt of a complete application, NMFS will consult with the Council through its Executive Director, and the USFWS, ONMS, OHA, and the Chair of the Hawaii DLNR concerning the permit application and will receive their recommendations for approval or disapproval of the application.
- Disposition of Native Hawaiian Subsistence Practices Catch: Bottomfish MUS and Pelagic MUS legally caught by an individual holding a valid MEA Native Hawaiian Subsistence Practices fishing permit may bring catch back to the main Hawaiian Islands for consumption, including customary exchange. Additionally, permittees may sell, barter or trade catch to recoup costs associated with the trip to the MEA, not to exceed the actual direct costs associated with the trip, subject to the limit below. Direct costs include costs of supplies such as bait, fuel or ice needed for the trip, but do not include purchase, berthing, or maintenance of vessels or other costs external to the trip. This restriction ensures that the activity is not for commercial purposes.
- NMFS and the Council would limit the total value of catch traded, bartered or sold not to exceed the cost for fuel and ice, and other trip costs to make a trip from the main Hawaiian Islands to the MEA and in no case exceed \$15,000 per trip. A permittee would also be required to document and report to NMFS, the direct costs associated with each trip conducted to the MEA and the amount and value of any catch that is sold, bartered or traded.
- Trip Mixing: To ensure fish caught from inside the MEA for non-commercial and Native Hawaiian practices are not commingled with fish caught commercially seaward of the MEA, NMFS and the Council would prohibit any person from fishing both inside and outside the MEA on the same trip. Similarly, to ensure fish caught inside the original monument area for sustenance purposes are not commingled with fish caught in the MEA for non-commercial and Native Hawaiian practices and sharing in the MHI, NMFS and the Council would prohibit any person from engaging in both non-commercial fishing inside and outside the MEA as well as sustenance fishing in the original monument area on the same trip. However, sustenance fishing in the original monument and MEA on the same trip shall not be prohibited.
- Observer and VMS Requirements: All fishing vessels must carry an activated and functioning NOAA-provided VMS unit on board at all times whenever the vessel is in the Monument, and an observer if directed to do so by NMFS.
- Notification: Permit holders must notify NMFS prior to making any fishing trip to the MEA so NMFS may place a VMS unit and/or an observer on board as directed. Additionally, permit holders must contact NMFS at least 24 hours before landing any catch harvested under an MEA permit, and report the port and the approximate date and time at which the catch will be landed.
- Other Requirements: All fishing vessels must also comply with regulations codified at 50 CFR 665 – Western Pacific Fisheries applicable in the Exclusive Economic Zone (EEZ) comprising the MEA.

Further, the Council deemed that the regulations implementing the recommendations are necessary or appropriate in accordance with Section 303(c) of the Magnuson-Stevens

Fishery Conservation and Management Act (MSA). In doing so, the Council directs Council staff to work with NMFS to complete regulatory language to implement the Council's final action. Unless otherwise explicitly directed by the Council, the Council authorizes the Executive Director and the Chairman to review the draft regulations to verify that they are consistent with the Council action before submitting them, along with this determination, to the Secretary on behalf of the Council. The Executive Director and the Chairman are authorized to withhold submission of the Council action and/or proposed regulations and take the action back to the Council if, in their determination, the proposed regulations are not consistent with the Council action.

4. Directed staff to organize a meeting with Council advisors and Native Hawaiian groups to provide the Council with the details of Native Hawaiian practices and a review process for the Native Hawaiian subsistence fishing permit for its consideration at its next meeting.

Regarding Hawaii Fishery Issues, the Council:

5. Requested the State of Hawaii provide a presentation on the Holomua Marine 30x30 to the Council and its advisory groups in order to determine the impacts on fisheries managed by the Council.



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Ocean Service
 1305 East West Highway
 Silver Spring, Maryland 20910

February 22, 2023

Kitty Simonds
 Executive Director
 Western Pacific Regional Fishery Management Council
 1164 Bishop Street, Suite 1400
 Honolulu, HI 96813

Dear Ms. Simonds:

This letter responds to the Western Pacific Regional Fishery Management Council's (Council) final action taken at the December 2022 Council meeting, recommending fishing regulations for the Papahānaumokuākea Monument Expansion Area (MEA). Coordination with the Council under section 304(a)(5) of the National Marine Sanctuaries Act (NMSA), 16 U.S.C. § 1434(a)(5), for the proposal to designate marine portions of Papahānaumokuākea Marine National Monument (Monument) as a national marine sanctuary, which began in November 2021, has been a critical step in the proposed sanctuary designation process. I would like to thank the Council for its time and effort in this matter. This letter provides the Council with notice regarding the conclusion of its role in the NMSA 304(a)(5) process and notice that the final action taken at the December 2022 meeting, in part, does not fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed designation.

NOAA made this finding by evaluating the Council's action relative to Presidential Proclamations 8031, 8112, and 9478 specific to the Monument, as well as the purposes and policies of the NMSA and the goals and objectives of the proposed national marine sanctuary. At this time, and as required by the NMSA, NOAA will begin to develop its own regulations to fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed designation. Should the Council choose to reconsider this matter at its March 2023 meeting and take action to revise its recommended fishing regulations as specified below, NOAA will consider such a revision as a part of the NMSA 304(a)(5) process **until Friday, April 14, 2023**. NOAA also welcomes input from the Council as a part of any future public comment process associated with the proposed designation. In either case, I offer the following input on key components of the December 2022 action that NOAA finds do not meet the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary.

Position on Council Final Action

NOAA finds that the majority of the Council's final action fulfills the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation. However, the



inclusion of the ability to “sell” fish caught pursuant to the Native Hawaiian Subsistence Practices Fishing Permit fails to fulfill the purposes and policies of the NMSA and the goals and objectives of the proposed sanctuary designation, as outlined below. While NOAA may authorize subsistence fishing in the MEA under a Native Hawaiian Practices Fishing Permit only where the fish may be traded, bartered, or exchanged *on a small scale within the family or community*, such activities must be sustainable and must not serve as a foothold for prohibited commercial fishing. As such, any Council regulations establishing a MEA permit system would need to include sufficient safeguards to ensure that the resources harvested do not enter commerce.

Specifically, the Council’s final action recommends that:

“Bottomfish [Management Unit Species (MUS)] and Pelagic MUS legally caught by an individual holding a valid MEA Native Hawaiian Subsistence Practices fishing permit may bring catch back to the main Hawaiian Islands for consumption, including customary exchange. Additionally, permittees may sell, barter or trade catch to recoup costs associated with the trip to the MEA, not to exceed the actual direct costs associated with the trip, subject to the limit below. Direct costs include costs of supplies such as bait, fuel or ice needed for the trip, but do not include purchase, berthing, or maintenance of vessels or other costs external to the trip. This restriction ensures that the activity is not for commercial purposes.”

Pursuant to the NMSA section 304(a)(5), NOAA finds that the allowance of “sale” is inconsistent with the following goals and objectives of the proposed sanctuary.

- Goal 4. Partnerships & 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.
- Objective 3: Support and maintain existing co-management functions within the Papahānaumokuākea Monument Management Board to ensure unified governance in the spirit of seamless integrated stewardship.
- Objective 5: Manage the sanctuary as a sacred site consistent with Native Hawaiian traditional knowledge, management concepts, and principles articulated within Mai Ka Pō Mai.
- Objective 6: Enhance community engagement and involvement, including engagement of the Indigenous Hawaiian community in the development and execution of management of the sanctuary.

NOAA makes this finding based on the following information. The State of Hawaii representative on the Council voted against the Council’s December 2022 final action on the basis that the inclusion of “sale” under a Native Hawaiian Subsistence Practices Fishing Permit is inconsistent with the state’s constitutional protection of Native Hawaiian traditional and customary rights. While the MEA does not include state waters, the state is a co-managing partner for the Monument and the proposed sanctuary, and accordingly, NOAA believes that the Council’s final action fails to fulfill Objectives 3 and 5 of proposed sanctuary. In addition, the Council has received comments from the Papahānaumokuākea Native Hawaiian Cultural Working Group (CWG), supported by the Office of Hawaiian Affairs, a co-trustee of the Monument, opposing any form of customary exchange (exchange, trade, barter, or sale) or regulations that would allow catch to be brought back to the Main Hawaiian Islands and

consumed outside of the Monument or the MEA. The opposition from members of the Papahānaumokuākea CWG, represents an inconsistency between the Council’s final action and NOAA partner knowledge and expertise regarding Native Hawaiian cultural perspectives and practices. As such, NOAA finds that the Council’s final action is not consistent with the sanctuary’s goal of partnerships that “generate active and meaningful involvement, with a commitment to incorporating traditional values and stewardship ethics”; and the sanctuary’s objectives to “ensure unified governance” of the Papahānaumokuākea Monument Management Board, “manage the sanctuary as a sacred site consistent with Native Hawaiian traditional knowledge, management concepts, and principles,” and “engagement of the Indigenous Hawaiian community in the development and execution of management of the sanctuary” specific to the proposed sanctuary Goal 4 and Objectives 3, 5 and 6.

Should the Council wish to provide to NOAA a revised action **by no later than Friday, April 14, 2023**, the Council is advised to remove any provision that allows for the ability to “sell” fish caught under a Native Hawaiian Subsistence Fishing Practices Permit. The Council is further advised to retain the remaining provisions of the December 2022 action so as not to warrant additional NOAA review at this time. Any revisions the Council wishes to make beyond those associated with the provisions described in this letter may be raised as a part of future public comment processes associated with the sanctuary designation. I sincerely hope that this information is helpful to the Council in its deliberations.

I appreciate the active engagement of the Council throughout this process and look forward to continuing to work with the Council on the proposed sanctuary designation. Please contact Kristina Kekuewa at Kristina.Kekuewa@noaa.gov if you have any questions or require more information.

Sincerely,
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870841

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Nicole R. LeBocuf
Assistant Administrator
for Ocean Services and Coastal Zone
Management

cc: Janet Coit, Assistant Administrator, NOAA Fisheries (NMFS)
Sarah Malloy, Regional Administrator (Acting), NMFS, Pacific Islands Regional Office (PIRO)
Gerry Davis, Assistant Regional Administrator for Habitat Conservation, NMFS, PIRO
Jarad Makaiau, Assistant Regional Administrator for Sustainable Fisheries, NMFS, PIRO
John Armor, Director, Office of National Marine Sanctuaries (ONMS)
Kristina Kekuewa, Regional Director, ONMS Pacific Islands Region
Eric Roberts, Superintendent (Acting), Papahānaumokuākea Marine National Monument



**Western
Pacific
Regional
Fishery
Management
Council**

April 14, 2023

Nicole LeBoeuf
Assistant Administrator for Ocean Services and Coastal Zone Management
National Oceanic and Atmospheric Administration
1305 East West Highway
Silver Spring, MD 20910

Dear Ms. LeBoeuf,

The Western Pacific Regional Fishery Management Council (Council), at its 194th meeting held on March 27-28, 2023 in Saipan, CNMI and March 30-31, 2023 in Tumon, Guam, reconsidered fishing regulations for the Monument Expansion Area (MEA) of the Northwestern Hawaiian Islands (NWHI). The Council deliberated on your February 22, 2023 letter and the potential changes to its existing recommendations. After a thorough discussion that included multiple options and the opportunity to have questions answered by the Superintendent of Papahānaumokuākea Marine National Monument, the Council amended its previous recommendations made its 193rd meeting held in Honolulu, Hawaii on December 6-8, 2022, by (1) removing as a provision of the Native Hawaiian Subsistence Practices Fishing Permit cost recovery by sale while leaving barter and trade within the community, (2) removing the previous recommendation to allow cost recovery up to \$15,000 and instead providing applicants the ability to request for limited cost recovery by sale in the permit application process through a statement of need for cost recovery along with expected costs, and (3) providing that such application shall be subject to review and approval/disapproval following an interagency consultation and public review.

The Council stressed the importance of allowing limited cost recovery for Native Hawaiian subsistence fishing practices in the MEA in order for the community to participate in regulated fishing practices under Proclamation 9478. Native Hawaiians are at the top of several socio-economic indicators including the highest rates of poverty, unemployment, negative health conditions, lowest home ownership, etc., among identified ethnic groups in Hawaii. A decision to disallow cost recovery by sale will continue to disenfranchise the Native Hawaiian community. The distance from the main Hawaiian Islands to the MEA requires a large cost for fuel, bait, ice, food and other fishing needs, which would likely prohibit fishers from participating in Native Hawaiian subsistence and traditional fishing practices in the MEA.

Further, the Council believes that limited cost recovery may be conducted on a small scale within the community consistent with Proclamation 9478's prohibition on commercial fishing. We further believe that the Council's recommended prohibition on commercial gear and comprehensive process for applying and approving requests for Native Hawaiian subsistence practice permits will provide effective safeguards against commercial fishing. The Council's recommendation does not approve cost recovery by sale as described in the previous

A Council Authorized by the Magnuson-Stevens Fishery Conservation and Management Act of 1976
1164 BISHOP ST • SUITE 1400 • HONOLULU, HI 96813 USA • TEL (808) 522-8220 • FAX (808) 522-8226 • www.wpcouncil.org

recommendation from the 193rd Council meeting. Instead, it provides a framework for NMFS to consider the costs associated with each trip through the application process, so that a case-by-case decision may be made after consultation with other partners, including the Council, Office of National Marine Sanctuaries (ONMS), State of Hawaii, US Fish and Wildlife Service, and Office of Hawaiian Affairs. Accordingly, an application for cost recovery by sale would consider the circumstances and objectives of the particular trip, the costs incurred, and the availability of alternate sources of funding. Cost recovery also allows for the disadvantaged communities to participate in cultural and traditional fishing practices by promoting equity amongst fishers as directed by Executive Order 13985 in particular for Asian American, Native Hawaiian and Pacific Island communities as directed in Executive Order 14031.

The Council also acknowledges the comments of an independent cultural working group and their concerns regarding fishing in the NWHI, but the area under consideration is 50-200 nm from the islands that they are concerned about. Other Native Hawaiian groups have commented at the Council's recent public meetings with differing opinions and expressed the desire to fish in the MEA. However, they expressed these wishes in concert with the concern that a journey to the MEA would be financially unattainable given the cost. President Obama's proclamation intended to benefit Native Hawaiians who are not economically in the position to front those costs for a subsistence fishing trip to the MEA. Without some type of opportunity to recover costs, the intention of the Proclamation will not be met.

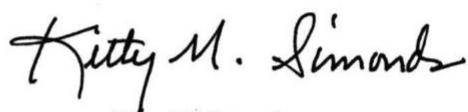
In order to provide equity for Native Hawaiian communities, the Council also recommended that funding be provided to the Western Pacific Community Demonstration Projects Program (CDPP) and Community Development Plans (CDP) under the authority of Section 305(i) of the Magnuson Stevens Act. Funding could then be used to solicit for applications to participate in Native Hawaiian fishing practices in the MEA and submitted in accordance with 67 FR 18512 (April 16, 2002). Because funds may be allocated only if available, cost recovery by sale provides an important additional safeguard. By placing the cost recovery by sale in the permit process itself, NMFS and its monument partner agencies, may consider the availability of CDP funds before determining if cost recovery will be allowed. The use of the CDP and CDPP for this purpose was supported by the State of Hawaii at this meeting.

Due to the Council's recommendation no longer explicitly allowing "sale" but providing a framework for NMFS to consider cost recovery, the Council believes that the recommendation is consistent with the goals and objectives of the proposed sanctuary. In particular, this framework provides for partnership and constituent engagement (Goal 4) through a consultation process and public review; Supports and maintains existing co-management functions to ensure seamless integrated stewardship (Objective 3) through the inclusion of management partners in the consultation process; Allows for input through the application process to provide Native Hawaiian management concepts and principles (Objective 5); and Enhances community involvement through providing a public review and commenting process and providing opportunities for economically disadvantaged communities to access cultural practices through cost recovery (Objective 6).

The attached document provides the final recommendations for fishing regulations in the Monument Expansion Area of the Northwestern Hawaiian Islands. The Council believes that in the development of the MEA President Obama's Proclamation 9478 intended to allow for sustainable fishing and that any attempt to reduce that opportunity clashes with that intent. If

you have any questions, or if you would like to discuss the Council recommendations further, please give me a call at the Council Office, (808) 522-8220.

Sincerely,



Kitty M. Simonds
Executive Director

cc: Janet Coit, Assistant Administrator, NOAA Fisheries
John Armor, Director, Office of National Marine Sanctuaries
Kristina Kekuewa, Regional Director, ONMS Pacific Islands Region
Sarah Malloy, Acting Regional Administrator, NMFS PIRO
John Gourley, Council Chair

Attachment: WPRFMC recommendation on fishing regulations for the MEA



WPRFMC Recommendations for Fishing Regulations in the Monument Expansion Area

Regarding NWHI fishing regulations for the Monument Expansion Area, the Council recommended amending the Hawaii and Pelagic Fishery Ecosystem Plan (FEP) to prohibit commercial fishing and allow for sustainable non-commercial fishing and Native Hawaiian subsistence fishing practices in the Monument Expansion Area (MEA), including bringing back resources to the Main Hawaiian Islands (MHI). Fishing regulations would include:

- **Commercial Fishing Prohibition:** Commercial fishing as defined in 50 CFR 665 – Western Pacific Fisheries would be prohibited in the MEA.
- **Allowable Species:** Only Hawaii bottomfish management unit species (MUS) as defined at [50 CFR 665.201](#) and western Pacific pelagic MUS as defined at [50 CFR 665.800](#) would be allowed to be caught in the MEA. Fishing for all other Hawaii FEP MUS and Hawaii FEP ecosystem component species (ECS), as defined in [50 CFR 665 - Subpart C, Hawaii Fisheries](#) would be prohibited.
- **Allowable Gear Types:** Only handline, hook and line, rod and reel and spear as authorized at [50 CFR 600.725 – General Prohibitions](#) would be allowed to be used to catch bottomfish MUS and pelagic MUS in the MEA. All other gear types, including longline, bottom set longline, trawl and poisons would be prohibited from use in the MEA.
- **Catch Limits:** Establish a preliminary annual catch limit for bottomfish MUS at 350,000 lbs. and pelagic MUS at 180,000 lbs. for the MEA. NMFS and the Council would monitor catches from within the original monument authorized by NOAA, and in the MEA authorized by NMFS towards this limit. As an accountability measure (AM), if NMFS forecasts the limit would be reached NMFS would prohibit all fishing in the MEA for the remainder of the fishing year.
- NMFS and the Council will annually report fishery performance (e.g., number of permits issued, catch and effort information, etc.) in the annual Hawaii FEP and Pelagics FEP Stock Assessment and Fisheries Evaluation (SAFE) Reports. NMFS and the Council will also evaluate fishery performance after an appropriate time not to exceed 5 years from the effective date of the fishery regulations and will continue to conduct evaluations as necessary in order to ensure the resources are managed sustainably. Such evaluations will take into consideration the best scientific information available and evaluate whether additional specific actions are necessary for the proper care and management of monument objects, including fishery resources, consistent with Proclamation 9478.
- **Non-Commercial Fishing Permit and Reporting:** Any person engaging in non-commercial fishing in the MEA must obtain a MEA non-commercial fishing permit and comply with reporting and record keeping requirements codified at [50 CFR 665.14 – Reporting and Recordkeeping](#), as required for all Magnuson-Stevens Act permits issued by NMFS.
- **Disposition of Non-Commercial Catch:** Bottomfish MUS and pelagic MUS legally caught by an individual holding a valid MEA non-commercial fishing permit may be brought back to the MHI for consumption, including community sharing. However, fish caught from within the MEA under this permit cannot enter commerce through sale, barter, or trade and may not recoup costs associated with the trip to the MEA.
- **Native Hawaiian Subsistence Practices Fishing Permit Application Process:** An applicant for a Native Hawaiian Subsistence Practices Permit must complete and submit an application to NMFS that includes, but is not limited to a statement describing the objectives of the fishing

activity for which a permit is needed, including a general description of the expected disposition of the resources harvested under the permit. If cost recovery is requested through sale, the application must include estimated costs for fuel and ice, and other trip costs to make a trip from the main Hawaiian Islands to the MEA along with a statement explaining why cost recovery is necessary for the intended action.

- If an application contains all of the required information, NMFS will forward copies of the application to the Council, the USFWS, the ONMS, the Office of Hawaiian Affairs (OHA), and the Chair of the Hawaii Department of Land and Natural Resources. The Council may consult with any of its Federal Advisory Committee Act (5 U.S.C. App. 2) exempt advisory bodies established pursuant to Section 302(g) of the Magnuson-Stevens Act to provide comments on the application. NMFS will also make the permit application available for public review for no less than 30 days.
- Within 30 days following receipt of a complete application, NMFS will consult with the Council through its Executive Director, and the USFWS, NOAA Office of National Marine Sanctuaries (ONMS), Office of Hawaiian Affairs (OHA), and the Chair of the Hawaii Department of Land and Natural Resources (DLNR) concerning the permit application and will receive their recommendations for approval or disapproval of the application.
- Disposition of Native Hawaiian Subsistence Practices Catch: Bottomfish MUS and Pelagic MUS legally caught by an individual holding a valid MEA Native Hawaiian Subsistence Practices fishing permit may bring catch back to the main Hawaiian Islands for consumption, including community sharing, barter and trade. Additionally, permittees may request NMFS consider the ability to recover costs through sale of catch associated with the trip to the MEA.
- Trip Mixing: To ensure fish caught from inside the MEA for non-commercial and Native Hawaiian practices are not commingled with fish caught commercially seaward of the MEA, NMFS and the Council would prohibit any person from fishing both inside and outside the MEA on the same trip. Similarly, to ensure fish caught inside the original monument area for sustenance purposes are not commingled with fish caught in the MEA for non-commercial and Native Hawaiian practices and sharing in the MHI, NMFS and the Council would prohibit any person from engaging in both non-commercial fishing inside and outside the MEA as well as sustenance fishing in the original monument area on the same trip. However, sustenance fishing in the original monument and MEA on the same trip shall not be prohibited.
- Observer and VMS Requirements: All fishing vessels must carry an activated and functioning NOAA-provided VMS unit on board at all times whenever the vessel is in the Monument, and an observer if directed to do so by NMFS.
- Notification: Permit holders must notify NMFS prior to making any fishing trip to the MEA so NMFS may place a VMS unit and/or an observer on board as directed. Additionally, permit holders must contact NMFS at least 24 hours before landing any catch harvested under an MEA permit, and report the port and the approximate date and time at which the catch will be landed.
- Other Requirements: All fishing vessels must also comply with regulations codified at 50 CFR 665 – Western Pacific Fisheries applicable in the Exclusive Economic Zone (EEZ) comprising the MEA.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
1305 East West Highway
Silver Spring, Maryland 20910

May 31, 2023

Kitty Simonds
Executive Director
Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1400
Honolulu, HI 96813

Dear Ms. Simonds:

This letter responds to the Western Pacific Regional Fishery Management Council's (Council) final action taken at the 194th Council meeting as detailed in your April 14, 2023 letter to NOAA, amending the Council's prior December 2022 action for the Papahānaumokuākea Monument Expansion Area (MEA).

NOAA finds that, with the exception of the recommendation providing Native Hawaiian Subsistence Practices Fishing Permit applicants the ability to request limited cost recovery by selling their catch, the Council's amended recommendations fulfill the purposes and policies of the National Marine Sanctuaries Act (NMSA) and the goals and objectives of the proposed sanctuary. As detailed in NOAA's February 22, 2023 letter, any recommendation for the allowance of "sale" is inconsistent with the goals and objectives of the proposed sanctuary. Accordingly, NOAA rejects that portion of the Council's recommendation providing Native Hawaiian Subsistence Practices Fishing Permit applicants the ability to request limited cost recovery by selling their catch. This finding concludes the NMSA section 304(a)(5) process for the purpose of the proposed sanctuary designation within Papahānaumokuākea Marine National Monument.

Per the NMSA section 304(a)(5), based on this finding, NOAA will begin to prepare regulations under the Magnuson–Stevens Fishery Conservation and Management Act, for those parts of the Council's recommendations that it has accepted.

Coordination with the Council under the NMSA section 304(a)(5) for the proposal to designate marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary has been a critical step in the proposed sanctuary designation process. On behalf of NOAA, I would like to thank the Council for its time and effort in this matter.



Please contact Kristina Kekuewa at Kristina.Kekuewa@noaa.gov if you have any questions or require more information.

Sincerely,



Nicole R. LeBoeuf
Assistant Administrator
for Ocean Services and Coastal Zone
Management

cc: Janet Coit, Assistant Administrator, NOAA Fisheries (NMFS)
Sarah Malloy, Regional Administrator (Acting), NMFS, Pacific Islands Regional Office (PIRO)
Gerry Davis, Assistant Regional Administrator for Habitat Conservation, NMFS, PIRO
Jarad Makaiau, Assistant Regional Administrator for Sustainable Fisheries, NMFS, PIRO
John Armor, Director, Office of National Marine Sanctuaries (ONMS)
Kristina Kekuewa, Regional Director, ONMS Pacific Islands Region
Eric Roberts, Superintendent, Papahānaumokuākea Marine National Monument



**STATE OF HAWAII
OFFICE OF PLANNING
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DAVID Y. IGE
GOVERNOR
MARY ALICE EVANS
DIRECTOR

DTS202111231309BA

Coastal Zone
Management
Program

December 1, 2021

Environmental
Review Program

Ms. Athline Clark
NOAA Superintendent
Papahānaumokuākea Marine National Monument
1845 Wasp Blvd., Bldg 176
Honolulu, Hawai'i 96818

Land Use
Commission

Land Use Division

Special Plans
Branch

Dear Ms. Clark:

State Transit-
Oriented
Development

Subject: Proposed Designation of a National Marine Sanctuary Within
Papahānaumokuākea Marine National Monument (PMNM).

Statewide
Geographic
Information System

Statewide
Sustainability
Program

According to Federal Register (86 FR 64904, November 19, 2021) the National Oceanic and Atmospheric Administration intends to seek consistency consultation under the Coastal Zone Management Act (CZMA) in accordance with 15 CFR Part 930, Subpart C. This letter acknowledges the intent to designate marine portions of PMNM as a national marine sanctuary and inform you that this activity may have reasonably foreseeable effects on coastal uses and resources.

We kindly invite you to consult with our office prior to the submittal of your CZMA consistency determination to facilitate the review process.

If you have any questions, please contact Keelan Barcina of our Hawai'i Coastal Zone Management Program at keelan.mk.barcina@hawaii.gov or (808) 587-2803.

Mahalo,

Mary Alice Evans

Mary Alice Evans
Director

Scoping Comments from Marine Mammal Commission

Received January 31, 2021 via regulations.gov

Dear Ms. Clark:

On 19 November 2021, the National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries (ONMS) published in the Federal Register a Notice of Intent (86 Fed. Reg. 64904) to prepare a draft environmental impact statement (DEIS) and hold public scoping meetings to consider designating the marine portions of the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary (NMS). That notice indicated that NOAA is working in cooperation with the U.S. Fish and Wildlife Service, the State of Hawai'i, and the Office of Hawaiian Affairs on the possible sanctuary designation and that "the DEIS will evaluate a reasonable range of alternatives that could include different options for management goals or actions, sanctuary regulations, and potential boundaries." NOAA is inviting comments on the scope of issues to be considered in the DEIS and their significance. The DEIS is expected to inform NOAA's decision on the sanctuary designation and development of a draft sanctuary management plan, proposed sanctuary regulations, and proposed terms of designation.

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors, has reviewed the Federal Register notice and other relevant documents and offers herein its comments and recommendations. The Commission's primary concern with a sanctuary designation is **how it would affect marine mammals that occupy or travel through the Northwestern Hawaiian Islands and surrounding waters (NWHI), and the ecosystems that support those species**. The Commission is especially interested in the impacts of potentially permitted human activities on Hawaiian monk seals (*Neomonachus schauinslandi*), the NWHI insular stock of false killer whales (*Pseudorca crassidens*), insular populations of other odontocetes, and the Central North Pacific stock of humpback whales (*Megaptera novaeangliae*) that winters in the Hawaiian Islands.

Background Threats to Marine Mammals

Because human activities in the Monument are currently limited to research, education, Native Hawaiian practices, and a small number of recreational trips to historical sites at Midway Atoll, current threats to marine mammals associated with those activities are being managed. However, the sanctuary designation process creates the potential for long-prohibited fishing to be permitted again, and the Commission considers fishing to be a significant threat to a number of marine mammals. In addition, there are at least two longstanding and ongoing significant human caused threats to marine mammals in the Monument. First, large quantities of marine debris, including derelict fishing gear, can be found in Monument waters. Most of this debris comes from outside the Hawaiian Archipelago (Boland & Donohue 2003). Entanglement of endangered monk seals, especially young animals, is one of the largest sources of injury and mortality for the population in the NWHI. Second, global warming and its secondary and tertiary impacts (e.g., sea level rise, prey impacts) are potential threats to marine mammals in the Monument. The monk seal population relies on a relatively small amount of low-lying island habitat for giving birth, nursing young, and resting. Significant loss and degradation of this critical terrestrial habitat have already occurred and this is expected to continue, representing a threat to the persistence of monk seals in most of the NWHI (Baker et al. 2006, Reynolds et al. 2012, Baker et al. 2020).

Two dozen species of marine mammals are found in the NWHI. Because of the remoteness of the islands, we know relatively little about most of the species or stocks, with the exception of the endangered Hawaiian monk seals, which have been studied intensively for decades. Because the islands are largely uninhabited by humans, the number of threats to these species and stocks from human activities is low

compared to archipelagoes with or near large population centers. As elsewhere in the nation and the world, fishing poses the greatest threat to most species and stocks of marine mammals in the NWHI. Almost all fishing is currently prohibited in the Monument, but fishing was a concern in the past and could be again should regulations change. We know from scientific studies and data gathered in the Main Hawaiian Islands and elsewhere where the same or similar species occur that cetaceans and monk seals are at considerable risk from a variety of fishing gear types. In the Hawaiian Islands, fisheries that pose the greatest threat include those that deploy various types of hook and line gear (e.g., long lines, short lines, bottom hook and line, trolling lures), gill nets, and trap gear. The deep-set long-line fishery is known to kill or seriously injure substantial numbers of odontocetes, and is especially a problem for the pelagic stock of false killer whales (Carretta et al. 2021). In recent decades, bycatch of pelagic false killer whales within the U.S. Exclusive Economic Zone (EEZ) has often exceeded NMFS's sustainability reference point, the potential biological removal level (PBR). If long-line fishing were to be allowed within Monument waters, then it certainly would pose a significant threat to the insular population of false killer whales that occurs there, and possibly to other insular populations of odontocetes (e.g., pantropical spotted (*Stenella attenuata*) and spinner (*Stenella longirostris*) dolphins) (Baird et al. 2015). In the early 1990's, monk seal injuries in the NWHI resulted from interactions with the longline fleet (Nitta and Henderson 1993). If once again permitted in the NWHI, bottomfish hook and line gear has the potential to hook, snag or entangle cetaceans and monk seals. A wide variety of gear types is used in fisheries in near-shore waters of the MHI, many of which are known to cause hookings and entanglements of small cetaceans and monk seals. If such gear types were allowed to be used in the NWHI, they would pose a similar threat to the same species. Finally, elsewhere in the world, entanglement in gill nets and the buoy lines of trap gear is known to be a significant source of mortality for large whales, and the same could be true if certain types of these gears were allowed beyond the coral reefs in the NWHI.

Protection of Marine Mammals in the NWHI Early Fisheries Management Measures

In response to hookings and injuries of monk seals and other species, NMFS prohibited long-line fishing within 50 nm of the NWHI in 1991. Commercial lobster fishing, which began in the NWHI in 1983, experienced declining catch rates over the next two decades, prompting the Western Pacific Fishery Management Council (WesPac) and NMFS to close the fishery temporarily several times in the 1990s. Apparently in response to a lawsuit brought by several environmental organizations and a recommendation from the Commission, NMFS set the annual harvest limit to zero for the 2000 season, and continued that policy through 2006, when the fishery closure was made permanent by a presidential proclamation (see below). Executive Order 13178— President Clinton issued E.O. 13178 on 4 December 2000, (subsequently amended by E.O. 13196) creating the Northwest Hawaiian Islands Coral Reef Ecosystem Reserve (the Reserve) under the authority of the NMSA (16 U.S.C. § 1431 et seq.). Section 3 of E.O. 13178 defined the Reserve to “include submerged lands and waters of the Northwestern Hawaiian Islands, extending approximately 1,200 nautical miles (nm) long and 100nm wide.” Section 2 stated that the Reserve’s purpose was “to ensure the comprehensive, strong, and lasting protection of the coral reef ecosystem and related marine resources and species (resources) of the Northwestern Hawaiian Islands.” The Reserve’s management principles, established in section 4, and its management plan, in section 5(b), provided for:

- “The long-term conservation and protection of the coral reef ecosystem and related marine resources and species of the Northwestern Hawaiian Islands in their natural character” as the Reserve’s principal purpose;
- Using “available science and applying a precautionary approach with resource protection favored when there is a lack of information regarding any given activity, to the extent not contrary to law;”
- “The restoration or remediation of any degraded or injured resources of the Reserve;”
- The “enforcement and surveillance” of the Reserve’s regulations;

- The “identification of potential tourism, recreational, and commercial activities within the Reserve and actions necessary to ensure that these activities do not degrade the Reserve’s resources or diminish the Reserve’s natural character;” and
 - Promulgation of “any regulations, in addition to the conservation measures and Reserve Preservation Areas established under [E.O. 13178], that the Secretary determines are necessary to manage the Reserve....” Of particular interest to the Commission are the Reserve’s fishing regulations. The E.O. allowed commercial and recreational fishing to continue at levels no greater than were occurring in December 2000 (E.O. 13178 Section 7), except in the Reserve Preservation Areas established in Section 8 of the E.O., within which all fishing was prohibited. Presidential Proclamation 8031 —President George W. Bush issued this proclamation on 15 June 2006 and a subsequent amendment later that year, using his authority under the Antiquities Act to establish the Papahānaumokuākea Marine National Monument (PMNM or the Monument). Presidential Proclamation 8031 required the Secretary of Commerce, in consultation with the Secretary of the Interior and the State of Hawaii, to develop a management plan for the Monument that would “preserve the marine area of the Northwestern Hawaiian Islands and certain lands as necessary for the care and management of the historic and scientific objects therein.” The PMNM management plan was based on a management plan then being developed for a prospective NMS in the NWHI. The proclamation prohibited a number of activities within the Monument, including:
 - “Exploring for, developing, or producing oil, gas, or minerals;”
 - “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 monument resource;” and
 - “Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the monument.” The proclamation set the lobster harvest limit within the Monument to zero, but allowed commercial fishing for bottom and pelagic species to continue, subject to harvest limits and other requirements, for a five-year period, after which all commercial fishing would be prohibited. The Monument’s fishing prohibitions superseded the Reserve provisions that had allowed limited fishing indefinitely. The proclamation also allowed the Secretary to issue permits for other activities regulated by the proclamation, such as research, education, Native Hawaiian practices, and those that “will assist in the conservation of the monument, provided that the activity meets certain requirements,” including that:
 - “The activity can be conducted with adequate safeguards for the resources and ecological integrity of the monument;”
 - “The activity will be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance monument resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects;”
 - “There is no practicable alternative to conducting the activity within the monument;” and
 - “The end value of the activity outweighs its adverse impacts on monument resources, qualities and ecological integrity.”
- Presidential Proclamation 9478 —President Obama issued this proclamation on 25 August 2016, expanding the PMNM from the boundaries established in 2006 “to the extent of the seaward limit of the ... U.S. EEZ.” Proclamation 9478 relied on the authority of the Antiquities Act and noted that the extended waters contain “objects of historic and scientific interest.” This proclamation specifically referenced the area’s “biological resources,” “75 seamounts,” “unique biodiversity,” and value as a “sacred cultural, physical, and spiritual place for the Native Hawaiian community.” Further, the proclamation recognized that 24 species of marine mammals are found within the expanded area, several of which are endangered, and that the Hawaiian monk seal forages well beyond the original boundaries in demersal habitats almost 2,000 feet deep, and therefore, would receive protection throughout its foraging range. Proclamation 9478 preserved all of the protections created under Presidential Proclamations 8031 and 8112, required the Secretary of Commerce to “consider initiating the process under the National

Marine Sanctuaries Act... to designate the [expanded monument]... as a National Marine Sanctuary to supplement and complement existing authorities," and established that the "Monument Expansion shall be the dominant reservation." Importantly, the proclamation clarified one portion of Proclamation 8031, stating that "the Secretaries may permit... non-commercial fishing, provided that the fish harvested, either in whole or in part, cannot enter commerce through sale, barter, or trade, and that the resource is managed sustainably."

Sanctuary Designation Process

As explained by ONMS in the Federal Register notice, "the primary objective of the NMSA is to protect the resources of the National Marine Sanctuary System, including biological and cultural resources, such as coral reefs, marine animals, archaeological sites, historic structures and historic shipwrecks." The notice further states that "any proposed sanctuary regulations would be separate from, but supplementary and complementary to, existing Monument regulations and management provisions from the establishing executive order and proclamations." An important element in designating most sanctuaries is the inclusion of effective regulations specifying whether and what fishing activities are permitted. Section 305(a)(5) of the NMSA provides the opportunity for the appropriate Regional Fishery Management Council to prepare draft regulations pertaining to fishing within the proposed NMS. The NMSA states that "regulations prepared by a Council... shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council's action fails to fulfill the purposes and this chapter and the goals and objectives of the proposed designation." Further, the Act states that "in preparing draft regulations, a Regional Fishery Management Council shall use as guidance the national standards of section 301(a) of the Magnuson-Stevens Act (16 U.S.C. 1851) to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation." In the case where a council's draft regulations are rejected by the Secretary, the Secretary is required to prepare fishing regulations for the sanctuary. However, in this case, the Presidential Proclamations establishing the pre-existing PMNM, with which the sanctuary is expected to overlap, already address fishery issues in this area.

A 19 November 2021 letter from ONMS to WesPac describes the section 305(a)(5) consultation process and clarifies that, in this specific instance:

- "The goals and objectives of the sanctuary designation..., together with the purposes and policies of the National Marine Sanctuaries Act, as well as the existing Presidential Proclamations 8031, 8112, and 9478 specific to Papahānaumokuākea Marine National Monument, are the benchmarks against which the Council's action shall ultimately be measured;"
- "For the area designated by Proclamation 8031, NOAA believes the current Magnuson-Stevens Fishery Conservation and Management Act regulations under 50 CFR 404 are consistent with both the relevant provisions of Proclamations 8031 and 8112 and the goals and objectives for the proposed sanctuary. However, in order to rely on Magnuson-Stevens Fishery Conservation and Management Act authority for sanctuary purposes within the Monument Expansion Area designated by Proclamation 9478, NOAA recommends the Council propose regulations for the Monument Expansion Area that are consistent with both the fishing provisions of Proclamation 9478, and the goals and objectives of the proposed sanctuary" (emphasis added). In the documents described above, NOAA identifies the following elements, among others, as necessary components of this sanctuary designation:
 - "develop objectives and actions that ensure lasting protections consistent with the existing Monument proclamations and regulations;"
 - "safeguard natural and cultural values of the marine environment of the Monument;"
 - "authorize NOAA to assess civil penalties for violations of sanctuary regulations or permits and to enforce provisions of the NMSA;"
 - "prohibit destruction or loss of sanctuary resources and provide natural resource damage assessment authorities for loss of or injury to any sanctuary resource;"

“require interagency consultation for any Federal agency action that is likely to destroy, cause the loss of, or injure any sanctuary resource;”

- “augment existing authorities under the Antiquities Act; Presidential Proclamations 8031, 8112 and 9478; Executive Order 13178; and 50 CFR 404 to provide additional regulatory and non-regulatory tools for management and protection of Monument resources.”

Summary of Existing Protections

The PMNM and the Reserve already are subject to a variety of protections under Executive Orders, Presidential Proclamations, and related documents. Key provisions are:

- Ensure strong, comprehensive conservation and protection of the coral reef ecosystem and related marine resources and species in their natural character (E.O. 13196)

- Ensure that degraded or injured resources are restored or remediated, and that ongoing permitted activities do not degrade Reserve resources (E.O. 13196)
- Prevent the actual or attempted removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging of any living or nonliving Monument resource (Proclamation 8031)
- Ensure that permitted activities are subject to adequate safeguards, are compatible with provisions of applicable proclamations, consider the extent to which the activity may diminish or enhance Monument resources, have a value that outweighs any adverse impacts, and lack a practicable alternative (Proclamation 8031). The Federal Register notice and other documents provided by NOAA indicate that these protections will form the foundation for any additional protections and regulatory or non-regulatory tools to be established pursuant to a sanctuary designation and that any new protections will augment the existing authorities. Key new provisions being considered by NOAA include:
 - Ensuring lasting protections that safeguard the Monument’s natural and cultural values and that are consistent with the Monument’s existing proclamations and regulations;
 - Prohibiting the destruction or loss of sanctuary resources;
 - Requiring interagency consultation for any Federal action likely to destroy or injure any Sanctuary resource. Further, NOAA’s Papahānaumokuākea NMS web page states that: “Sanctuary designation will provide another layer of protection to continue honoring this place and will not diminish any existing protections” (emphasis added). Further, the web page states: “Designation... would strengthen and increase the long term protections already existing in the monument, but cannot diminish them” (emphasis added). An infographic available on the page adds that: “National marine sanctuary designation would add the conservation benefits to the marine areas of Papahānaumokuākea Marine National Monument by providing a stable regulatory framework and additional protections to safeguard living, cultural, and maritime heritage resources” (emphasis added).

Recommendations

The Commission supports the Reserve and Monument goals, objectives and regulations. The Commission also supports NOAA’s intention to supplement, complement, strengthen and add to these protections through designation of the Papahānaumokuākea NMS. Moreover, from the Commission’s perspective, the proposed sanctuary designation should adhere tightly to the principles identified by NOAA and the Reserve’s and Monument’s existing protections, which, relative to marine mammals and their ecosystems, should, at a minimum:

- Provide long-term, strong, comprehensive protections from anthropogenic threats;
- Prohibit any activity that would remove, injure or kill marine mammals, except as specifically authorized by a permit; and
- Allow for the issuance of permits for extractive activities or those with potentially adverse impacts only if the applicant, using the precautionary approach, demonstrates to NOAA’s satisfaction that the proposed activities are compatible with Sanctuary and Monument goals and regulations, and will have only a negligible impact on sanctuary resources, including marine mammals.

Accordingly, the Commission recommends that these principles be reflected in the alternatives in the DEIS. The Commission recommends that the DEIS alternatives, draft sanctuary designation and draft regulations explicitly 1) re-affirm that protections provided by the Monument and the Reserve will not be diminished, and 2) describe in detail how existing protections will be strengthened, increased and added to under those alternatives. In particular, the Commission recommends that the DEIS's preferred alternative permanently prohibit all commercial or recreational fishing in Sanctuary waters. As long as sustenance and traditional (subsistence) fishing by Native Hawaiians is accurately monitored, assessed and capped at minimal levels, those forms of fishing should not pose a serious threat to the NWHI marine environment or deplete resources important to marine mammals. As such, the alternatives in the DEIS should include their perpetuation. The Commission notes that WesPac, at a recent Council meeting, expressed interest in exploring the potential for 'customary exchange' fishing to be permitted in the Sanctuary, and therefore in the Monument. The Commission believes that this practice would be contrary to the goals of the Sanctuary and the Monument, and Monument regulations. 'Customary exchange' is defined in the Magnuson-Stevens Act as: "The non-market exchange of marine resources between fishermen and community residents, including family and friends of community residents, for goods, and/or services for cultural, social, or religious reasons. Customary exchange may include cost recovery through monetary reimbursements and other means for actual trip expenses, including but not limited to ice, bait, fuel, or food, that may be necessary to participate in fisheries in the western Pacific." Given this definition, which would allow exchange of fish for goods or services 'customary exchange' does not differ substantively from commercial fishing, which includes not only selling fish, but barter and trade. In addition, monetary reimbursements arguably involve, or could involve, commercial aspects. If the DEIS considers alternatives that would allow fishing for purposes of customary exchange, it should explain whether and how this would be consistent with fishing limits applicable to the Monument, examine closely distinctions between commercial fishing and customary exchange and consider limitations (e.g., gear restrictions) to minimize impacts on marine mammals and other Sanctuary resources.

The Commission recognizes that NOAA, in designating a national marine sanctuary within the PMNM, is in part seeking to: • "provide a more stable regulatory framework and additional protections to safeguard living, cultural, and maritime heritage resources;" • "develop objectives and actions that ensure lasting protections consistent with the existing Monument proclamations and regulations;" and • "augment existing authorities... to provide additional regulatory and non-regulatory tools for management and protection of Monument resources." A national marine sanctuary arguably provides secure and lasting protections because, once designated, an act of Congress is needed to reverse it. However, applicable prohibitions and protections can be amended through periodic rulemaking. It remains an open question as to whether a marine national monument designation made under the Antiquities Act by Presidential Proclamation can be reversed or significantly downsized by a later President and subsequent Executive Order. Thus, there is some risk that the protections afforded the NWHI as a marine national monument could disappear or be curtailed through executive fiat. This being the case, the protections afforded via a sanctuary designation, even if duplicative of those applicable to the Monument, are necessary. For this reason, NOAA, in designating a Papahānaumokuākea NMS, should look beyond a designation that is merely "separate from, but supplementary and complementary to, existing Monument regulations and management provisions." Those regulations and management provisions should independently protect the area's resources at least at the existing level should those provided through national monument status be reduced or lost. Although not necessarily the case, a marine national monument created by proclamation often is more restrictive in terms of what activities are and are not allowed than would be expected through a sanctuary designation. National marine sanctuaries generally allow multiple uses, including, routinely, the extraction of resources. In contrast, almost all forms of resource extraction and potentially destructive human activities are prohibited in the PMNM. Further, the NMSA explicitly invites the appropriate fishery management council to play a major role in developing fishing regulations. As

such, it is not surprising that most national marine sanctuaries allow at least some commercial and recreational fishing, and several are not subject to any sanctuary-specific fishing restrictions. During reviews that led to designation and expansion of the PMNM in 2006 and 2016, WesPac recommended that fishing be allowed in those areas. Moreover, on several occasions since 2006, WesPac has advocated that PMNM fishing prohibitions be removed. Thus, unless specifically tailored to reinforce the precedent established by the Monument with respect to fishing, it is not clear that an independently generated sanctuary designation would provide the same level of protection against impacts from fishing as do the PMNM provisions. The Commission is pleased that NOAA has advised WesPac that any draft fishing regulations it develops should be "consistent with both the fishing provisions of Proclamation 9478, and the goals and objectives of the proposed sanctuary." However, given the desirability of bolstering the Monument's protections and uncertainty surrounding the durability of those protections, the Commission recommends that NOAA, in developing the draft sanctuary designation and its regulations provide, at a minimum, the same levels of protections to marine resources, including fishery resources and marine mammals, as are afforded by the Monument. The NWHI are subject to a range of threats beyond those that would come with renewed fishing in the Sanctuary. The Commission supports NOAA in the protections it has implemented against those threats, and for its intention to strengthen and add to those protections with the proposed sanctuary designation. The Commission recommends that NOAA, in its DEIS, provide a range of options for effectively addressing the threats posed to marine mammals and their ecosystems in the NWHI from marine debris and global warming. Finally, in commenting on and generally supporting the proposal to designate the marine portions of the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary (NMS), the Commission notes that there are other possible sanctuary designations under consideration around the United States. ONMS should consider giving higher priority to designating other areas nominated as sanctuaries (e.g., the St. George Unangan Heritage National Marine Sanctuary and the Chumash Heritage National Marine Sanctuary) that currently lack any site specific protections, before focusing on Papahānaumokuākea, which already is rather well-protected as a monument and reserve, and which is likely to receive only incremental benefits from the overlay of a sanctuary designation. We hope these comments and recommendations are helpful. Please contact me if you have questions.

Peter O. Thomas, Ph.D. Executive Director
Marine Mammal Commission
Submitted by dheinemann@mmc.gov

Received via *Regulations.gov* on January 31, 2022

U.S. Environmental Protection Agency (EPA)

Dear Athline Clark:

The U.S. Environmental Protection Agency has reviewed the National Oceanic and Atmospheric Administration's Notice of Intent to prepare a Draft Environmental Impact Statement for the National Marine Sanctuary Designation for Papahānaumokuākea Marine National Monument (Papahānaumokuākea Marine Sanctuary). Our review and comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. The National Oceanic and Atmospheric Administration is preparing an Environmental Impact Statement to consider and disclose the anticipated environmental effects of designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary.

The Monument is administered jointly by four Co-Trustees—the Secretary of Commerce through the NOAA, the Secretary of the Interior through the U.S. Fish and Wildlife Service (USFWS), the State of Hawaii through the Governor and the Office of Hawaiian Affairs. The Monument Co-Trustees currently operate the Monument guided by a 2008 Monument Management Plan for Papahānaumokuākea and the residential Proclamations designating the Monument. Papahānaumokuākea Marine National Monument is one of the largest protected areas in the world. The original Papahānaumokuākea Marine National Monument and the Monument Expansion Area located around the Northwestern Hawaiian Islands, were established under the Antiquities Act through, respectively, Presidential Proclamation 8031 of June 15, 2006, as amended by Proclamation 8112 of February 28, 2007; and Proclamation 9478 of August 26, 2016. Proclamation 9478 expanded the Monument by an additional 442,781 square miles from 139,793 square miles to a total 582,574 square miles and directed NOAA to initiate the process to designate Papahānaumokuākea Marine National Monument as a National Marine Sanctuary. The EPA offers the following scoping recommendations to NOAA to consider when preparing the Draft EIS, including impacts to biological resources, water quality for coral reef protection, water quality impairments from trash, legacy hazardous waste cleanup at Tern Island, and air quality. These issues are discussed further in the attached detailed comments. The EPA appreciates the Papahānaumokuākea Marine Sanctuary analysis utilizes best available science. Additionally, the EPA appreciates opportunities to participate in future review periods issued for updates to the overarching Monument Management Plan.

The EPA appreciates the opportunity to comment on the preparation of the Draft EIS. Once it is release for public review, please provide an electronic copy to me at [REDACTED]. If you have any questions, please feel free to contact me at [REDACTED] or by email.

Andrew Zellinger
Environmental Review Branch

[ATTACHED DOCUMENT]

U.S. EPA DETAILED COMMENTS ON THE SCOPING NOTICE FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE NATIONAL MARINE SANCTUARY DESIGNATION FOR PAPAHAANAUMOKUĀKEA MARINE NATIONAL MONUMENT, HONOLULU COUNTY, HAWAII – JANUARY 31, 2022

Purpose and Need

In the Draft EIS, clearly identify the underlying purpose and need to which NOAA is responding in proposing the alternatives (40 CFR 1502.13). The purpose of the proposed action is typically the specific objectives of the activity, while the need for the proposed action may be to eliminate a broader

underlying problem or take advantage of an opportunity. The purpose and need should be a clear, objective statement of the rationale for the proposed project.

Range of Alternatives

All reasonable alternatives that fulfill the proposed action's purpose and need should be evaluated in detail. A robust range of alternatives will include options for avoiding significant environmental impacts.

The environmental impacts of the proposed action and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of habitat impacted; change in water quality).

Baseline Environmental Conditions

When evaluating project effects, we recommend using existing environmental conditions as the baseline for comparing impacts across all alternatives, including the no-action alternative. This provides an important frame of reference for quantifying and/or characterizing magnitudes of effects and understanding each alternative's impacts and potential benefits. This is particularly important when there are environmental protections in place that are based on current conditions, such as total maximum daily loads (TMDLs) for impaired waterbodies. It can also be useful, although often less certain, to compare alternatives against a no action baseline that includes reasonably foreseeable future conditions.

The EPA recommends that the NEPA analysis compare and present impacts to resources against the existing conditions baseline using a consistent method to measure project impacts for all alternatives. By utilizing existing environmental conditions as a baseline, future changes to environmental resources can be more accurately measured for all alternatives, including the No Action alternative. We recommend that NOAA consider the following when defining baseline conditions:

- Verifying that historical data (e.g., data 5 years or older) are representative of current conditions.
- Including resources directly impacted by the project footprint within the geographic scope of analysis, as well as the resources indirectly (or secondarily) impacted by the project. These indirectly impacted areas may include streams, wetlands, and aquatic, riparian, and meadow ecosystems.

Biological Resources

The document should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. We recommend that NOAA quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative. The EPA recommends engaging the U.S. Fish and Wildlife Service as early in the analysis as possible to ensure that the proposed alternatives account for the following:

- Impacts to special-status pieces found in the project area including the Hawaiian Monk seal, and green turtles;
- Migratory Bird Treaty Act compliance; and
- Protection from invasive species.

Clean Water Act

List of Impaired Waters under Clean Water Act, Section 303(d)

EPA added Tern Island to the 303(d) list based on a review of data and information that the Center for Biological Diversity provided to the State of Hawaii for its 2018 Integrated Report. EPA determined that waters around Tern Island are not meeting Hawaii's water quality standards for trash based on this review.

States are required to develop a Total Maximum Daily Load for every pollutant/waterbody combination that are on its 303(d) list. States assign a priority ranking to waterbodies/pollutants on the list for TMDL development. Tern Island trash is currently listed as a low priority for TMDL development on Hawaii's list. It is possible for a waterbody to come off the 303(d) list without a TMDL if

other restoration activities occur and new data and information show the waterbody is meeting water quality standards. We recommend that NOAA consider strategies focused on minimizing trash and marine debris in the waters around Tern Island throughout the Marine Sanctuary designation and management process.

Improving Water Quality to Protect Coral Reefs

EPA protects coral reefs by implementing Clean Water Act programs that protect water quality in watersheds and coastal zones of coral reef areas. EPA also supports efforts to monitor and assess the condition of U.S. coral reefs and conducts research into the causes of coral reef deterioration. EPA is developing tools to help adapt coral reefs to better handle changing conditions. 1. Much of EPA's work to protect coral reefs is conducted in partnership with other federal agencies, states, and territories. For example, EPA is an active member of the interagency U.S. Coral Reef Task Force. 2 EPA is currently developing an evidence map identifying and organizing existing literature evaluating the impact of water quality stressors on coral reef habitats.

Legacy Hazardous Waste Cleanup at Tern Island

Tern Island is a US Fish and Wildlife Service Refuge within the Papahānaumokuākea Marine National Monument. It served as a US Naval Air Facility and Refueling Station during WWII before serving as a US Coast Guard Long-Range Navigation Station from 1952-1979, after which it was transferred to FWS. Today it is recognized as a World Heritage Site and an increasingly important terrestrial location for several threatened and endangered species and 18 species of nesting seabirds. Tern Island was placed on the Federal Agency Hazardous Waste Compliance Docket in 2004. Legacy military waste and associated hazardous substances remain buried on the island. In 2012, EPA was petitioned by the CBD to conduct a CERCLA Preliminary Assessment (PA) of the Northwestern Hawaiian Islands, with a focus on the source and impact of plastic pollution on sensitive species. CBD agreed to EPA conducting a scaled down PA of Tern Island, which EPA completed in partnership with FWS in 2014. The PA confirmed that releases of hazardous substances—such as PCBs, lead, hydrocarbons, dioxins/furans, and heavy metals from onsite buried military wastes—have occurred in sensitive marine and terrestrial environments and further action is needed. In 2019, EPA completed a removal assessment for hazardous substances on the island. Data from the report demonstrated elevated concentrations of metals, PCBs and PAHs in soil, groundwater, and surface water in the vicinity of the legacy "Bulky Dump" and the SE corner of the island. On November 9, 2021, CBD sent EPA a letter seeking an update on EPA's investigations at Tern Island, noting the September 2014 PA "indicated that further evaluation was warranted at Tern Island."

Proposed Next Steps

EPA (in consultation with FWS) proposes to conduct a removal action on an emergency basis to mitigate threats posed by hazardous substances which remain unaddressed. FWS and DOI staff and solicitors met with EPA recently to discuss coordination on a proposed hazardous substances removal action. The proposed action would abate hazardous substance impacts due to the Bulky Dump (exposed during Hurricane Walaka) and other isolated areas of concern. The action decouples the emergency action from the larger effort to restore the island, including the construction of a seawall to shore up the eroding dump area.

Air Quality

General Conformity

EPA's General Conformity Rule, established under Section 176(c)(4) of the Clean Air Act, provides a specific process for ensuring that federal actions do not interfere with a state's plans to attain or maintain NAAQS. For any criteria pollutants in the air basin of the project area where the air quality status is in nonattainment or attainment – maintenance,³ complete a general conformity applicability analysis (i.e., a comparison of direct and indirect emissions for each alternative with de minimis thresholds of 40 CFR 93.153). We recommend including a draft general conformity determination in the Draft EIS to fulfill the public participation requirements of 40 CFR 93.156.

Consultation with Tribal Governments

Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments" (November 6, 2000) was issued to establish regular and meaningful consultation and collaboration with tribal

officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian Tribes. In the Draft EIS, describe the process and outcome of government-to-government consultation between NOAA and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative. As a general resource, the EPA recommends the document Tribal

Consultation: Best Practices in Historic Preservation, published by the National Association of Tribal Historic Preservation Officers.

National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 103 of the National Historic Preservation Act (NHPA). Historic properties under the NHPA are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office (SHPO/THPO). Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007 "Indian Sacred Sites" (May 24, 1996) requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside of the project area may also have religiously significant ties to lands within the project area and should, therefore, be included in the consultation process. The EPA recommends that the Draft EIS address the existence of Native Hawaiian sacred sites in the project area. Explain how the proposed action would address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how NOAA would ensure that the proposed action would avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. Provide a summary of all coordination with Native Hawaiians and with the SHPO/THPO, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

Environmental Justice

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 11, 1994) and the "Memorandum of Understanding on Environmental Justice and Executive Order 12898," released on August 4, 2011, direct federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. CEQ guidance clarifies the terms low-income and minority population, which includes Native Americans, and describes the factors to consider when evaluating disproportionately high and adverse human health effects. The EPA⁵ recommends that the Draft EIS include an evaluation of environmental justice populations within the geographic scope of the project area. If such populations exist, describe how the proposed action would address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation and coordination with these populations. The EPA recommends the following for development of the EJ analysis:

- Consider Promising Practices for EJ Methodologies in NEPA Reviews when developing the EJ section of the EIS.
- Include a description of the area of potential impact used for the environmental justice impact analysis and provide the source of demographic information.
- Consider using EPA's Environmental Justice screening and Mapping Tool EJScreen6
- Disclose whether the project will result in a disproportionate and adverse impact on minority or low-income populations.
- Discuss potential mitigation measures for any anticipated adverse impacts to community

members that could result from the project.

- Include opportunities for incorporating public input to promote context sensitive design, especially in minority and low-income communities.
- Document the process used for community involvement and communication, including all measures to specifically involve low-income and minority communities. Include an analysis of results achieved by reaching out to these populations.
- Identify any specific actions proposed by NOAA to reduce emissions from the project, including use of low or zero-emissions construction equipment, and inclusion of alternative fuel and green technology infrastructure. Include an estimate of the air quality benefits and reduced adverse health effects that would result from each mitigation measure proposed. Identify any specific mitigation measures considered for sensitive populations (e.g., schools, daycare facilities, hospitals, senior centers, etc.).

References

- 1 <https://www.epa.gov/coral-reefs/what-epa-doing-protect-coral-reefs>
- 2 EPA coral reef contact information: <https://www.epa.gov/coral-reefs/forms/contact-us-about-coral-reefs>
- 3 Maintenance areas redesignated to attainment more than twenty years in the past are no longer required to comply with general conformity.
- 4 See http://www.nathpo.org/PDF/Tribal_Consultation.pdf
- 5 See Promising Practices for EJ Methodologies in NEPA Reviews, May 2016 https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf
- 6 <https://ejscreen.epa.gov/mapper/>



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Papahānaumokuākea Marine National Monument
NOAA DKIRC
NOS/ONMS/PMNM
1845 Wasp Blvd, Building 176
Honolulu, Hawaii 96818

November 22, 2021

Re: Invitation for Consultation under Section 106 of the National Historic Preservation Act
Papahānaumokuākea Marine National Monument proposed Sanctuary Designation and
Environmental Impact Statement (EIS)

Aloha,

“Ua mau ke ea o ka ‘āina i ka pono”
(The life of the land is perpetuated in righteousness)

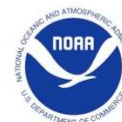
Spoken by Kamehameha III, King of Hawai‘i, in 1843
and adopted in 1959 as the motto of the State of Hawai‘i

Historic Significance of the Papahānaumokuākea Marine National Monument

The area known as the Papahānaumokuākea Marine National Monument (Monument) includes the Northwestern Hawaiian Islands (NWHI), an immense seascape of natural and cultural significance. According to Hawaiian traditions, this vast region is considered a sacred place that is foundational to the cultural origins of Native Hawaiians. This place is connected to Hawaiian cosmology, religion and spirituality, and historical accounts which shaped the social and political development of traditional Hawaiian society. The island of Mokumanamana, became a ritual center of power, supported by long-term habitation of the island of Nihoa as an extensive voyaging sphere that helped to support prolonged recurring access and use throughout the NWHI. Up until the late 1800s, Hawaiian chiefs and monarchs traveled to these remote islands and initiated expeditions to bring these islands under political authority and control of the Hawaiian Kingdom.

After European contact with the area, commercial access led to a variety of extractive activities during the 1800s and early 1900s, such as the harvest of whales, seals, turtles, sharks, seabirds, pearl oysters, fish, and other natural resources. In the 1900s, the atolls played a role in transpacific cable communications and early aviation routes. During World War II, most of the Battle of Midway occurred at sea in the NWHI region, and for much of the latter part of the 1900s, most activities were military, commercial fishing, conservation, and scientific in nature.

Over the last two decades, several state and federal protections have been afforded to the NWHI which are now known as Papahānaumokuākea, a name conferred by the Native Hawaiian community. Currently, Papahānaumokuākea is one of the largest marine protected areas in the world and the only natural and cultural (mixed) World Heritage site in the country recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The Monument is managed by four Co-trustees: the National Oceanic and Atmospheric Administration (NOAA) for the Department of Commerce, the U.S. Fish and Wildlife Service (USFWS) for the



Department of Interior, the Department of Land and Natural Resources (DLNR) for the State of Hawai'i, and the Office of Hawaiian Affairs (OHA).

Purpose of this Letter

NOAA is initiating the process to consider the designation of marine portions of the Monument as a national marine sanctuary under the authority of the National Marine Sanctuaries Act (16 U.S.C. § 1431 *et seq.*). Sanctuary designation would provide continued or enhanced long-term protection for the marine waters within the Monument. As part of the sanctuary designation process, NOAA will work with cooperating agencies including the USFWS, the State of Hawai'i, and OHA, to prepare a draft environmental impact statement to evaluate the potential environmental effects of this action on the human environment under the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 *et seq.*). Additionally, NOAA will coordinate responsibilities under Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 3001 *et seq.*) with the NEPA process for the sanctuary designation. The Section 106 consultation process specifically applies to any federal agency undertaking that may affect historic properties and requires federal agencies to take into account the effects of their undertakings on historic properties. NOAA is requesting public input on potential effects on historic properties from the proposed sanctuary designation as part of the NEPA scoping process. Through this letter, NOAA is seeking to identify and invite consulting parties to participate in this process. Consulting parties will have a reasonable opportunity to identify their concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional, religious, and cultural importance, articulate their views on the undertaking's effects on such properties, and participate in the resolution of any adverse effects, if identified.

Proposed Federal Action and Undertaking

The purpose and need of the sanctuary designation is to fulfill the purposes and policies outlined in Section 301(b) of the National Marine Sanctuaries Act (NMSA) (16 U.S.C. § 1431(b)), including to identify and designate as sanctuaries, areas of the marine environment which are of special national significance, provide authority for comprehensive and coordinated conservation and management of these marine areas, and to provide continued or enhanced long-term protection for the resources of these areas. Additionally, the purpose and need for the designation is to implement the provisions of Executive Order 13178 and Presidential Proclamation 9478 that direct NOAA to consider initiating the sanctuary designation process. NOAA will consider marine areas within the original Monument boundary and the Monument Expansion Area for designation as a national marine sanctuary. The proposed sanctuary would not replace or supersede any existing designations or authorities in the marine areas of the Monument, but would provide a means of supplementing and reinforcing protection in these areas.

Coordinating NEPA and Section 106

NOAA is coordinating this Section 106 review with the NEPA process, pursuant to 36 C.F.R. 800.8(a). Through this coordination, NOAA will use the NEPA scoping process and other public notices and meetings to solicit participation from the public and other stakeholders and to seek input and information regarding the identification of, and potential effects to, historic properties associated with this undertaking. Further information on how you can provide comments and participate in this process is detailed below.

Proposed Area of Potential Effects

The proposed area of potential effects is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The proposed area of potential effects for this project will encompass the entirety of the marine area of Papahānaumokuākea, including the Monument Expansion Area. The proposed area of potential effects is shown in Attachment A.

Identification of Historic Properties within the Proposed Area of Potential Effects

NOAA invites your comments to aid in the identification of historic properties that may be present within the proposed area of potential effects, including traditional and cultural properties associated with traditional and customary practices of Native Hawaiians. NOAA also seeks comments to help identify issues relating to the proposed designation's potential effects on historic properties.

Of note, the draft environmental impact statement will include archaeological survey reports, architectural inventories, and a cultural assessment. The State of Hawai'i, a cooperating agency, will be responsible for the cultural impact assessment and compliance with the Hawai'i Environmental Policy Act (HEPA), hence the need for a comprehensive approach to the Section 106 and cultural assessment process. In compliance with the State of Hawai'i's Guidelines for Assessing Cultural Impacts, the Section 106 process will address the necessary methodology and content of cultural impact assessment as per Chapter 343 Hawai'i Revised Statutes.

Participation as a Consulting Party

NOAA is currently identifying consulting parties through outreach to potentially interested entities such as Native Hawaiian organizations (NHO); including Native Hawaiian descendants with ancestral, lineal, or cultural connections to or knowledge of Papahānaumokuākea; and/or cultural practitioners. Other consulting parties may be fishers (commercial, recreational, and subsistence); representatives of local government, other parties, and the public. Certain individuals and organizations may also participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the potential effects on historic properties. With this letter, NOAA is inviting you to participate as a consulting party in the Section 106 consultation process. Should you wish to participate as a consulting party, we request that you complete and return the attached Consulting Party Response form. You may also register by sending a letter of interest.

By becoming a consulting party, you will be actively informed of steps in the Section 106 process, including public meetings, and your views will be actively sought. You may elect to participate as a consulting party at any time and you may also choose to withdraw your request to be a consulting party at any time. NOAA will consider these requests throughout the consultation process, and intends to provide multiple opportunities to comment on this project and its potential effects on historic properties.

Opportunities to Comment

Concurrent with the initiation of Section 106 consultation, NOAA published a Notice of Intent to prepare an EIS in the Federal Register on November 19, 2021. Through this Notice, NOAA is inviting public and consulting party participation and input regarding the identification of historic properties and potential effects to historic properties related to the undertaking. This Notice directs the public to the project website <https://www.papahanaumokuakea.gov> for additional information.

Type of Participation and Input	Methods of Participation and Input Options for providing comments include:
Section 106 Consulting Party Participation	<ul style="list-style-type: none"> • Submit written comment letter and/or Consulting Party Response Form by email or by U.S. Postal Service • Submit written comments at regulations.gov, docket # NOAA-NOS-2021-0114 • Provide comments at public scoping meetings
Public Participation Provide comments but not as a consulting party	<ul style="list-style-type: none"> • Submit written comment letter by U.S. Postal Service • Submit written comments at regulations.gov, docket # NOAA-NOS-2021-0114 • Provide comments at public scoping meetings

NOAA will also host virtual public scoping meetings to gather public and consulting party comments at the dates and times listed below. Written comments can be provided at: [regulations.gov](https://www.regulations.gov), docket # NOAA-NOS-2021-0114]. Following the close of the public comment period, NOAA will continue to seek engagement and input from consulting parties in order to inform the Section 106 review. Options for consulting parties include individual consultations upon request.

Public scoping meetings will be hosted virtually on the Zoom online platform and require registration to participate on the following dates:

- Wednesday, December 8, 2021, 6:00 PM HST
Register at:
https://zoom.us/meeting/register/tZ0vc--przotHdAlz-shgXe_ceEcH-RSB1b7
- Saturday, December 11, 2021, Noon (12:00 PM) HST
Register at:
https://zoom.us/meeting/register/tZAocO6urTMiHtXpAGJq5_4YODHChiPLz1qN
- Tuesday, December 14, 2021, 6:00 PM HST
Register at:
<https://zoom.us/meeting/register/tZ0pceGurTopHNc80XiGhAnftQ5mhGrdAle>
- Thursday, December 16, 2021, 3:00 PM HST
Register at:
https://zoom.us/meeting/register/tZMpfiuprTwsEt3p_c569qkQUaYxgHo7JJXV

-
Hāmama ‘ia nā hālāwai lehulehu a pau
i ka hāpai ‘ana i ka mana’o ma ka ‘ōlelo Hawai‘i a ho‘opa‘a kūhelu ‘ia.
We welcome comments in ‘ōlelo Hawai‘i (Hawaiian language) at all public scoping meetings.
-

Conclusion

On behalf of NOAA, we respectfully request your review and consideration of the information contained in this letter and additional information at this website

<https://www.papahanaumokuakea.gov>.

Should you wish to register as a consulting party please submit the Consulting Party Response Form (Attachment B). If you choose to submit a letter of interest, please include the following information:

- Organization/Agency/Native Hawaiian organization (NHO)
- Organization/Agency/NHO address, telephone number, email
- Point of Contact (POC) and/or Authorized Representative (AR)
- POC or AR address, telephone number, email
- Geographic and/or cultural areas of interest and/or expertise
- If desired, the letter may also include comments you may have on historic properties within the proposed area of potential effects or that may be beyond the boundaries of the proposed area of potential effects but associated with traditional and customary practices, as well as the names and contact information of Native Hawaiian descendants with ancestral, lineal or cultural connection to or knowledge of Papahānaumokuākea; cultural practitioners; fishers (commercial, recreational, and subsistence); NHOs; individuals; or organizations who may have a cultural affiliation and historical properties information within the proposed area of potential effects.

Please send the Consulting Party Response Form (Attachment B) and/or letter of interest via email to pmnm.section106@noaa.gov or via U.S. Postal Service to:

Papahānaumokuākea Marine National Monument
Attn: Response to Section 106 Letter
NOAA/Daniel K. Inouye Regional Center
1845 Wasp Blvd, Building 176
Honolulu, HI 96818

Further information is available at <https://www.papahanaumokuakea.gov>. Should you have any questions, please contact Kalani Quioco, Cultural Resources Coordinator for NOAA Office of National Marine Sanctuaries - Pacific Islands Region, at pmnm.section106@noaa.gov.

Mahalo,

Athline M. Clark

Athline Clark
Superintendent

Attachments

Selected background information:

The Papahānaumokuākea 2020 State of the Monument Report can be downloaded at:

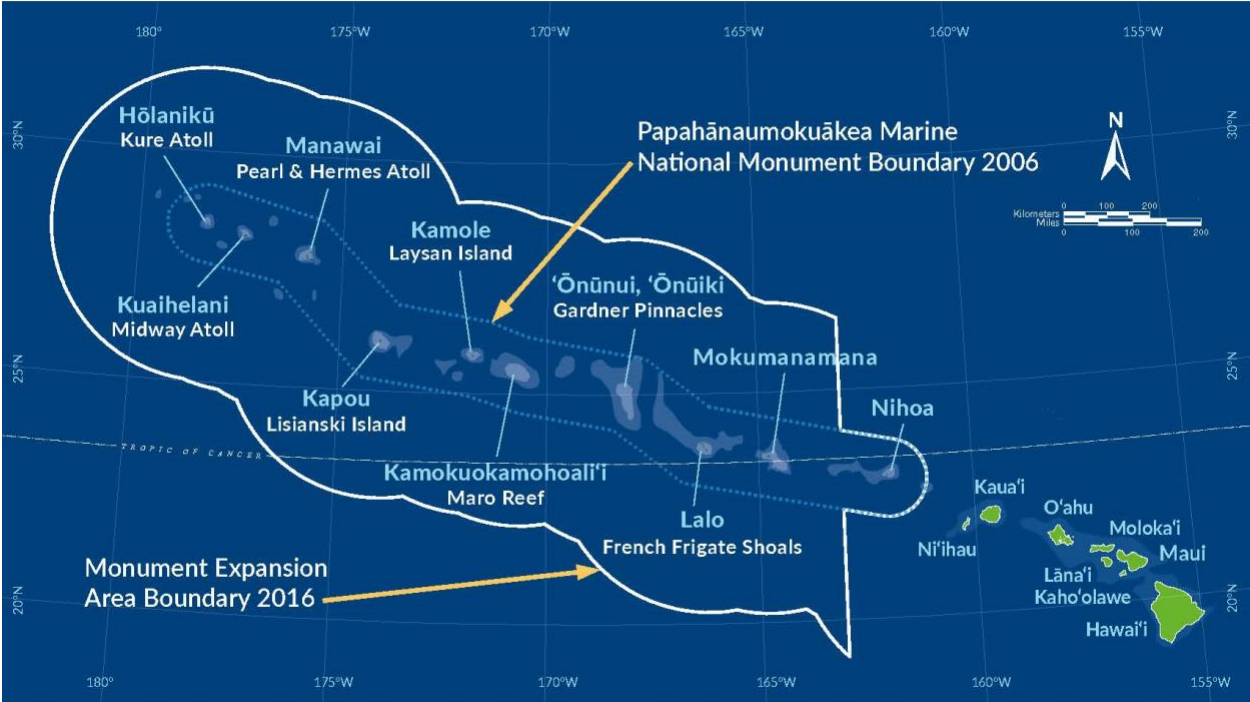
<https://sanctuaries.noaa.gov/science/condition/pmnm/>

Page 6 of 6 Section 106 Invitation Letter

Guidance on consultation with Native Hawaiian organizations by the Advisory Council on Historic Preservation: <https://www.achp.gov/sites/default/files/guidance/2020-01/ConsultationwithNHOshandbookupdate29Jan2020final.pdf>

Information about Section 106 of the National Historic Preservation Act can be found here: <http://www.achp.gov/work106.html>

Attachment A



Attachment B

Consulting Party Response Form for Section 106 Review Process

Aloha - Thank you for your interest in consulting on NOAA's proposed sanctuary designation process for Papahānaumokuākea Marine National Monument (PMNM). Consultation is the process of seeking, discussing, and considering the views of consulting parties and how this undertaking affects historic properties. Consulting parties play an important role in the Section 106 process and are provided with opportunities to share their views, receive and review pertinent information, offer ideas, and consider possible mitigation efforts if potential impacts to historic properties are identified. NOAA has identified members of Native Hawaiian organizations, fishers (commercial, recreational, and subsistence), representatives of local government, and other parties as potential consulting parties. It is up to you to decide how actively you want to participate in consultation.¹ Pursuant to the regulations implementing the National Historic Preservation Act, Native Hawaiian organizations are specifically afforded a reasonable opportunity to identify their concerns about historic properties; advise on the identification and evaluation of historic properties, including those of traditional, religious, and cultural importance; articulate their views on the undertaking's effects on such properties; and participate in the resolution of adverse effects. See 36 C.F.R. 800.2(c)(2)(ii)(A).

Please complete this form and return it via email to pmnm.section106@noaa.gov or via U.S. Postal Service to:

Papahānaumokuākea Marine National Monument
Attn: Response to Section 106 Letter
NOAA/Daniel K. Inouye Regional Center
1845 Wasp Blvd, Building 176
Honolulu, HI 96818

If desired, you may also include comments below on the proposed area of potential effects, any information you may have on historic properties or cultural resources within the area of potential effects, or that may be beyond the boundaries of the area of potential effects but associated with traditional and customary practices.

¹ Advisory Council on Historic Preservation, *Protecting Historic Properties: A Citizen's Guide to Section 106 Review*, available electronically at https://www.achp.gov/sites/default/files/documents/2021-01/CitizenGuide2021_011321.pdf.

Attachment B

Consultation Participation

- I accept NOAA's invitation to be a consulting party on the proposed undertaking.
- I do not wish to participate in consultation on the undertaking. *(Please note you may request to rejoin the consultation process later.)*

Contact Information Preference

Please take this opportunity to provide and/or update your contact information with us, including your mailing address, email address, and phone number. Please note that our preference is to conduct all future correspondence via email. However, if you are unable to receive correspondence via email and would prefer to be contacted via postal mail or telephone, please check one of the boxes below.

Name/Point of Contact:

(First) _____
(Last) _____

Title (if applicable): _____

Name of Agency/Organization/Native Hawaiian organization:

Address: (Street) _____
(City/Town) _____ (State) _____
Phone: _____
Email: _____

Geographic and/or Cultural Areas of Interest and/or Expertise:

Please provide all future correspondence via (mark response):

- Email
- U.S. Postal Service
- Telephone

Appendix D: Biological Species Associated with Consultations

Table D.1a. ESA and State-Listed Marine Reptile Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Central North Pacific Green Sea Turtle	Honu	<i>Chelonia mydas</i>	Resident	Threatened
Hawksbill Turtle	Honu'ea	<i>Eretmochelys imbricata</i>	Resident to Main Hawaiian Islands	Endangered
North Pacific Loggerhead turtle	None	<i>Caretta caretta</i>	Transient	Endangered
Olive Ridley Turtle	None	<i>Lepidochelys olivacea</i>	Transient	Threatened
Leatherback Turtle	None	<i>Dermochelys coriacea</i>	Transient	Endangered

Table D.1b. ESA and State-Listed Marine Mammal Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Hawaiian Monk Seal	ʻĪlioheʻoikauaua	<i>Neomonachus schauinslandi</i>	Resident	Endangered
Sperm Whale	Palaoa	<i>Physeter macrocephalus</i>	Transient	Endangered
Blue Whale	Koholā	<i>Balaenoptera musculus</i>	Transient	Endangered
Sei Whale	Koholā	<i>B. borealis</i>	Transient	Endangered
Fin Whale	Koholā	<i>B. physalus</i>	Transient	Endangered
North Pacific Right Whale	Koholā	<i>Eubalaena japonica</i>	Transient	Endangered

Table D.1c. ESA and State-Listed Marine Fish Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Giant manta ray	Hāhālua	<i>Manta birostris</i>	Unknown	Threatened
Oceanic Whitetip Shark	Manō	<i>Carcharhinus longimanus</i>	Unknown	Threatened
Shortfin mako shark	Manō	<i>Isurus oxyrinchus</i>	Unknown	Candidate

Table D.1d. ESA and State-Listed Seabird Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Short-tailed Albatross	Mōlī	<i>Phoebastria albatruss</i>	Resident	Endangered

Table D.1e. ESA and State-Listed Coral Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
No common name	No common name	<i>Acropora globiceps</i>	Resident	Threatened

Of the above listed species, NMFS has designated critical habitat only for the Hawaiian monk seal: From shore to 20 fathoms around every island, atoll, and bank of Papahānaumokuākea, except Sand Island at Midway Atoll, including all beach areas, sand spits and islets, inner reef waters, and ocean waters. No other critical habitat has been designated in the project area for any other of the species of Table D.1.

Table D.2a. ESA and State-Listed Shorebird and Land Bird Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Laysan Duck	Koloa pōhaka	<i>Anas platyrhynchos laysanensis</i>	Resident	Endangered
Laysan Finch	‘Ekupu‘u	<i>Telespyza cantans</i>	Resident	Endangered
Nihoa Millerbird	Ulūlu	<i>Acrocephalus familiaris</i>	Resident	Endangered
Nihoa Finch	Palihoa	<i>Telespyza ultima</i>	Resident	Endangered

Table D.2b. ESA and State-Listed Terrestrial Plant Species of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Nihoa Fan Palm	Loulu	<i>Pritchardia remota</i>	Endemic	Endangered
No common name	‘Ihi	<i>Portulaca villosa</i>	Endemic	Endangered
No common name	Pōpolo	<i>Solanum nelsonii</i>	Endemic	Endangered
No common name	‘Ōhai	<i>Sesbania tomentosa</i>	Endemic	Endangered
No common name		<i>Amaranthus brownii</i>	Endemic	Critically endangered
No common name	No Hawaiian name	<i>Cenchrus agrimonioides var. laysanensis</i>	Endemic	Endangered, potentially extinct

Table D.3a. Marine Mammals of Papahānaumokuākea: Family Phocidae

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Hawaiian Monk Seal	`Ilio holo i ka uaua	<i>Neomonachus schauinslandi</i>	Resident	Endangered

Table D.3b. Marine Mammals of Papahānaumokuākea: Family Balaenopteridae (Baleen Whales)

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Humpback Whale	koholā	<i>Megaptera novaeangliae</i>	Resident	Least Concern
Blue Whale	koholā	<i>Balaenoptera musculus</i>	Transient	Endangered
Sei Whale	koholā	<i>B. borealis</i>	Transient	Endangered
Fin Whale	koholā	<i>B. physalus</i>	Transient	Vulnerable
North Pacific Right Whale	koholā	<i>Eubalaena japonica</i>	Transient	Endangered
Bryde's Whale		<i>Balaenoptera edeni</i>		Least Concern
Minke Whale		<i>Balaenoptera acutorostrata</i>		Least concern

Table D.3c. Marine Mammals of Papahānaumokuākea: Family Physeteridae (Toothed Whales)

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Sperm Whale	Palaoa	<i>Physeter macrocephalus</i>	Transient	Endangered

Table D.3d. Marine Mammals of Papahānaumokuākea: Family Ziphiidae (Beaked Whales)

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Baird's beaked whale		<i>Berardius bairdii</i>	Transient	Least Concern
Blainville's beaked whale		<i>Mesoplodon densirostris</i>	Transient	Least Concern
Cuvier's beaked whale		<i>Ziphius cavirostris</i>	Transient	Least concern

Table D.3e. Marine Mammals of Papahānaumokuākea: Family Delphinidae (dolphins)

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
False killer whale	koholā	<i>Pseudorca crassidens</i>	Transient	Near threatened
Killer whale		<i>Orcinus orca</i>	Transient	Data deficient

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Melon-headed whale		<i>Peponocephala electra</i>	Transient	Least concern
Short-finned pilot whale		<i>Globicephala macrorhynchus</i>	Transient	Least concern
Bottlenose dolphin	Nai'a	<i>Tursiops truncatus</i>	Resident	Least concern
Spinner dolphin	Nai'a	<i>Stenella longirostris</i>	Resident	Least concern
Striped dolphin	Nai`a	<i>Stenella coeruleoalba</i>	Transient	Least concern
Rough-toothed dolphin		<i>Steno bredanensis</i>	Transient	Least concern
Pantropical spotted dolphin		<i>Stenella attenuata</i>	Transient	Least concern
Pacific White-sided dolphin		<i>Lagenorhynchus obliquidens</i>	Transient	Least concern
Pygmy killer whale		<i>Feresa attenuata</i>	Transient	Least concern
Risso's dolphin		<i>Grampus griseus</i>	Transient	Least concern

Table D.3f. Marine Mammals of Papahānaumokuākea: Family Kogiidae

Common Name	Hawaiian Name	Scientific Name	Occurrence	ESA Listing
Pygmy sperm whale		<i>Kogia breviceps</i>	Transient	Least concern
Dwarf sperm whale		<i>Kogia sima</i>	Transient	Least concern

Table D.4. Shorebirds and Land birds of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name
Laysan Duck	Koloa pōhaka	<i>Anas platyrhynchos laysanensis</i>
Nihoa Millerbird	Ulūlu	<i>Acrocephalus familiaris</i>
Laysan Finch	'Ekupu'u, 'Ainohu kauo	<i>Telespyza cantans</i>
Nihoa Finch	Palihoa	<i>Telespyza ultima</i>
Bristle-thighed Curlew	Kioea	<i>Numenius tahitiensis</i>
Wandering Tattler	'Ūlili	<i>Heteroscelus incanus</i>

Common Name	Hawaiian Name	Scientific Name
Ruddy Turnstone	‘Akekeke	<i>Arenaria interpres</i>
Pacific Golden Plover	Kōlea	<i>Pluvialis fulva</i>

Table D.5. Seabirds of Papahānaumokuākea

Common Name	Hawaiian Name	Scientific Name	Status	Threat Level
Black-footed Albatross	Ka‘upu	<i>Phoebastria nigripes</i>	I	BCC
Laysan Albatross	Mōlī	<i>Phoebastria immutabilis</i>	I	BBC
Short-tailed Albatross	Makalena	<i>Phoebastria albatrus</i>	I	E
Bonin Petrel	Nunulu	<i>Pterodroma hypoleuca</i>	I	LC
Bulwer’s Petrel	‘Ou	<i>Bulweria bulwerii</i>	I	LC
Wedge-tailed shearwater	‘Ua‘u kani	<i>Puffinus pacificus</i>	I	LC
Christmas shearwater	‘Ao‘ū	<i>Puffinus nativitatus</i>	I	LC
Tristram’s Storm-petrel	‘Akihike‘ehi‘ale	<i>Oceanodroma tristrami</i>	I	BCC
Red-tailed Tropicbird	Koa‘e ‘ula	<i>Phaethon rubricauda</i>	I	LC
Masked booby	‘Ā, Akeake	<i>Sula dactylatra</i>	I	LC
Red footed booby	‘Ā, Akeake	<i>Sula sula</i>	I	LC
Great frigatebird	‘Iwa	<i>Fregata minor</i>	I	LC
White tern	Manu o Kū	<i>Gygis alba</i>	I	LC
Grey-backed tern	Pakalakala	<i>Sterna lunata</i>	I	LC
Sooty tern	‘Ewa‘ewa	<i>Sterna fuscata</i>	I	LC
Black noddy	Noio, lae hina	<i>Anous minutus</i>	I	LC
Brown noddy	Noio koha	<i>Anous stolidus</i>	I	LC
Blue-gray noddy	Noio hinaoku, manuohina	<i>Procelsterna cerulea</i>	I	LC

1 E = endemic to the Hawaiian Islands; I = indigenous to the Hawaiian Islands; M = non-breeding migrant in the Hawaiian Islands; X = possibly extinct (not counted in species total for IBA qualification purposes).

2 E = endangered; T = threatened; C = candidate for listing; BCC = bird of conservation concern; LC = least concern (U.S. Fish and Wildlife Service 2002).

Source: Adapted from VanderWerf 2008

Table D.6a. Marine Alien Species of Papahānaumokuākea: Phylum Annelida (worms)-15

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Chaetopterus variopedatus</i>	A	Kuaihelani	
<i>Kuwaita (Lumbrineris) heteropoda</i>	C	Kuaihelani	
<i>Lumbrineris sphaerocephala</i>		No data	Not in database
<i>Branchiomma cingulatum</i>	A	Kuaihelani	
<i>Potamethus elongatus</i>	C	Kuaihelani	
<i>Sabellastarte spectabilis</i>	A	Multiple locations	
<i>Potamilla sp.</i>	C	Kuaihelani	
<i>Hydroides brachyacantha</i>	A	Kuaihelani	
<i>Hydroides elegans</i>	A	Kuaihelani	
<i>Hydroides exaltata</i>	A	Kuaihelani	
<i>Pseudovermilia pacifica</i>	A	Kuaihelani	
<i>Salmacina tribranchiata</i>	A	Kuaihelani	
<i>Protula cf. atypha</i>	C	Kuaihelani	Only genus in database
<i>Vermiliopsis sp.</i>	C	Kuaihelani	
<i>Lanice conchilega</i>	A	Kuaihelani	

Table D.6b. Marine Alien Species of Papahānaumokuākea: Phylum Arthropoda (crustaceans, barnacles, amphipods)-5

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Chthamalus proteus</i>	A	Kuaihelani	
<i>Caprella scaura</i>	A	Kapou	
<i>Ligia (Megaligia) exotica</i>	A	Kuaihelani	
<i>Amphibalanus reticulatus</i>	A	No data	Maybe seen at Lalo
<i>Amphibalanus venustus</i>	A	No data	Not established, seen only on R/V Sette hull during port inspection

Table D.6c. Marine Alien Species of Papahānaumokuākea: Phylum Bryozoa-5

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Amathia distans</i>	A	Kuaihelani	
<i>Amathia verticillata</i>	A	Kuaihelani, Kapou	
<i>Watersipora sp.</i>	C	Kuaihelani	Uncertain whether occurs
<i>Schizoporella cf. errata</i>	A	Kuaihelani	
<i>Bugula sp.</i>	A	Kuaihelani	

Table D.6d. Marine Alien Species of Papahānaumokuākea: Phylum Chordata (non-vertebrates)-18

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Diplosoma listerianum</i>	A	Kuaihelani	
<i>Didemnum perlucidum</i>	A	Kuaihelani	

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Didemnum</i> sp.	A	Kuaihelani	
<i>Lissoclinum fragile</i>	A	Kuaihelani	
<i>Polyclinum constellatum</i>	A	Kuaihelani	
<i>Ascidia archaia</i>	A	Kuaihelani	
<i>Ascidia sydneyensis</i>	A	'Ōnūni and 'Ōnuiki, Kuaihelani	
<i>Phallusia nigra</i>	A	Kuaihelani	
<i>Ascidia</i> sp.	A	Kuaihelani	
<i>Microcosmus exasperatus</i>	A	Multiple locations	
<i>Herdmania pallida</i>	A	Kuaihelani	
<i>Cnemidocarpa irene</i>	A	Multiple locations	
<i>Polycarpa aurita</i>	C	Multiple locations	
<i>Styela canopus</i>	A	Kuaihelani	
<i>Symplegma brakenhielmi</i>	A	Kuaihelani	
<i>Symplegma</i> sp.	A	Manawai	
<i>Botrylloides</i> sp.	A	Kuaihelani	
<i>Botryllus</i> sp.	A	Kuaihelani	

Table D.6e. Marine Alien Species of Papahānaumokuākea: Subphylum Vertebrata (fish)-3

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Lutjanus fulvus</i>	A	Lalo	
<i>Lutjanus kasmira</i>	A	Multiple locations	
<i>Cephalopholis argus</i>	A	Multiple locations	

Table D.6f. Marine Alien Species of Papahānaumokuākea: Phylum Cnidaria-2

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Pennaria disticha</i>	A	Multiple locations	
<i>Diadumene lineata</i>	A	Manawai	Not established

Table D.6g. Marine Alien Species of Papahānaumokuākea: Phylum Porifera (sponges)-17

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Heteropia glomerosa</i>	A		
<i>Halichondria</i> sp.	C	Manawai	Uncertain whether occurs
<i>Chelonaplysilla violacea</i>	C	Kuaihelani	
<i>Darwinella australiensis</i>	C	Kuaihelani	
<i>Dictyodendrilla dendyi</i>	C	Kuaihelani	
<i>Dysidea arenaria</i>	C	Kuaihelani	
<i>Cladocroce burapha</i>	C	Kuaihelani	
<i>Haliclona</i> sp.	C	Kuaihelani	
<i>Callyspongia</i> sp.	C	Kuaihelani	

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Lissodendoryx similis</i>	C	Kuaihelani	
<i>Monanchora cf. unguiculata</i>	A	Kuaihelani	
<i>Monanchora quadrangulata</i>	A	Kuaihelani	
<i>Crella (Yvesia) spinulata</i>	C	Kuaihelani	
<i>Phorbas burtoni</i>	C	Kuaihelani	
<i>Strongylamma wilsoni</i>	C	Kuaihelani	
<i>Tedania (Tedania) strongylostyla</i>	C	Kuaihelani	
<i>Tethya deformis</i>	C	Kuaihelani	

Table D.6h. Marine Alien Species of Papahānaumokuākea: Phylum Rhodophyta (red algae)-3

Species Name	Alien/ Cryptogenic	Distribution	Notes
<i>Hypnea sp.</i>	C	Multiple locations	
<i>Chondra sp.</i>	C	Kuaihelani, Manawai	
<i>Acanthophora spicifera</i>	A	Kuaihelani	

Appendix E: Analysis of Relevant Federal and State Statutes

The resources within the proposed sanctuary are protected under numerous federal and state laws and their clarifying regulations. These include, but are not limited to, those listed below. Specific descriptions of some that contribute to day-to-day management are further described.

Laws and Existing Management (EIS Section 4.2)

Numerous federal and state agencies provide regulatory oversight to the resources within or near the study area. Many of these are particularly relevant to the study area, as they provide the primary current regulatory framework for resources in the study area. This appendix provides information on these federal and state laws and policies and how they intersect with management of the study area. NOAA's proposed sanctuary designation complies with all applicable environmental laws and regulations associated with the study area.

Federal Actions – Statutes

Antiquities Act of 1906, 16 U.S.C. § 431, et seq.

This act grants the President the authority to designate as national monuments from federal lands to protect significant natural, cultural, or scientific features. Areas of the monuments are to be confined to the smallest area compatible with the proper care and management of the objects to be protected. Through Executive Order, President George W. Bush used the Antiquities Act to establish Papahānaumokuākea Marine National Monument in 2006. President Barack Obama also used the Antiquities Act to create the Monument Expansion Area to the Monument's current size.

National Marine Sanctuaries Act of 1972, as amended (16 U.S.C. 1431-1445c)

The National Marine Sanctuaries Act (NMSA) authorizes the Secretary of Commerce to designate and protect areas of the marine environment with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational or esthetic qualities as national marine sanctuaries. The proposed action is occurring under the authority of the NMSA. Consultations required under the NMSA are described at Appendix C.1.

National Wildlife Refuge System Administration Act of 1966, as amended, 16 U.S.C. §§ 668dd-ee

The National Wildlife Refuge System Administration Act (NWRSA) serves as the “organic act” for the National Wildlife Refuge System. The NWRSA consolidated the lands administered by the Secretary of the Interior, through the U.S. Fish & Wildlife Service (FWS), into a single National Wildlife Refuge System. The NWRSA establishes a process for determining compatible uses of NWRs so long as wildlife conservation is the overarching principle. The NWRSA reinforces and expands the “compatibility standard” of the Refuge Recreation Act. The Refuge Administration Act authorizes the Secretary to “permit the use of any area within

the System for any purpose including, but not limited to, hunting, fishing, public recreation and accommodations, and access whenever he determines that such uses are compatible with the major purposes for which such areas were established.” The NWRSA draws on the following previous acts;

- National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. §§ 668dd-ee),
- Refuge Recreation Act of 1966, as amended (16 U.S.C. 460k-460k-4)
- Fish and Wildlife Improvement Act of 1978, as amended, 16 U.S.C. 742l
- Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742a-742m)

The NWRSA notes that the Comprehensive Conservation Plan required for each NWR “shall, to the maximum extent practicable and consistent with this Act consult with adjoining federal, state, local, and private landowners and affected State conservation agencies; and coordinate the development of the conservation plan or revision with relevant State conservation plans for fish and wildlife and their habitats.”

Federal Actions – Executive Orders

Executive Order 1019—Hawaiian Islands Reservation, February 3, 1909

Executive Order (EO) 1019 established the Hawaiian Islands Reservation as a preserve and breeding grounds for native birds, making it unlawful for any person to hunt, trap, capture, willfully disturb, or kill any bird, or take their eggs. The EO defined the boundaries of the reservation as the “islets and reefs” of all land except Midway atoll. The Reservation became the Hawaiian Islands National Wildlife Refuge, managed by the U.S. Fish and Wildlife service.

Executive Order 10413, Restoring Kure (Ocean) Island to the Jurisdiction of the Territory of Hawaii, 17 FR 10497 (November 17, 1952)

During the build-up to World War II, the U.S. Navy took control and jurisdiction of Kure Atoll and built a LORAN station (EO 7299, February 10, 1936). EO 10413 restored jurisdiction of the atoll and surrounding reefs to the Territory of Hawaii, while still providing for the Navy to maintain and access the LORAN station.

Executive Order 13022—Administration of the Midway Islands, November 1, 1996 (61 FR 56875)

E.O. 13022 executed the transfer of control of Midway Atoll, including the land and marine waters to 12 nm, under Department of the Interior jurisdiction. The U.S. Fish and Wildlife Service (FWS) administers the Midway Islands as the Midway Atoll National Wildlife Refuge in a manner consistent with Executive Order 12996 of March 25, 1996, to: (1) maintain and restore natural biological diversity; (2) provide for the conservation and management of fish, wildlife and their habitats; (3) fulfill international treaty obligations with respect to fish and wildlife; (4) provide opportunities for scientific research, environmental education, and compatible wildlife dependent recreational activities; and (5) in a manner compatible with refuge purposes, recognize and maintain the historic significance of the Midway Islands consistent with E.O. 11593.

Executive Order 13089—Coral Reef Protection, June 11, 1998 (63 FR 32701)

E.O. 13089 for Coral Reef Protection created the U.S. Coral Reef Task Force, headed by the Secretaries of Commerce and Interior, fostering cooperation for protection of marine resources between these two agencies.

Executive Order 13158—Marine Protected Areas, May 26, 2000 (65 FR 34909)

E.O. 13158 for Marine Protected Areas (MPAs) directed the Departments of Commerce and Interior to develop a national system of MPAs. This E.O. included a Memorandum regarding Protection of U.S. Coral Reefs in the Northwest Hawaiian Islands, directing the Secretaries to “provide for culturally significant uses of the Northwest Hawaiian Islands’ marine resources by Native Hawaiians.” Native Hawaiians with decades of first-hand knowledge of the ecosystem’s fragility and dangers of over-exploitation gave testimony and support for greater protection of this area.

Executive Order 13178—Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, December 4, 2000 (65 FR 76903)

This E.O. established the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (Reserve) in the federal waters of the Northwestern Hawaiian Islands from 3 - 50 nm around all islands and atolls. The Reserve remains under the proposed action and is managed by the U.S. Department of Commerce through NOAA. The E.O. stated “[t]he Secretary shall initiate the process to designate the Reserve as a national marine sanctuary pursuant to sections 303 and 304 of the National Marine Sanctuaries Act.”

Executive Order 13196—Final Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, January 18, 2001 (66 FR 7395)

This executive order amended 13178, making the Reserve Preservation Areas permanent, capping the take of pelagic trolling and bottom fishing allowed in the Reserve, and establishing discharge regulations.

Federal Actions – Presidential Proclamations***Presidential Proclamations 8031—Establishment of the Northwestern Hawaiian Islands National Monument, June 15, 2006 (71 FR 36443)***

This proclamation established the Northwestern Hawaiian Islands, including all land and waters to 50 nm as a national marine monument, establishing a co-management authority between the Department of Interior (through the Fish and Wildlife Service, Department of Commerce (through the Office of National Marine Sanctuaries), and the State of Hawaii (through the Department of Land and Natural Resources).

Presidential Proclamation 8112—Amending Proclamation 8031 of June 15, 2006, To Read, “Establishment of the Papahānaumokuākea Marine National Monument,” February 28, 2007 (72 FR 10031)

This proclamation renamed the Monument and required that living resources harvested in the Monument under a Native Hawaiian Practices Permit must be consumed in the Monument.

Presidential Proclamation 9478—Papahānaumokuākea Marine National Monument Expansion (81 FR 60227)

This proclamation expanded the Monument from 50 to 200 nm. Proclamations 8031, 8112, and 9478 are discussed in detail in the draft EIS.

Federal Actions – Secretarial Orders

Department of the Interior Secretary’s Order 3217—Designation of the Battle of Midway National Memorial (September 13, 2000)

This Order recognized the Battle of Midway as one of the two most significant dates in U.S. Naval history. The memorial ensures that “the heroic courage and sacrifice of those who fought against overwhelming odds to win an incredible victory will never be forgotten.”

Federal Actions – Regulations

Papahānaumokuākea Marine National Monument Regulations, 50 CFR Part 404

Regulations codify prohibitions and management measures set forth in Presidential Proclamations 8031 and 8112, including those relating to boundaries, access, ship reporting requirements for Areas to be Avoided and Particularly Sensitive Sea Areas, prohibited activities, regulated activities, emergencies and law enforcement, armed forces actions, commercial fishing, permitting procedures and criteria, international law, boundaries of ecological preserves, special preservation areas and Midway Atoll Special Management Area. These regulations are discussed in detail in the draft EIS.

Papahānaumokuākea Marine National Monument Provisions, December 3, 2008, 73 FR 73592

These regulations, incorporated into 50 CFR 404, were promulgated following the International Maritime Organization 2008 designation of waters of the Monument as Particularly Sensitive Sea Areas, which expanded and consolidated the six existing Areas To Be Avoided, established in 1981, in the Monument into four larger areas, enlarged the class of vessels to which they apply, and established a NOAA ship reporting system for vessels transiting the Monument.

State of Hawai‘i Authorities and Actions

Hawaii Organic Act of April 30, 1900, c339, 31 Stat.141 § 2

The Organic Act established the Territory of Hawai‘i after the illegal overthrow of the Hawaiian Kingdom and the subsequent annexation of the Republic of Hawai‘I by the U.S.

Hawaii Admission Act of March 18, 1959, Pub. L. 86-3, 73 Stat. 4 § 2

The Admission Act granted the Territory of Hawai‘i statehood status and created the public land trust. Section 5 of the act established the public land trust. The trust has five trust purposes: the support of public schools and other public educational institutions, the betterment of the conditions of native Hawaiians, the development of farm and home ownership, and for the provision of lands for public use. The State of Hawai‘i and U.S. government are trustees with Native Hawaiians and the general public as beneficiaries. This trust was adopted in the Constitution of the State of Hawai‘i.

Constitution of the State of Hawaii, Article XI, §§ 1, 4, 6, and 9 and Article XII § 7

The State of Hawai‘i has constitutional public trust duties to protect and conserve its natural resources for future generations. The State also has a constitutional duty to protect Native Hawaiian traditional and customary practices.

Hawaii Environmental Policy Act, Title 19, Chapter 343, Hawaii Revised Statutes

The Hawaii Environmental Policy Act (HEPA), provides the basis for the public environmental review through disclosure documents such as an environmental impact statement or environmental assessment for certain individual or agency actions. The requirements of HEPA are presented in Hawaii Administrative Rules (HAR) Chapter 200.1. Comments received during public scoping are included in Appendix H, and relevant comments have been addressed in the EIS and attached appendices. This EIS and the associated public process meet the requirements of HEPA and HAR Chapter 200.1.

Physical Resources (EIS Section 4.3)

Federal Authorities

Air Quality and Climate Change

Federal Clean Air Act, 42 U.S.C. § 7401 *et seq.*

The federal Clean Air Act requires the USEPA to set National Ambient Air Quality Standards (40 CFR part 50) for six principal pollutants (“criteria” air pollutants) that can be harmful to public health and the environment (USEPA 2022c).

Section 176(c)(4) of the federal Clean Air Act contains provisions that apply specifically to federal agency actions, including actions that receive federal funding. This section of the Clean Air Act requires federal agencies to ensure that their actions are consistent with the Clean Air Act and with applicable state air quality management plans. The USEPA’s general conformity rule applies to federal actions occurring in nonattainment or in certain designated maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds under National Ambient Air Quality Standards. The federal agency providing the funding for the proposed action is responsible for submitting conformity determination documentation to the USEPA (USEPA 2022k, USEPA 2022a). Due to the remote nature of the sanctuary, permitted activities depend on large vessel support for both

transport and accommodations, which would be controlled under sanctuary designation. The number of permits has been in decline over the past 10 years, rendering fewer vessels operating within the proposed sanctuary. While the lands of Midway Atoll are outside of the proposed sanctuary, the National Wildlife Refuge accommodates 50–60 staff at any given time, and relies on supply barges that travel through the proposed sanctuary, and airplanes to maintain operations, a 2,600 mile round trip. The proposed sanctuary designation does not include stationary sources of emissions and would not result in emissions that exceed thresholds. Therefore, the proposed sanctuary designation is not subject to a formal conformity determination.

During scoping, the EPA recommended that the draft EIS include a draft general conformity determination to fulfill the public participation requirements of 40 CFR 93.156. In response, NOAA has reviewed the requirements of the Clean Air Act, and determined that a conformity determination is not required as the proposed action meets the *de minimis* standard on 40 CFR 93.153(c)(2). Specifically, the proposed action falls under three categories of actions determined to “result in no emissions increase or an increase in emissions that is clearly *de minimis*,” 1) “Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted,” and 2) “Rulemaking and policy development and issuance,” and 3) “Routine operation of facilities, mobile assets and equipment.”

MARPOL Annex VI Regulations for the Prevention of Air Pollution from Ships

Annex VI of MARPOL, the International Convention for the Prevention of Pollution from Ships, addresses air pollution from ocean-going ships. Annex VI’s international air pollution requirements set limits on nitrogen oxides emissions and require use of fuel with lower sulfur content to reduce ozone-producing pollution. Designated emission control areas set more stringent standards for sulfur oxides, nitrogen oxides, and particulate matter. These requirements apply to vessels operating in U.S. waters as well as ships operating within 200 nautical miles of the coast of North America, also known as the North American Emission Control Area (USEPA, 2021). In 2011, the International Maritime Organization adopted more stringent measures to significantly reduce the amount of greenhouse gas emissions from ships; these measures went into effect on January 1, 2013 (IMO 2019a). Transiting vessels, primarily international cargo ships, would be allowed to use identified sealanes in the sanctuary to avoid dangerous sea conditions, thus reducing fuel consumption, operating in calmer conditions, and reducing emissions.

Geology and Oceanography

Submerged Lands Act, 43 U.S.C. § 1301 *et seq.*

Under the Submerged Lands Act, the location of energy and mineral resources determines whether or not they fall under state control. The Submerged Lands Act granted states title to the natural resources located within 3 miles of their coastline. For purposes of the Submerged Lands Act, the term “natural resources” includes oil, gas, and all other minerals. The State has designated all State waters of Papahānaumokuākea, which includes a prohibition “to engage in any activity ... that can or does result in damaging or destroying coral.” This effectively prohibits

the exploitation of natural resources, as defined in the Submerged Lands Act, within State waters.

Deep Seabed Hard Mineral Resources Act, 30 U.S.C. § 1401 *et seq.*

The Deep Seabed Hard Mineral Resources Act establishes a U.S. legal regime for the exploration and recovery of hard mineral resources in the deep seabed, pending the United States' adoption of an international legal regime, such as the United Nations Convention on the Law of the Sea. Under the Act, "deep seabed" is defined to mean the seabed lying seaward of and outside of the continental shelf of any nation and any area of national resource jurisdiction of any nation that extends beyond the continental shelf, if such jurisdiction is recognized by the United States. The Act establishes a licensing and permit process for exploration and recovery of hard mineral resources for persons and entities under U.S. jurisdiction; the process helps to ensure the protection of the marine environment, safety of life and property at sea, prevention of unreasonable interference with other uses of the high seas, and conservation of mineral resources. With regard to minerals on the deep seabed, seabed nodules contain nickel, copper, cobalt, and manganese—minerals important to many industrial uses. Presidential Proclamations 8031 and 9478 withdrew all federal lands and interests in Papahānaumokuākea from the development of oil and gas, minerals, geothermal, or renewable energy. This foreclosure would be reinforced by proposed sanctuary regulations which include a prohibition on exploring for, or mining minerals.

Water Quality

Marine water quality is regulated by numerous statutes and government agencies. These serve to protect the marine environment from the various point and nonpoint sources of marine pollution.

Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq.*

The CWA was passed in 1972 by Congress, and amended in 1987. Point source discharges into waters of the United States are prohibited under the CWA unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits require compliance with technology- and water quality–based treatment standards. Two sections of the CWA deal specifically with discharges to marine and ocean waters.

In 2018, the EPA added Tern Island to the List of Impaired Waters (Section 303(d)) for trash, determining that waters around Tern Island are not meeting Hawaii's water quality standards for trash based on a Center for Biological Diversity review. The EPA recommended that NOAA consider strategies focused on minimizing trash and marine debris in the waters around Tern Island.

CWA Section 312 (33 U.S.C. § 1322) establishes a regulatory framework to protect human health and the aquatic environment from disease-causing microorganisms that may be present in sewage from boats. Pursuant to Section 312 of the CWA and its implementing regulations (33 CFR part 159), all recreational boats with installed toilet facilities must have an operable Marine Sanitation Device on board. All installed Marine Sanitation Devices must be USCG-certified.

USCG-certified devices are so labeled except for some holding tanks, which are certified by definition under Section 312 of the CWA (33 U.S.C. § 1322).

Under CWA Section 403 (33 U.S.C. § 1343), any discharge to the territorial seas (3 miles) or beyond also must comply with the Ocean Discharge Criteria established under CWA Section 403.

Section 404 of the CWA establishes a permit program to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Section 404 requires a permit before dredged or fill material may be discharged into waters of the U.S., unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities) (USEPA, 2022e).

Under Section 401 of the CWA, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the U.S. unless a Section 401 water quality certification is issued, or certification is waived. States and authorized tribes where the discharge would originate are generally responsible for issuing water quality certifications. In cases where a state or tribe does not have authority, the USEPA is responsible for issuing certification (33 U.S.C. § 1341) (USEPA, 2022d).

CWA Section 311 pertains to cleanup and removal of oil and/or hazardous substance discharges into navigable waters, adjoining shorelines, or certain other areas. Section 311(c)(1)(A) requires the President to ensure effective and immediate removal of a discharge by, for example, directing all federal, state, and private actions to remove a discharge or mitigate or prevent a substantial threat of a discharge (USEPA, 2023a).

The proposed action complies with the CWA through the permit process, ensuring permittees have an acceptable plan for addressing vessel discharge. Proposed regulations require innocent passage vessels to limit discharge to vessel engine cooling water, weather deck runoff, and vessel engine exhaust within a Special Preservation Areas or the Midway Atoll Special Management Area, and allow discharge of only deck wash, approved marine sanitation device effluent, cooling water, and engine exhaust in all other areas of the Sanctuary. Discharging or depositing any material inside or outside of the sanctuary by permitted vessels will be explicitly regulated via a sanctuary permit. Sanctuary designation also confers the powers of the NMSA, which allow for emergency action and cost recovery in the event of damage or potential damage to sanctuary resources, such as with a vessel grounding in which fuel, oil, or other fluid or debris may be released.

Vessel Incidental Discharge Act (Title IX of the Frank LoBiondo Coast Guard Authorization Act of 2018, Pub. L. 115-282)

The Vessel Incidental Discharge Act requires the USEPA to develop new national standards of performance for commercial vessel incidental discharges and the USCG to develop corresponding implementing regulations. Pursuant to the Vessel Incidental Discharge Act, the following interim requirements apply until the USEPA publishes future standards and the USCG publishes corresponding implementing regulations under the Vessel Incidental Discharge Act:

- For large, non-fishing commercial vessels: The existing vessel discharge requirements established through the USEPA 2013 Vessel General Permit and the USCG ballast water regulations, and any applicable state and local government requirements.
- For small vessels and fishing vessels of any size: The existing ballast water discharge requirements established through the USEPA 2013 Vessel General Permit and the USCG ballast water regulations, and any applicable state and local government requirements (USEPA, 2022j).

On October 26, 2020, the USEPA published a Notice of Proposed Rulemaking for Vessel Incidental Discharge National Standards of Performance under the 2018 Vessel Incidental Discharge Act (USEPA, 2022h).

Prior to the Vessel Incidental Discharge Act, the USEPA regulated incidental discharges from commercial vessels under the NPDES Permit Program, primarily through two NPDES general permits: the Vessel General Permit and the Small Vessel General Permit (USEPA, 2022i).

Title I of the Marine Protection, Research, and Sanctuaries Act (MPRSA), also known as the Ocean Dumping Act, t, 33 U.S.C. §§ 1401 *et seq.*

The MPRSA, also known as the Ocean Dumping Act, prohibits dumping into marine waters material that would unreasonably degrade or endanger human health or the marine environment. Ocean dumping cannot occur unless a permit is issued under the MPRSA. The USEPA is the permitting agency for the ocean disposal of all materials except dredged material. In the case of ocean disposal of dredged material, the decision to issue a permit is made by the USACE, using the USEPA's environmental criteria and subject to USEPA's concurrence (USEPA, 2022b).

Oil Pollution Act (OPA) of 1990, 33 U.S.C. § 2701 *et seq.*

The OPA of 1990 streamlined and strengthened the USEPA's ability to prevent and respond to catastrophic oil spills. A trust fund financed by a tax on oil is available to clean up spills when the responsible party is incapable or unwilling to do so. The OPA requires oil storage facilities and vessels to submit to the federal government plans detailing how they will respond to large discharges. The USEPA has published regulations for aboveground storage facilities; the USCG has done so for oil tankers. The OPA also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale (USEPA 2022g). See Section 4.6.2 (Overview of Vessel and Air Traffic) for more information.

MARPOL Annex I Regulations for the Prevention of Pollution by Oil

Annex I of MARPOL, the International Convention for the Prevention of Pollution from Ships, addresses pollution of the marine environment by oil pollution from ships. It details discharge requirements for prevention of pollution by oil and oily materials (IMO, 2019b).

MARPOL Annex IV Regulations for the Prevention of Pollution by Sewage from Ships

Annex IV of MARPOL, Prevention of Pollution by Sewage from Ships, contains a set of regulations regarding the discharge of sewage into the sea from ships, including: regulations regarding the ships' equipment, systems for the control of sewage discharge, the provision of

port reception facilities for sewage, and requirements for survey and certification. The regulations in Annex IV prohibit the discharge of sewage into the sea within a specified distance from the nearest land, unless otherwise provided, since it is generally considered that bacterial processes in the ocean are capable of processing raw sewage (IMO 2019b). Proposed regulations either prohibit or regulate all discharge throughout the proposed sanctuary.

MARPOL Annex V Regulations for the Prevention of Pollution by Garbage from Ships

The Act to Prevent Pollution from Ships (33 U.S.C. § 1901 *et seq.*) implements provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL), including Annex V, which regulates prevention of pollution by garbage from ships. The discharge of solid wastes in United States waters is regulated under the Act to Prevent Pollution from Ships, as amended by the Marine Plastic Pollution Research and Control Act of 1987, and the Clean Water Act. Under these laws, the disposal of plastics is prohibited in all waters, and other garbage, including paper, glass, rags, metal, and similar materials, is prohibited within 14 miles (12 nm) from shore (unless macerated). Garbage ground to pieces under an inch can be discharged beyond 3 nm from shore (IMO, 2019c). Proposed regulations either prohibit or regulate all discharge throughout the proposed sanctuary.

Coastal Zone Management Act of 1972 (CZMA), 16 U.S.C. 1451 *et seq.*

The CZMA provides incentives for coastal states to develop and implement coastal area management programs. Among other things, the CZMA requires states that participate in the National Coastal Zone Management Program (CZMP) to develop coastal nonpoint pollution control programs. Appendix C provides a summary of ONMS' consultation with the State of Hawai'i Office of Planning CZMP. NOAA will conclude the CZMA consultation process and document all compliance steps in the final EIS.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, as amended

CERCLA addresses cleanup of hazardous substances and mandates liability for environmental cleanup on those who release hazardous substances into the environment. In conjunction with the CWA, it requires preparation of a National Contingency Plan for responding to oil or hazardous substances release. The EPA placed Tern Island on the Federal Agency Hazardous Waste Compliance Docket in 2004 due to legacy military waste and associated hazardous substances buried on the island. EPA and FWS completed a CERCLA Preliminary Assessment (PA) of Tern Island in 2014, confirming that PCBs, lead, hydrocarbons, dioxins/furans, and heavy metals from onsite buried military wastes have been released in sensitive marine and terrestrial environments based on elevated levels of polychlorinated biphenyls (PCBs) in monk seals inhabiting the area. In 2019, EPA completed a removal assessment for hazardous substances on the island. Data from the report demonstrated elevated concentrations of metals, PCBs and PAHs in soil, groundwater, and surface water in the vicinity of the legacy "Bulky Dump" and the SE corner of the island. EPA is coordinating with FWS to conduct a removal action of these hazardous substances to mitigate impacts from the Bulky Dump (exposed during Hurricane Walaka) and other isolated areas of concern. At this time, Tern Island has not been included on the National Priorities List.

Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 *et seq.*

RCRA addresses hazardous waste management, establishing duties and responsibilities for hazardous waste generators, transporters, handlers, and disposers. RCRA requires that vessels that generate or transport hazardous waste offload these wastes at treatment or disposal facilities or outside of the territorial waters of the United States.

Marine Debris Act 33 U.S.C. § 1951 *et seq.*

The Marine Debris Act, signed into law in 2006 and amended in 2012, 2018, and 2020, established a Marine Debris Program within NOAA to identify, determine sources of, assess, prevent, reduce, and remove marine debris and address adverse impacts on the U.S. economy, the marine environment, and navigation safety. The Marine Debris Act also directs NOAA to provide national and regional coordination to assist states, tribes, and regional organizations in the process of addressing marine debris, and to undertake outreach and education activities for the public and other stakeholders on sources of marine debris, threats associated with marine debris, and approaches to identifying and addressing marine debris. NOAA has had an established marine debris program for Papahānaumokuākea since 1996, including a recent update to the Marine Debris Action Plan (NOAA Marine Debris Program, 2018). The impact of marine debris on Papahānaumokuākea resources continues to be a primary threat, and annual clean-ups currently continue through a partnership with NOAA and the Papahānaumokuākea Marine Debris Project (PMDP). Between 1996 and 2018, NOAA removed 923 metric tons of marine debris from Papahānaumokuākea, including 74 metric tons of marine debris from shallow coral reef and shoreline environments in 2018. From 2020 to 2023, PMDP removed an additional [228 metric tons of debris](#).

State Authorities

Conservation District, Chapter 183C, Hawaii Revised Statutes

HRS Chapter 183C establishes the State’s authority over submerged lands, including those of Papahānaumokuākea. The State Board of Land and Natural Resources provides a public process for review and determination of all permits requested for land uses within a conservation district. The rules for this program are presented in Hawaii Administrative Rules, Title 13, Chapter 5. This requirement will continue in the same manner under the proposed action.

Water Pollution, Chapter 342D, Hawaii Revised Statutes

The Hawaii State Department of Health implements regulations governing water quality in the State (HAR Chapter 11-54), including ensuring water quality standards are met. Chapter 11-55 includes water pollution laws and regulations, and issuing NPDES permits for point-source discharge under the authority of the CWA. The State also has Ballast Water Management rules (HAR Chapter 1–76) which complement federal regulations to prevent the introduction of invasive species through vessel ballast waters.

Biological Resources (EIS Section 4.4)

There are numerous federal and state laws and regulations providing protection of biological resources in the study area. An overview of some of the primary regulations and regulating agencies are summarized below (note, the following does not comprise a comprehensive list).

Federal Authorities

Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq.

The Endangered Species Act (ESA) of 1973, as amended, provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. The ESA directs all federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the act. NMFS works with USFWS to manage ESA listed species. Generally, NMFS manages marine species, while USFWS manages land and freshwater species. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future. When listing a species as threatened or endangered, NMFS or USFWS also designates critical habitat for the species to the maximum extent prudent and determinable (16 U.S.C. § 1533(a)(3)). Section 4.4 of the draft EIS provides information on threatened and endangered species in the project area. Section 5.3 analyzes the potential impacts of the designation (and not individual management activities or permitted actions) to these species. Appendix C provides a summary of the ESA Section 7 consultation process with NMFS and the FWS.

Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended, 16 U.S.C. § 1801 et seq.

Under the MSA, the U.S. claimed sovereign rights and exclusive fishery management authority over all fish, and all Continental Shelf fishery resources, within the U.S. EEZ (within 230 mi [200 nm] of the shoreline). The MSA established a procedure for authorizing foreign fishing, and prohibited unauthorized foreign fishing within the U.S. EEZ.

The MSA also established national standards for fishery conservation and management within the U.S. EEZ, and created eight Regional Fishery Management Councils composed of state officials with fishery management responsibility, the regional administrators of NMFS, and individuals appointed by the Secretary of Commerce who are knowledgeable regarding the conservation and management, or the commercial or recreational harvest, of the fishery resources of the geographical area concerned. The Councils are responsible for preparing and amending fishery management plans for each fishery under their authority that requires conservation and management.

Fishery management plans (FMPs) describe the fisheries and contain necessary and appropriate conservation and management measures, applicable to foreign vessels in U.S. waters and fishing by U.S. vessels. The plans are submitted to the Secretary of Commerce, who has delegated to NOAA approval of the plans. If approved, NMFS promulgates implementing regulations. NMFS may prepare Secretarial FMPs if the appropriate Council fails to develop such a plan.

The Fishery Ecosystem Plan for the Hawaiian Archipelago (WPFMC, 2009a) and the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region (WPFMC, 2009b) cover the proposed action area and were prepared by NMFS and the Western Pacific Fishery Management Council (WPFMC) to comply with section 303(a)(7) of the MSA to:

- Describe and identify EFH for the fishery;
- Designate Habitat Areas of Particular Concern (HAPC);
- Minimize to the extent practicable the adverse effects of fishing on EFH; and
- Identify other actions to encourage the conservation and enhancement of EFH.

EFH is broadly defined by depth in the Western Pacific Region as described in Section 4.3. No HAPC has been designated in the proposed action area and commercial fishing is prohibited throughout the action area by 50 CFR 404 and Presidential Proclamation 9478.

Fish and Wildlife Coordination Act and Implementing Regulations, 16 U.S.C. § 661 et seq.

Any federal agency that proposes to control or modify any body of water must first consult with the USFWS or NMFS, as appropriate, and with the head of the appropriate state agency exercising administration over the wildlife resources of the affected state. The USACE has a memorandum of understanding with the USFWS to provide a coordination act report to assist in planning efforts.

Marine Mammal Protection Act of 1972, 16 U.S.C. § 1361 et seq.

The MMPA, enacted by Congress on October 21, 1972, establishes a national policy to prevent marine mammal species and population stocks from declining beyond the point where they cease to be significant functioning elements of the ecosystems of which they are a part. The MMPA, as amended, prohibits, with certain exceptions, the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. The MMPA defines “take” as: “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal” (16 U.S.C. § 1362(13)). Harassment means any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment) (16 U.S.C. § 1362).

Section 101(a)(5)(A-D) of the MMPA provides a mechanism for allowing, upon request, the “incidental,” but not intentional, taking, of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing or directed research on marine mammals) within a specified geographic region. The NMFS Office of Protected Resources processes applications for incidental takes of small numbers of marine mammals. Authorization for incidental takes may be granted if NMFS finds that the taking would be of small numbers, have no more than a “negligible impact” on those marine mammal species or stocks, and not have an “unmitigable adverse impact” on the availability of the species or stock for “subsistence” uses. NMFS issuance of an incidental take authorization also requires NMFS to make determinations under NEPA and section 7 of the ESA.

Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. § 703 et seq.

The Migratory Bird Treaty Act of 1918 (MBTA) implements the U.S.'s commitment to bilateral treaties, or conventions, with Great Britain, Canada, Japan, Russia, and Mexico for the protection of shared migratory bird resources. The MBTA establishes that it is unlawful to pursue, hunt, take, capture, kill or sell migratory birds unless authorized by a permit issued by USFWS. Take is defined in regulations as: “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect” (50 CFR § 10.12). The statute does not discriminate between live or dead birds, and gives full protection to any bird parts including feathers, eggs and nests. The MBTA protects over 800 species of birds that occur in the U.S., and the list of migratory bird species protected by the MBTA is set forth in 50 CFR § 10.13. Of these migratory bird species protected under the MBTA, 21 species of seabirds nest on the islets within Papahānaumokuākea, while an additional 47 species of shorebirds may be found transiting, resting, or foraging within the study area. NOAA has determined that the proposed action would not cause the take of any migratory bird species protected under the MBTA, as detailed in Appendix C: Consultations.

Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990, 16 U.S.C. § 4701 et seq.

NANCPA mandates ballast water management for vessels entering the Great Lakes. This law was reauthorized as the National Invasive Species Act of 1996 (NISA 96; Pub. L. 104-332), which strengthened the 1990 law and required the development of voluntary ballast management guidelines for all other ships entering U.S. waters. The law also requires all vessels that enter U.S. territorial waters (with certain exemptions) to manage ballast water according to prescribed measures. NISA 96 also required the USCG to evaluate the effectiveness of the voluntary ballast management program three years after implementation. In 2004, voluntary guidelines were determined to be ineffective, and thus USCG initiated mandatory ballast management for all ships entering U.S. waters from outside the U.S. EEZ.

Under the proposed action, Vessel Hull, Tender Vessel, Gear and Ballast Water must be inspected and certified free of alien and invasive species before departure for the sanctuary. All permitted vessels currently undergo hull inspections, rodent inspections and adhere to strict cleaning protocols for personal gear and equipment. The Monument has a technical Invasive Algal Working Group, and NOAA conducts ongoing invasive species surveys.

USCG Ballast Water Management Regulation

Linked to the National Invasive Species Act of 1996, the USCG established the rule, “Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters” (77 FR 17253), which is codified at 33 CFR Part 151 and 46 CFR Part 162. The final rule became effective on June 21, 2012. The rule prohibits all vessels with ballast tanks to discharge untreated ballast water into U.S. waters. Ships must also manage their ballast water by following treatment methods and good practices.

Executive Order 13112—Invasive Species, February 3, 1999 (64 FR 6183)

E.O. 13112 tasked executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species

that are established. E.O. 13112 also tasked the Department of the Interior with establishing an Invasive Species Advisory Committee. President Biden’s E.O. 14048 (2021) reestablished the Invasive Species Advisory Committee. The proposed action would support the agency in meeting the mandates of E.O. 13112 to prevent the introduction and spread of invasive species because it would be prohibited to introduce or otherwise release from within or into the proposed sanctuary an introduced species. Invasive species are discussed in Section 4.7 of the draft EIS and introducing or otherwise releasing an introduced species from within or into the sanctuary is prohibited in the proposed rule.

State Authorities

Fishing in the Northwestern Hawaiian Islands, Title 12, Section 188-37, Hawaii Revised Statutes

The Board of Land and Natural Resources may issue permits for extractive activities in the Northwestern Hawaiian Islands. This permit is part of the rules for the Northwestern Hawaiian Islands Marine Refuge and built into the current Papahānaumokuākea permit.

Northwestern Hawaiian Islands Marine Refuge, Title 13, Ch. 60.5, Hawaii Administrative Rules (2005)

The Northwestern Hawaiian Islands Marine Refuge, established in 2005, includes the waters extending three miles seaward of any coastline from Nihoa to Hōlanikū (Kure Atoll), excluding Midway Atoll. Refuge rules prohibit access without a permit, and regulate extractive activities through the permit. These rules are built into the current Papahānaumokuākea permit approval process and will continue in the same manner under the proposed action.

Rules Regulating Wildlife Sanctuaries, Title 13, Ch. 126, Hawaii Administrative Rules

Hawaii Revised Statutes title 12, section 183D-4, provides that the Department of Land and Natural Resources may establish wildlife sanctuaries such as the Kure Atoll State Wildlife Sanctuary. The rules established to conserve, manage, and protect Hawai‘i’s indigenous wildlife and their habitats in sanctuaries are presented in Hawaii Administrative Rule title 13, chapter 126. The Kure Atoll State Wildlife Sanctuary was established in 1981. Green Island and Sand Island are closed wildlife sanctuaries meaning that entry is prohibited unless authorized by permit. This permit is built into the current Papahānaumokuākea permit approval process and will continue in the same manner under the proposed action.

Cultural Heritage and Maritime Heritage Resources (EIS Section 4.5)

Cultural and historical resources are regulated through numerous federal and state laws, as summarized below. Depending on the resources identified, the following authorities could apply within the study area.

Federal Authorities

National Historic Preservation Act, as amended, 16 U.S.C. § 470 et seq.

Cultural and historical resources on state and federal lands are protected primarily through the National Historic Preservation Act (NHPA) (16 U.S.C. § 300101 *et seq.*) of 1966 and its implementing regulations (found at 36 CFR Part 800). Section 106 of the NHPA requires federal agencies to identify and evaluate the effects of their actions on properties listed in or eligible for listing in the National Register of Historic Places (NRHP). Consultation with the State Historic Preservation Officer (SHPO), Native American tribes Tribal Historic Preservation Officer (THPO), the Advisory Council for Historic Preservation, and other interested parties is part of the regulatory process. The intent of the process is to require the federal agency, in consultation with other affected parties, to make an informed decision as to the effect its actions would have on something that may be important to our heritage. To be protected under the NHPA, a property must meet specific criteria of significance established under the NHPA's regulations at 36 CFR Part 60.

According to NHPA (36 CFR PART 800), the agency official shall apply the National Register criteria (36 CFR part 63) to properties identified within the area of potential effects that have not been previously evaluated for National Register eligibility, in consultation with the SHPO/THPO and any Indian tribe that attaches religious and cultural significance to identified properties, and guided by the Secretary's Standards and Guidelines for Evaluation. The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible. The agency official shall acknowledge that Indian tribes possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them.

Regarding assessment of adverse effects, NHPA (36 CFR § 800.5) states that the agency official shall apply criteria of adverse effects to historic properties within the area of potential effects, in consultation with the SHPO/THPO and any Indian tribe that attaches religious and cultural significance to identified historic properties. The agency official shall consider any views concerning such effects which have been provided by consulting parties and the public. A summary of the consultation process is provided in Appendix C. A determination from the State Historic Preservation Division will be included in the final EIS.

Archaeological Resources Protection Act of 1979, as amended, 16 U.S.C. § 470 aa-mm

The Archaeological Resources Protection Act governs the excavation of archaeological sites on federal and Indian lands in the United States, and the removal and disposition of archaeological collections from those sites. The Archaeological Resources Protection Act was enacted "to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained before October 31, 1979." This act also imposes criminal penalties for unauthorized excavations.

Native American Graves Protection and Repatriation Act of 1990, as amended, 25 U.S.C. § 3001 et seq.

This act requires federal agencies to identify and inventory possible Native American, native Alaskan, or native Hawaiian human remains, burial goods, or cultural items in their collections and to make them available for repatriation to affiliated tribes or lineal descendants. The act also establishes procedures for handling and disposing of such remains, burial goods, or cultural items discovered on federal lands.

The ongoing protection of Papahānaumokuākea’s cultural heritage is demonstrated through a series of management actions, including the development of Mai Ka Pō Mai, a collaborative management framework that guides Co-Trustee agencies towards integrating traditional Hawaiian knowledge systems, values, and practices into all areas of management. The Cultural Working Group provides recommendations on a variety of issues as they develop. The Native Hawaiian Practices permit is specifically authorized to further the living Native Hawaiian culture. These existing management measures ensure compliance with this Act.

National Marine Sanctuaries Act, Section 301(b)(7) (16 U.S.C. § 1431(b)(7))

Section 301(b)(7) of the National Marine Sanctuaries Act authorizes NOAA to “Develop and implement coordinated plans” with various government entities, including “Native American Tribes.” In 2000, Executive Order 13158: Marine Protected Areas reaffirmed this by stating each federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions. To the extent permitted by law and to the maximum extent practicable, each federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA.

Abandoned Shipwreck Act of 1987, 43 U.S.C. § 2101-2106

The Abandoned Shipwrecks Act is meant to protect historic shipwrecks in U.S. waters from treasure hunters and unauthorized salvagers by transferring the title of the wreck to the U.S. state whose waters it lies in. This Act covers non-military vessels, including whalers, sampans, and fishing vessels. Shipwrecks in federal waters remain under the jurisdiction of the federal government.

Sunken Military Craft Act of 2004, 10 U.S.C. § 113 et seq.

The primary purpose of the Sunken Military Craft Act of 2004 (SMCA) is to preserve and protect from unauthorized disturbance all sunken military craft that are owned by the United States government, as well as foreign sunken military craft that lie within U.S. waters. This act asserts federal ownership over sunken military craft, regardless of their location. A number of federal agencies, such as the U.S. Navy and the U.S. Coast Guard, have jurisdiction and management over sunken military craft, including statutory authority to conduct and permit specific activities. The Act provides that no person shall engage in or attempt to engage in any activity directed at a sunken military craft that disturbs, removes, or injures any sunken military craft, except — (1) as authorized by a permit under this title by the Secretary concerned; (2) as authorized by regulations issued under this title; or (3) as otherwise authorized by law. NOAA would coordinate with these applicable federal agencies, or state agencies if found within state waters, regarding activities directed at sunken military craft discovered within the sanctuary.

The Naval History and Heritage Command's Underwater Archaeology Branch is responsible for implementing SMCA and managing the Navy's collection of over 17,000 ship and aircraft wrecks located around the world. Therefore, the Naval History and Heritage Command is an important consulting party participating with NOAA in the National Historic Preservation Act Section 106 review process in the context of sanctuary designation. The Office of National Marine Sanctuaries and the Naval History and Heritage Command currently support heritage management efforts in Papahānaumokuākea through a memorandum of agreement on an ad hoc basis.

Antiquities Act of 1906, 54 U.S.C. § 320301 et seq.

In addition to being the authority that designated Papahānaumokuākea Marine National Monument (discussed above), this act requires a permit to excavate or remove any historic objects or antiquities from federal lands, and grants the President the authority to designate as national monuments landmarks of historic or scientific importance. The permit provisions of the Antiquities Act are generally enforced through the NHPA process.

Historic Sites, Buildings, Objects and Antiquities Act of 1935, 54 U.S.C. § 3201 et seq.

This act establishes the national policy of preserving historic sites, buildings, and objects of national significance and gives the Secretary of the Interior the power to make historic surveys and document, evaluate, acquire, and preserve archaeological and historic sites across the country. This act provided the authority behind the establishment of the National Historic Landmarks and Historic American Buildings Survey programs.

Archaeological and Historic Preservation Act (AHPA) of 1974

The AHPA applies to all federal agencies, requiring them to preserve historic and archeological objects and materials that would otherwise be lost or destroyed as a result of their projects or licensed activities or programs. The AHPA built upon the Historic Sites Act of 1935, which established historic preservation to be national policy. The act established permanent institutions and created a clearly defined process for historic preservation in the United States. Historic structures that would be affected by federal projects—or by work that was federally funded—now had to be documented to standards issued by the Secretary of the Interior. This act provides similar protections of the NHPA.

Preserve America Executive Order

This E.O. directs federal agencies to advance the protection, enhancement, and contemporary use of federal historic properties and to promote partnerships for the preservation and use of historic properties, particularly through heritage tourism.

American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996 and 1996a

The Act requires policies of all governmental agencies to eliminate interference with the free exercise of Native American religions, based upon the First Amendment to the United States Constitution, and to accommodate access to, and use of, Native American religious sites to the extent that the use is practicable and is consistent with an agency's essential functions.

State Authorities

Historic Preservation, Title 1, Chapter 6E, Hawaii Revised Statutes,

The Hawai'i Historic Preservation Program is managed by the Department of Land and Natural Resources State Historic Preservation Division. The program requires review of projects that may impact a historic site.

State Historic Preservation Division Rules, Title 13, Chapters 275-284, Hawaii Administrative Rules

This section of the HAR covers rules governing the Hawai'i Historic Preservation Program including historic preservation, archaeological site development, preservation, practices, surveys, reports, data, agency reviews, and other aspects of the program.

Socioeconomics, Human Uses, and Environmental Justice (EIS Section 4.6)

Federal Authorities

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations and Executive Order (EO) 14008: Tackling the Climate Crisis at Home and Abroad (2021)

E.O. 12898 directs federal agencies to identify and address disproportionately high and adverse effects of their actions on human health and the environment of minority or low-income populations. NOAA's compliance with this E.O is discussed in Section 4.6, Socioeconomic Resources, Human Uses, and Environmental Justice, of this EIS. The analysis of environmental justice issues associated with the proposed action are presented in Chapter 5: Environmental Consequences. The designation of national marine sanctuaries by NOAA helps to ensure the enhancement of environmental quality for all populations in the United States. In 2021, President Biden signed E.O. 14008 reaffirming E.O. 12898, stating in Sec. 219 that agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts. In addition, Sec. 220 of EO 14008 called for the creation of a White House Environmental Justice Interagency Council (Interagency Council) within the Executive Office of the President. The proposed sanctuary designation would not result in disproportionate negative impacts on any minority or low-income population. In addition, many of the potential impacts from designating the proposed sanctuary would result in long-term or permanent beneficial impacts by protecting sanctuary resources, which may have a positive impact on communities by providing employment and educational opportunities, and potentially result in improved ecosystem services.



Executive Order (EO) 13045, Protection of Children from Environmental Health or Safety Risks

In April 1997, President Clinton signed EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. This EO requires federal agencies to identify, assess, and address disproportionate environmental health and safety risks to children from federal actions.

Appendix F: Summary of Scoping Input on Notice of Intent and EIS Preparation Notice, and State of Hawai‘i Responses to Public Scoping Comments

1. Public Participation

Public involvement is a key component of both the NEPA and HEPA processes. Public input is formalized in a public scoping process and in prescribed public review/comment periods. Figure F.1 depicts the stages of public involvement in the HEPA/NEPA environmental processes, with opportunities for public input highlighted in yellow. HEPA and NEPA public involvement processes for this EIS are running concurrently to meet the requirements for both regulations.

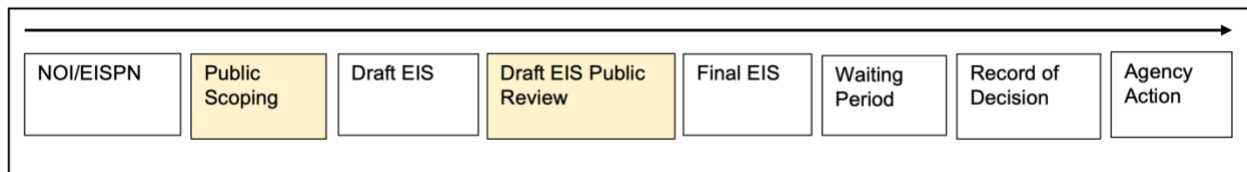


Figure F.1. NEPA/HEPA public participation process and opportunities for public input (yellow)

Notice of Intent/EIS Preparation Notice

NOAA’s NEPA notice requirements are codified in 32 CFR Part 651.45, which aligns with the requirements of 40 CFR Part 1506.11. Publication of an NOI in the Federal Register alerts the public of an agency’s intent to prepare an EIS and initiates the NEPA 30-day public scoping period. The NOI for this EIS was published on November 19, 2021 with a public comment period extending through January 31, 2022 (86 FR 64904).

In accordance with HAR Section 11-200.1-23, publication of the HEPA EIS Preparation Notice (EISPN) in the State Office of Environmental Quality Control (now Environmental Review Program) bi-monthly publication, The Environmental Notice, alerts the public of the applicant’s intent to prepare an EIS and initiates the HEPA 30-day public comment period. Notice of the HEPA EISPN availability was published in The Environmental Notice on December 8, 2021 with a public comment period extending through January 31, 2022. As required by HAR § 11-200.1-5(e)(4)(B), paper copies of the EISPN were submitted to the Hawai‘i State Library (Hawai‘i Document Center), Hilo Public Library, Lahaina Public Library, and Lihue Public Library.

Both of these public notifications included information on the public scoping meetings and how to participate in them. Additional information was provided via press releases, the Papahānaumokuākea Marine National Monument website, and the NOAA Office of National Marine Sanctuaries website.

Public consultation on effects of an action on historic properties is required in accordance with the National Historic Preservation Act (NHPA) Section 106, and HRS Chapter 343-2 requires an environmental assessment of cultural resources (Cultural Impacts Assessment or CIA) in determining the significance of a proposed project. These two processes will be conducted in

tandem with the HEPA/NEPA processes, and a CIA will be included as outlined by HAR §11-200-10 and 16 through 18.

2. Public Scoping Summary

The purpose of a public scoping process is to help identify reasonable alternatives and potential impacts and to obtain input from the community regarding key issues of concern and resources to be addressed or analyzed through the EIS process. In this regard, it helps to define the “scope” of issues and analyses in the EIS. The intent of a scoping process is to reach out early and engage a broad range of stakeholders with the purpose of informing and requesting input. Methods to solicit public input during the scoping process for this EIS included notification, publication of project information, and invitations to participate in scoping at various stakeholder meetings and presentations.

NOAA invited federal, state, and local agencies; Native Hawaiian organizations; and the public to participate in the scoping process. Written comments were accepted throughout the public scoping period using two methods:

1. through the federal eRulemaking portal at <https://www.regulations.gov>;
2. sent in a hard copy letter via U.S. Postal Service.

Four public meetings were held to gather input on the proposed sanctuary designation for Papahānaumokuākea. Public input on a variety of topics were specifically sought, including: proposed sanctuary boundaries; resources to protect; potential socio-economic, cultural, and biological impacts of concern; potential management measures, and regulations, but all input was accepted and recorded.

Due to the continuing COVID-19 threat, public scoping meetings were held virtually via Zoom. Based on the regulatory needs of the Monument agencies for recordkeeping, the meetings were moderated and recorded by a third-party provider. Meetings consisted of an informational presentation followed by an oral public comment period. All meetings were recorded as required by the State of Hawai‘i and transcribed. Transcripts are available upon request from NOAA.

A total of 143 people attended the virtual meetings, including agency representatives, with approximately 111 members of the public (based on non-governmental email addresses).

December 8, 2021 at 6:00PM HST – 52 participants

December 11, 2021 at 12:00PM HST – 28 participants

December 14, 2021 at 6:00PM HST – 30 participants

December 16, 2021 at 3:00PM HST – 33 participants

The virtual meetings were co-hosted by the National Oceanic and Atmospheric Administration (NOAA) and the State of Hawai‘i in cooperation with the U.S. Fish and Wildlife Service (FWS) and the Office of Hawaiian Affairs (OHA). The meetings were conducted through a web-hosted video-conference platform to allow participants to see speakers, view prepared slides, and record the meeting. The presentation provided a background on the NWHI, the significance of this area to Native Hawaiian culture as well as important flora and fauna. An overview of the

Proposed Action was given. Participants could pre-register to submit an oral comment at the meeting, but an opportunity to submit a comment without registering was also made available at the end of each meeting. Per HAR Section 11-200.1-23(d), the original recordings have been submitted as audio files with the draft EIS to the Environmental Review Program and are available from its online EA/EIS library. The transcripts for all oral comments are provided in Section 4. Written comments were accepted throughout the scoping period and are provided in Section 3. A list of all those that provided both written and oral comments during scoping is included in Table F.2.

Summary of Oral Public Input Received, By Topic

Only a few attendees chose to provide oral public comments during each virtual meeting. A total of 9 individuals, all Hawai‘i residents, provided comments. Comments mainly addressed the areas of resource protection, sanctuary boundaries, and fishery management. Additionally, two-thirds of speakers emphasized the importance of Native Hawaiian participation, and/or practices and/or perspectives. A summary of the oral public comments received can be found in Table F.1.

Table F.1. Summary of oral public input received (issues and recommendations)

Topic	Issue or Recommendation	# of references to topic
Sanctuary Boundary	<ul style="list-style-type: none"> • Include all of the Monument and MEA in the sanctuary. Area should be viewed and managed as one place - this is important biologically and culturally. • Consider Native Hawaiian perspective when zoning. • Honor past agreements with small fishers, regarding the footprint of a sanctuary, especially near Kaua‘i 	3
Resource Protection	<ul style="list-style-type: none"> • Resources of PMNM are fragile and exceptional. • Protection is essential to sustain native systems and wildlife. • A sanctuary would provide strong, lasting protections. • Life on earth depends on healthy oceans and ecosystems, so we need to protect them. • Not sure what we are protecting the resources from. 	6
Fishery Management	<ul style="list-style-type: none"> • Protect the fishing rights that had been established during 2016 expansion for fisher families in nearby islands. • Honor past agreements with small fishers. • Long-term sustainability is needed. • More fishery protection is needed. • Grant Native Hawaiian fishermen access to fishery if it is monitored and regulated. • Fish have been depleted at alarming rates. • Previous mismanagement of fisheries has negatively impacted the NWHI. We inherit the impacts of commercialism. • Fishers are constantly getting bombarded with fishing restrictions. Too many regulations on the little guy. • NOAA should honor past agreements made with small fishers regarding the footprint of a sanctuary, especially near the island of Kaua‘i. 	8

Topic	Issue or Recommendation	# of references to topic
Native Hawaiian Values, Practices and Contributions	<ul style="list-style-type: none"> • Voices of Native Hawaiians must be an integral part of the socio-economic conversations. • Look to, acknowledge, and/or build on the contributions of Native Hawaiians to the present PMNM management regime. 	4

N=9. Some participants provided input in multiple areas, therefore the number of references exceeds the number of participants.

Summary of Written Public Input Received, By Topic

A total of 73 written comment submissions were received during the scoping period. The team identified nine topics under which to categorize the comment submissions:

- 1) Economic/budget
- 2) Enforcement
- 3) Sanctuary Boundary
- 4) Threats
- 5) Fishery Management
- 6) NHPA 106 Properties
- 7) Native Hawaiian Values, Practices and Management
- 8) Sanctuary Regulations
- 9) Resource Protections

The number of times each category was mentioned can be seen in Figure F.2. A single commenter could provide input in multiple categories, therefore there is a larger number of category tallies than total comments.

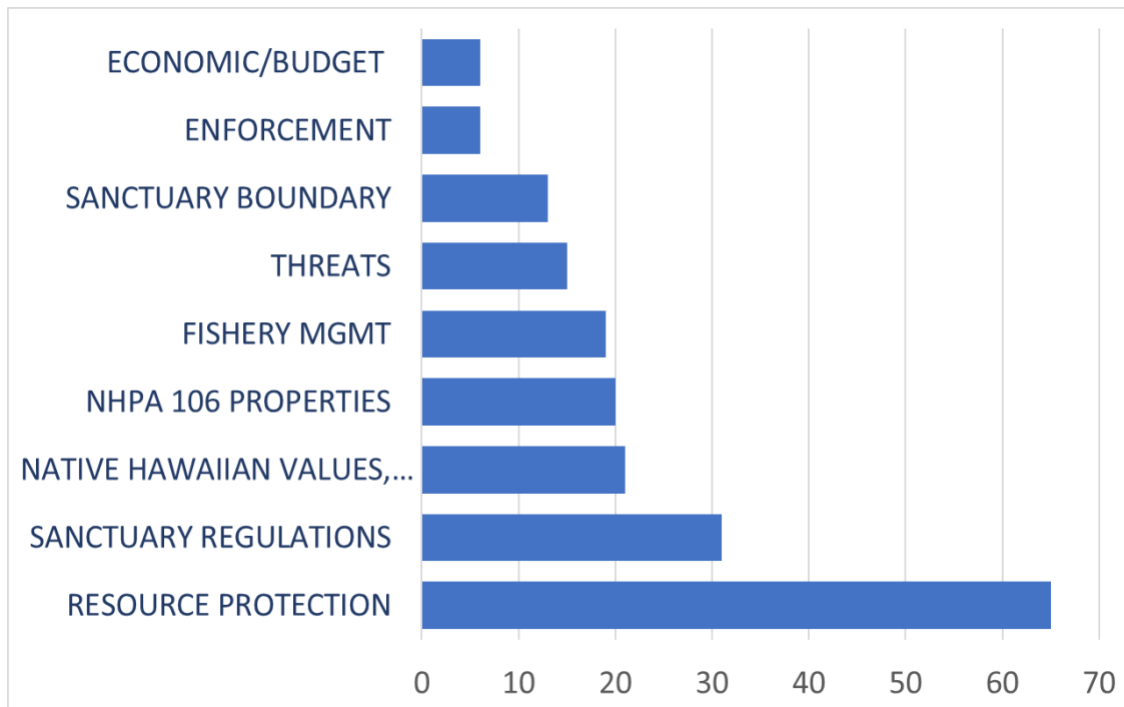


Figure F.2. Categories of written public comment submissions and number of references

Summary of Attitudinal Data Regarding Sanctuary Designation

Of the 82 total comments, 76% of comments were “pro-sanctuary” designation, 4% were against sanctuary designation and 20% did not definitively mention a pro or con attitude (see Figure F.3).

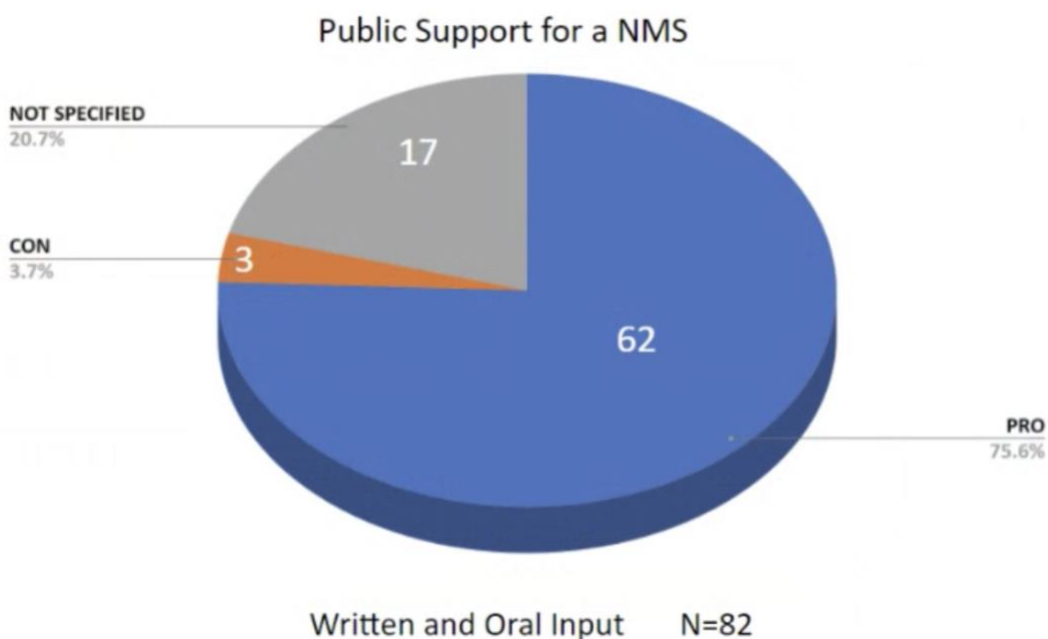


Figure F.3. Number and percentage of commenters who expressed positive or negative support of sanctuary designation

Summary of Comments by Geographic Location

The majority of the public comments were received from the continental United States (49) and Hawaii (19). Written public comments are available to view at the Regulations.gov website and transcripts of oral comments are available by request.

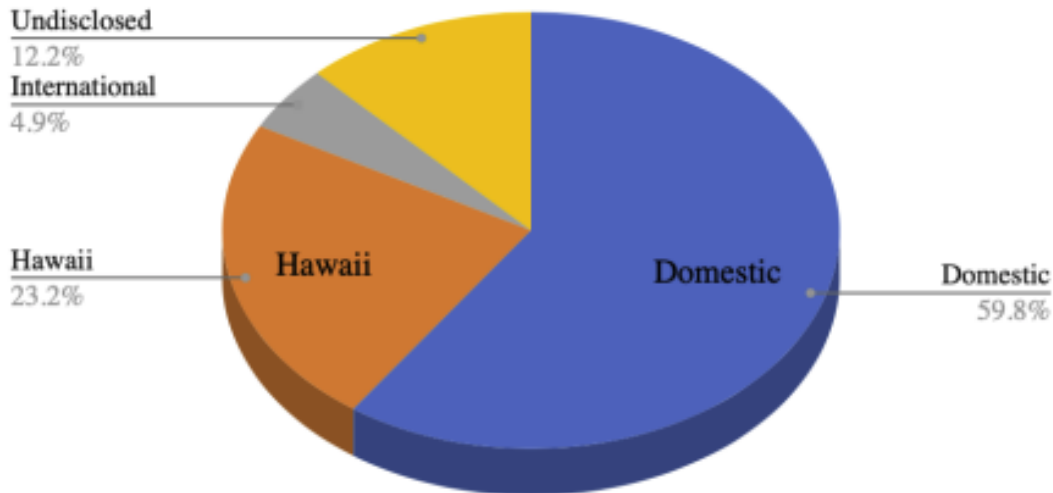


Figure F.4. Summary of public input: Origin of written and oral comments, N=82

Summary of State of Hawai'i Review of Substantive Comments Regarding Sanctuary Designation

All 82 written and oral communications were reviewed for substantive content and subsequently assigned to one or more subject categories. In determining whether a comment was substantive, the agency reviewers considered "... the validity, significance and relevance of the comment to the scope, analysis or process of the EIS (HAR Section 11-200.2-26[a])." For this EIS, comments that help refine the Proposed Action or alternatives; help inform the development of the EIS; or identify specific resource analyses to be conducted in the EIS were considered substantive. Statements considered to not be substantive were general comments with no specific information, such as those that stated preferences for or against the Proposed Action. A total of 51 comments were deemed substantive. From there, substantive comments were placed into one of four categories pertaining to the development of the draft EIS:

- 1) Purpose and Need
- 2) Alternatives
- 3) Affected Environment
- 4) Environmental Consequences

Section 3 includes all scoping comments received (both written and oral) and Section 4 provides responses to all substantive comments under the category headings listed above.

Table F.2. List of parties who submitted scoping comments

Parties	Provided Written Comment	Provided Oral Comment
Federal Agencies		
EPA	x	x
U.S. Navy	x	
State of Hawaii Agencies		
County of Hawaii Agencies		
Elected Officials		
Organizations		
Surfrider Foundation	x	x
The Pew Charitable Trusts (x2)	x	
National Marine Sanctuary Foundation (and partners)	x	
Ocean Sanctuaries	x	
Earth Island Shark Stewards	x	
Center for Sport Fishing Policy	x	
International Marine Mammal Project of Earth Island Institute	x	
Marine Mammal Commission	x	
The Deep Ocean Stewardship Initiative	x	
Cruise Lines International Association	x	
American Sportfishing	x	
Mystic Aquarium	x	
Creation Justice Ministries	x	
Defenders of Wildlife	x	
Northwest Hawaiian Islands Coral Reef Ecosystem Advisory Council (RAC) (X2)	x	
Center for Marine Conservation		
Individuals		
Michelle Johnston	x	
Callan Fromm	x	
John Pechin	x	
Constance Lombard	x	
Rick V. Macys	x	
Anonymous	x	
Karie Wakat	x	
Dave Treichel	x	
Beth Orcutt	x	
Katherine Weeks	x	
Cory H.	x	
Maureen Kellman	x	
Christopher Kelley	x	
Linda M.B. Paul	x	
Anonymous	x	
Michele Paularena	x	
Nancy Fleming	x	
Diane Kastel (x4)	x	
J. Thew	x	
Jennifer Valentine	x	
Daphne Alden	x	
Denise Martini	x	
Anonymous	x	
Gregory Gordon	x	
Vic Bostock	x	

Parties	Provided Written Comment	Provided Oral Comment
Scott Wolland	X	
Risa Mandell	X	
Julie Nagase Miller	X	
Stephanie Shorter	X	
J. Miller	X	
Jacqui Smith-Bates	X	
Neil Finlay	X	
Maria Gritsch	X	
Joe Smith	X	
Warren TenHouten	X	
Nancy Meehan	X	
Kelly Eigler	X	
Carol Jagiello	X	
Georgia Braithwaite	X	
Kristina Dutton	X	
Brad Nahill	X	
Susan Fleming	X	
Anonymous	X	
Elizabeth McCloskey	X	
Sarah Millisen	X	
Nancy Fleming	X	
Dinah Bear and Lois Schiffer	X	
Victor Carmichael	X	
Klayton Kubo		X
Devin Silva		X
Kenton Geer		X
Kolomona Kaho'ohalahala		X
Doug Fetterly		X
Tammy Harp		X
Brian Bowen		X

3. Scoping Comments

The following are written or transcribed comments received from parties listed in Table F.2.

3.1 Written Comments

3.1.1 Federal Agencies

U.S. Department of Navy (DON)

The Department of the Navy (DON) appreciates the opportunity to provide comments on the National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries (ONMS) notice of intent to prepare a draft environmental impact statement (EIS) to consider designating marine portions of the Papahānaumokuākea Marine National Monument (PMNM) as a national marine sanctuary. We look forward to working with NOAA, the U.S. Fish and Wildlife Service (FWS), the State of Hawaii, and the Office of Hawaiian Affairs during the designation process and request to be a cooperating agency for this EIS.

The Pacific region is an area of great strategic importance and focus for national defense and specifically for the DON. DON seeks to preserve the ability to conduct military activities in the Pacific as needed to support Navy and Marine Corps readiness and support U.S. national security initiatives. DON requests to be a cooperating agency in order to provide special expertise on potential Navy and Marine Corps equities that may be relevant to the sanctuary designation and management process. DON requests that the sanctuary designation process be consistent with the spirit and intent of the two Proclamations that established PMNM, directing that the management of this area not restrict or unduly burden the activities and exercises of the Armed Forces. A portion of PMNM overlaps with the Navy's temporary operating area within the Hawaii Range Complex; and training and testing activities that could occur within the PMNM include training by individual ships transiting to and from the Western Pacific on deployment or occasional positioning of ships supporting testing or other events outside of the Monument. Types of events can be in the air, at the surface, or sub-surface. The Navy previously considered the effects of training and testing in and around the Monument in its 2018 Hawaii and Southern California Training and Testing Environmental Impact Statement and earlier analysis around the Hawaiian Islands. Activities conducted in this area are performed in compliance with applicable environmental laws.

During the sanctuary designation process, consistent with the language in the Proclamation, the Navy requests that ONMS work with the Department of Defense (DoD), through the United States Navy, under the Sunken Military Craft Act regarding the protection of sunken craft which are under the DoD's jurisdiction. DON also requests the sanctuary designation process consider the rights, freedoms, and lawful uses of the sea recognized in customary international law. The proclamations establishing the PMNM are explicit that the designation shall be applied in accordance with international law, and include several statements about the applicability of management provisions to specific entities (e.g., foreign flag vessels, sovereign warships). DON recommends that the sanctuary incorporate the U.S. Armed Forces and emergency and law enforcement activities provisions of the proclamations, as well as the provisions that are in accordance with international law. Any permit system for research should include coordination with the Department of State regarding U.S. Marine Scientific Research policy, and consider appropriate boundaries for the protection and management of cultural resources outside of the contiguous zone and consistency with international law.

We look forward to working with NOAA, FWS, the State of Hawaii, and the Office of Hawaiian Affairs to facilitate the Sanctuary designation while ensuring Navy equities are considered. The Department of the Navy point of contact is: Matt Senska, Office of the Deputy Assistant Secretary of the Navy (Environment & Mission Readiness) [REDACTED].

U.S. Environmental Protection Agency (EPA)

Dear Athline Clark:

The U.S. Environmental Protection Agency has reviewed the National Oceanic and Atmospheric

Administration's Notice of Intent to prepare a Draft Environmental Impact Statement for the National Marine Sanctuary Designation for Papahānaumokuākea Marine National Monument

(Papahānaumokuākea Marine Sanctuary). Our review and comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The National Oceanic and Atmospheric Administration is preparing an Environmental Impact Statement to consider and disclose the anticipated environmental effects of designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary.

The Monument is administered jointly by four Co-Trustees—the Secretary of Commerce through the NOAA, the Secretary of the Interior through the U.S. Fish and Wildlife Service (USFWS), the State of Hawaii through the Governor and the Office of Hawaiian Affairs. The Monument Co-Trustees currently operate the Monument guided by a 2008 Monument Management Plan for Papahānaumokuākea and the residential Proclamations designating the Monument. Papahānaumokuākea Marine National Monument is one of the largest protected areas in the world. The original Papahānaumokuākea Marine National Monument and the Monument Expansion Area located around the Northwestern Hawaiian Islands, were established under the Antiquities Act through, respectively, Presidential Proclamation 8031 of June 15, 2006, as amended by Proclamation 8112 of February 28, 2007; and Proclamation 9478 of August 26,

2016. Proclamation 9478 expanded the Monument by an additional 442,781 square miles from 139,793 square miles to a total 582,574 square miles and directed NOAA to initiate the process to designate Papahānaumokuākea Marine National Monument as a National Marine Sanctuary.

The EPA offers the following scoping recommendations to NOAA to consider when preparing the Draft EIS, including impacts to biological resources, water quality for coral reef protection, water quality impairments from trash, legacy hazardous waste cleanup at Tern Island, and air quality. These issues are discussed further in the attached detailed comments. The EPA appreciates the Papahānaumokuākea Marine Sanctuary analysis utilizes best available science. Additionally, the EPA appreciates opportunities to participate in future review periods issued for updates to the overarching Monument Management Plan.

The EPA appreciates the opportunity to comment on the preparation of the Draft EIS. Once it is release for public review, please provide an electronic copy to me at [REDACTED]. If you have any questions, please feel free to contact me at [REDACTED] or by email.

Andrew Zellinger

Environmental Review Branch

[ATTACHED DOCUMENT]

U.S. EPA DETAILED COMMENTS ON THE SCOPING NOTICE FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE NATIONAL MARINE SANCTUARY DESIGNATION FOR PAPA HĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT, HONOLULU COUNTY, HAWAII – JANUARY 31, 2022

Purpose and Need

In the Draft EIS, clearly identify the underlying purpose and need to which NOAA is responding in proposing the alternatives (40 CFR 1502.13). The purpose of the proposed action is typically the specific objectives of the activity, while the need for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity. The purpose and need should be a clear, objective statement of the rationale for the proposed project.

Range of Alternatives

All reasonable alternatives that fulfill the proposed action's purpose and need should be evaluated in detail. A robust range of alternatives will include options for avoiding significant environmental impacts.

The environmental impacts of the proposed action and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of habitat impacted; change in water quality).

Baseline Environmental Conditions

When evaluating project effects, we recommend using existing environmental conditions as the baseline for comparing impacts across all alternatives, including the no-action alternative. This provides an important frame of reference for quantifying and/or characterizing magnitudes of effects and understanding each alternative's impacts and potential benefits. This is particularly important when there are environmental protections in place that are based on current conditions, such as total maximum daily loads (TMDLs) for impaired waterbodies. It can also be useful, although often less certain, to compare alternatives against a no action baseline that includes reasonably foreseeable future conditions.

The EPA recommends that the NEPA analysis compare and present impacts to resources against the existing conditions baseline using a consistent method to measure project impacts for all alternatives. By utilizing existing environmental conditions as a baseline, future changes to environmental resources can be more accurately measured for all alternatives, including the No Action alternative. We recommend that NOAA consider the following when defining baseline conditions:

- Verifying that historical data (e.g., data 5 years or older) are representative of current conditions.*
- Including resources directly impacted by the project footprint within the geographic scope of analysis, as well as the resources indirectly (or secondarily) impacted by the project. These*

indirectly impacted areas may include streams, wetlands, and aquatic, riparian, and meadow ecosystems.

Biological Resources

The document should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. We recommend that NOAA quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative. The EPA recommends engaging the U.S. Fish and Wildlife Service as early in the analysis as possible to ensure that the proposed alternatives account for the following:

- Impacts to special-status pieces found in the project area including the Hawaiian Monk seal, and green turtles;*
- Migratory Bird Treaty Act compliance; and*
- Protection from invasive species.*

Clean Water Act

List of Impaired Waters under Clean Water Act, Section 303(d)

EPA added Tern Island to the 303(d) list based on a review of data and information that the Center for Biological Diversity provided to the State of Hawaii for its 2018 Integrated Report. EPA determined that waters around Tern Island are not meeting Hawaii's water quality standards for trash based on this review.

States are required to develop a Total Maximum Daily Load for every pollutant/waterbody combination that are on its 303(d) list. States assign a priority ranking to waterbodies/pollutants on the list for TMDL development. Tern Island trash is currently listed as a low priority for TMDL development on Hawaii's list. It is possible for a waterbody to come off the 303(d) list without a TMDL if other restoration activities occur and new data and information show the waterbody is meeting water quality standards. We recommend that NOAA consider strategies focused on minimizing trash and marine debris in the waters around Tern Island throughout the Marine Sanctuary designation and management process.

Improving Water Quality to Protect Coral Reefs

EPA protects coral reefs by implementing Clean Water Act programs that protect water quality in watersheds and coastal zones of coral reef areas. EPA also supports efforts to monitor and assess the condition of U.S. coral reefs and conducts research into the causes of coral reef deterioration. EPA is developing tools to help adapt coral reefs to better handle changing conditions. 1. Much of EPA's work to protect coral reefs is conducted in partnership with other federal agencies, states, and territories. For example, EPA is an active member of the interagency U.S. Coral Reef Task Force. 2 EPA is currently developing an evidence map identifying and organizing existing literature evaluating the impact of water quality stressors on coral reef habitats.

Legacy Hazardous Waste Cleanup at Tern Island

Tern Island is a US Fish and Wildlife Service Refuge within the Papahānaumokuākea Marine National Monument. It served as a US Naval Air Facility and Refueling Station during WWII before serving as a US Coast Guard Long-Range Navigation Station from 1952-1979, after which it was transferred to FWS. Today it is recognized as a World Heritage Site and an increasingly important terrestrial location for several threatened and endangered species and 18 species of nesting seabirds. Tern Island was placed on the Federal Agency Hazardous Waste Compliance Docket in 2004. Legacy military waste and associated hazardous substances remain buried on the island. In 2012, EPA was petitioned by the CBD to conduct a CERCLA Preliminary Assessment (PA) of the Northwestern Hawaiian Islands, with a focus on the source and impact of plastic pollution on sensitive species. CBD agreed to EPA conducting a scaled down PA of Tern Island, which EPA completed in partnership with FWS in 2014. The PA confirmed that releases of hazardous substances--such as PCBs, lead, hydrocarbons, dioxins/furans, and heavy metals from onsite buried military wastes--have

occurred in sensitive marine and terrestrial environments and further action is needed.

In 2019, EPA completed a removal assessment for hazardous substances on the island. Data from the report demonstrated elevated concentrations of metals, PCBs and PAHs in soil, groundwater, and surface water in the vicinity of the legacy “Bulky Dump” and the SE corner of the island. On November 9, 2021, CBD sent EPA a letter seeking an update on EPA's investigations at Tern Island, noting the September 2014 PA "indicated that further evaluation was warranted at Tern Island."

Proposed Next Steps

EPA (in consultation with FWS) proposes to conduct a removal action on an emergency basis to

mitigate threats posed by hazardous substances which remain unaddressed. FWS and DOI staff and solicitors met with EPA recently to discuss coordination on a proposed hazardous substances removal action. The proposed action would abate hazardous substance impacts due to the Bulky Dump (exposed during Hurricane Walaka) and other isolated areas of concern. The action decouples the emergency action from the larger effort to restore the island, including the construction of a seawall to shore up the eroding dump area.

Air Quality

General Conformity

EPA's General Conformity Rule, established under Section 176(c)(4) of the Clean Air Act, provides a specific process for ensuring that federal actions do not interfere with a state's plans to attain or maintain NAAQS. For any criteria pollutants in the air basin of the project area where the air quality status is in nonattainment or attainment – maintenance,³ complete a general conformity applicability analysis (i.e., a comparison of direct and indirect emissions for each alternative with de minimis thresholds of 40 CFR 93.153). We recommend including a draft general conformity determination in the Draft EIS to fulfill the public participation requirements of 40 CFR 93.156.

Consultation with Tribal Governments

Executive Order 13175 “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000) was issued to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian Tribes. In the Draft EIS, describe the process and outcome of government-to-government consultation between NOAA and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative. As a general resource, the EPA recommends the document Tribal

Consultation: Best Practices in Historic Preservation, published by the National Association of Tribal Historic Preservation Officers.

National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 103 of the National Historic Preservation Act (NHPA). Historic properties under the NHPA are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office (SHPO/THPO). Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007 “Indian Sacred Sites” (May 24, 1996) requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside of the project area may also have religiously significant ties to lands within the project area and should, therefore, be included in the consultation process. The EPA recommends that the Draft EIS address the existence of Native Hawaiian sacred sites in the project area. Explain how the proposed action would address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how NOAA would ensure that the proposed action would avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. Provide a summary of all coordination with Native Hawaiians and with the SHPO/THPO, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

Environmental Justice

Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (February 11, 1994) and the “Memorandum of Understanding on Environmental Justice and Executive Order 12898,” released on August 4, 2011, direct federal agencies to identify and address disproportionately high and adverse

human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. CEQ guidance clarifies the terms low-income and minority population, which includes Native Americans, and describes the factors to consider when evaluating disproportionately high and adverse human health effects. The EPA⁵ recommends that the Draft EIS include an evaluation of environmental justice populations within the geographic scope of the project area. If such populations exist, describe how the proposed action would address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation and coordination with these populations. The EPA recommends the following for development of the EJ analysis:

- Consider Promising Practices for EJ Methodologies in NEPA Reviews when developing the EJ section of the EIS.
- Include a description of the area of potential impact used for the environmental justice impact analysis and provide the source of demographic information.
- Consider using EPA's Environmental Justice screening and Mapping Tool EJScreen⁶
- Disclose whether the project will result in a disproportionate and adverse impact on minority or low-income populations.
- Discuss potential mitigation measures for any anticipated adverse impacts to community members that could result from the project.
- Include opportunities for incorporating public input to promote context sensitive design, especially in minority and low-income communities.
- Document the process used for community involvement and communication, including all measures to specifically involve to low-income and minority communities. Include an analysis of results achieved by reaching out to these populations.
- Identify any specific actions proposed by NOAA to reduce emissions from the project, including use of low or zero-emissions construction equipment, and inclusion of alternative fuel and green technology infrastructure. Include an estimate of the air quality benefits and reduced adverse health effects that would result from each mitigation measure proposed. Identify any specific mitigation measures considered for sensitive populations (e.g., schools, daycare facilities, hospitals, senior centers, etc.).

References

¹ <https://www.epa.gov/coral-reefs/what-epa-doing-protect-coral-reefs>

² EPA coral reef contact information: <https://www.epa.gov/coral-reefs/forms/contact-us-about-coral-reefs>

³ Maintenance areas redesignated to attainment more than twenty years in the past are no longer required to comply with general conformity.

⁴ See http://www.nathpo.org/PDF/Tribal_Consultation.pdf

5 See *Promising Practices for EJ Methodologies in NEPA Reviews*, May 2016
https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf

6 <https://ejscreen.epa.gov/mapper/>

3.1.2 Organizations

Surfrider Foundation

As the Regional Manager of the Hawai'i Chapters of the Surfrider Foundation, I am writing to you in strong support to designate Papahānaumokuākea as a national marine sanctuary under the National Marine Sanctuaries Act. Hawai'i has four local chapters as part of our national non-profit network, which works with grass-roots activists everyday to protect the world's beaches, oceans, and waves. In all, Surfrider operates 85 chapters, 30 youth clubs, and reaches over a quarter million members, supporters, and activists.

In Hawai'i, as you know, the ocean is life, and the ocean is the very soul of those who call these remote islands home. Surfrider Foundation's four Hawai'i Chapters are some of the most active in our network and each year we work with the Hawai'i State Legislature and our City and County Councils to bring about progressive environmental policy shifts that will protect this public trust resource for generations into the future.

In addition, the current PMNM management structure is a model for shared governance with local Indigenous communities with the involvement of the Office of Hawaiian Affairs as a co-trustee. I highly encourage maintaining and strengthening this shared governance model in the consideration of sanctuary status. Studies have documented that local Indigenous communities are the best stewards of marine protection because of their framework of the responsibility for reciprocal caring for sacred non-human kin, which increases the likelihood of success of Papahānaumokuākea in achieving sanctuary goals.

On behalf of the Surfrider Foundation's Hawai'i Chapters, we urge you to take action to designate Papahānaumokuākea as a national marine sanctuary under the National Marine Sanctuaries Act. This additional layer of protection is important to permanently safeguard resources in the marine portions of the monument.

Mahalo for your leadership and for the time, energy, and consideration of such an important issue for the future of our oceans.

Sincerely,

Lauren Blickley

Hawai'i Regional Manager

Surfrider Foundation

████████████████████

████████████████

Pew Charitable Trusts

[1/31/22- First comment]

On behalf of The Pew Charitable Trusts we thank you for the opportunity to submit comments on the “Notice of Intent To Conduct Scoping and To Prepare an Environmental Impact Statement for the Proposed Designation of a National Marine Sanctuary Within Papahānaumokuākea Marine National Monument.” As home to more than 7,000 species, a quarter of which are endemic, Papahānaumokuākea safeguards key ecosystems and provides protection for organisms ranging from microscopic organisms to large marine mammals. Among these are rare species such as threatened green turtles, endangered Hawaiian monk seals, and false killer whales, as well as 14 million seabirds representing 22 species. We support a sanctuary designation provided it allows for highly or fully protected areas. Furthermore, we support designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary – but not if future management under the MSA opens it up to industrial fishing – which would be a step backwards and mean that the protections no longer qualify as an MPA under international standards. We also hope that the designation consider indigenous rights for durable conservation. Additionally, in order to have an effective MPA, sufficient funding and staffing is also required. We appreciate the opportunity to comment on the proposed sanctuary designation.

[1/31/22-Second comment]

Correction / replacement to earlier submission.

On behalf of The Pew Charitable Trusts, we thank you for the opportunity to submit comments on the “Notice of Intent To Conduct Scoping and To Prepare an Environmental Impact Statement for the Proposed Designation of a National Marine Sanctuary Within Papahānaumokuākea Marine National Monument.”

As home to more than 7,000 species, a quarter of which are endemic, Papahānaumokuākea safeguards key ecosystems and provides protection for a range of rare species such as threatened green turtles, endangered Hawaiian monk seals, and false killer whales, as well as 14 million seabirds representing 22 species. Given the site’s vital biological importance, we support designating Papahānaumokuākea Marine National Monument as a national marine sanctuary provided it maintains its status as highly/fully protected. Furthermore, we do not support future management that would allow industrial fishing – which would be a step backwards.

Sanctuary designation provides an opportunity to further integrate indigenous knowledge systems, values, and practices into the area’s management. Papahānaumokuākea is a place of honor and a deeply sacred space for Native Hawaiians, who maintain strong cultural ties to the land and sea and believe in the importance of managing the islands and waters inextricably connected to one another. As such, we urge relevant agencies to work with the Native Hawaiian Cultural Working Group, OHA, and the Native Hawaiian community throughout the sanctuary designation process and include the Mai Ka Pō Mai framework into the designation document, management plan, and regulations.

Additionally, we call for the sanctuary designation process to take measures to ensure that there is adequate funding in place for ongoing management. Staff and budget capacity have

been found to be the strongest predictors of conservation impact and the most important factors in explaining fish responses to MPA protection. MPAs with adequate capacity have shown ecological benefits that are 2.9 times greater than those with inadequate capacity (David Gill et al., 2017). According to a recent report by the Center for American Progress, many MPAs lack sufficient funding. Both staffing and financial resources should be carefully considered throughout the sanctuary designation process to ensure desired outcomes are effectively met.

We appreciate the opportunity to comment on the proposed sanctuary designation, and we look forward to working with NOAA to support continued protections for the Monument.

Earth Island Shark Stewards

In behalf of Sharks Stewards, a non profit shark and marine conservation organization based in California and Hawai'i, we strongly support designating Papahānaumokuākea Marine National Monument as a national marine sanctuary to enhance protections and safeguard resources in the marine portions of the Monument. We believe sanctuary designation will complement the efforts of the Office of Hawaiian Affairs, the state of Hawaii, and other federal agencies to conserve this nationally significant area and its cultural resources and bolster strong and lasting protection for the marine environment.

Papahānaumokuākea is a sacred place with deep cosmological significance to Native Hawaiians who have a genealogical relationship to all living things in the Hawaiian archipelago. The Monument is a mixed (natural and cultural) World Heritage Site and preserves sacred places, stories, artifacts, and strong Polynesian cultural ties to the land and seas, dating back more than a thousand years.

The island system supports a diversity of life, including over 7,000 species, many found nowhere else on earth. Threatened green sea turtles and endangered Hawaiian monk seals are among the rare species that inhabit the island chain.

It is critical that sanctuary designation strengthen and enhance the protection of Papahānaumokuākea, as designated under the Antiquities Act and the Presidential Proclamations. Those efforts should include integrating traditional Hawaiian knowledge systems, values, and practices into management. We oppose any regulatory or management measures that would decrease the current level of protection within the Monument and Monument Expansion Area.

- *The spatial extent of the proposed sanctuary and boundary alternatives.*

The existing boundaries of Papahānaumokuākea Marine National Monument cover 582,578 square miles. We recommend that NOAA's preferred alternative for the sanctuary's boundaries follow the current Monument boundaries, including the Monument area originally designated in Presidential Proclamation 8041 of June 15, 2006, and the Monument Expansion Area as specified in Presidential Proclamation 9478 of August 26, 2016. The sanctuary should include all the waters, submerged lands, and living and non-living resources within these areas. The shoreward boundary should extend to the mean high tide.

- *The location, nature, and value of the resources to protect by a sanctuary.*

The Papahānaumokuākea Marine National Monument provide a breeding areas for Hawaiian monk seals and four species of sea turtles, nesting sites for more than 14 million seabirds, and more than 5,000 square miles of coral reefs. Because this region is remote—nearly 3,000 miles from the nearest continent—life forms evolved here that exist nowhere else on earth. The Monument is one of the few intact, large-scale predator-dominated reef ecosystems left in the world. Researchers working in Papahānaumokuākea Marine National Monument continue to encounter new species: since 2000, scientists have discovered scores of new species of fish, coral, invertebrates, and even algae. The monument has significant living and non-living resources, cultural and natural seascapes, and geological features which deserve protection through sanctuary designation.

At least 23 species protected under the US Endangered Species Act inhabit the Monument, two national wildlife refuges, and two state-protected areas within its boundaries including endangered monk seals and green sea turtles.

The Monument provides critical foraging habitats for marine species and birds, including endangered Laysan albatross, Black-footed albatross, Bonin petrels and other seabird species that forage in the Monument. Three species of whales are threatened or endangered: sperm whales, fin whales, and sei whales, along with five species of protected sea turtles been sighted in the Monument. Sharks, including tiger sharks and Galapagos sharks, are key species in the Monument's ecosystems.

Native Hawaiians regard the Monument's atolls, islands, and waters as sacred places from which all life springs and ancestral spirits return after death. The Native Hawaiian belief systems regarding this genealogical relationship inform a set of responsibilities, rights, and privileges that Hawaiian people inherited to honor and protect their ancestors. Some islands have several names: one or more Hawaiian names that highlight a natural feature such as an abundance of sharks or a sacred quality ascribed to the place in traditional teachings, and an English name that often commemorates a historic shipwreck nearby.

Long-distance voyaging and wayfinding is a unique and valuable traditional practice that the Native Hawaiian community developed and advanced. Wayfinding relies on celestial, biological, and natural signs, such as winds, waves, currents, and the presence of birds and marine life. The Monument's open ocean ecosystem and its natural resources continue to be important in the Hawaiian Archipelago's cultural voyaging seascape and training ground for new generations of wayfinders.

Shipwrecks and aircraft in the Monument are of great historical interest and importance. The Monument is the final resting place of thousands of people lost during World War II battles. The submerged sites and scattered artifacts tell the stories of sailors and navigators who ventured throughout the Pacific. Interpretation of these shipwreck sites and the broader maritime heritage of Papahānaumokuākea Monument further our understanding of our connection to this place and our role in protecting its natural and cultural resources.

The sanctuary designation should protect all living, non-living, cultural, and maritime resources of the Monument and the cultural and natural seascapes of which they are an integral part.

- *Management measures for the sanctuary and any additional regulations that should be added under the NMSA to protect Monument Resources.*

Overall - Resource protection is the highest priority of the Monument, and the designation document, management plan, and regulations must be consistent with this priority. The sanctuary designation must augment and strengthen existing resource protections, increase regulatory compliance, ensure enforceability, and provide natural resources damage assessment authorities and interagency coordination of activities as provided in the National Marine Sanctuaries Act.

Presidential Proclamations 8031 and 9478 include prohibited activities which NOAA should incorporate into the sanctuary designation document, management plan, and regulations. Further, Presidential Proclamation 9478 provided a framework for managing the Monument Expansion Area, and NOAA should codify those protections in the designation document, regulations, and management plan.

Integration of Native Hawaiian cultural values and principles – "Mai Ka Pō Mai is a collaborative management framework intended to guide the Monument's co-trustees integration of traditional knowledge systems, values, and practices into management. Based on Hawaiian cosmology and worldview, the framework includes five management domains, four of the management domains are referred to as Kūkulu, and the central management domain is the Ho'oku'i. We strongly urge NOAA to embrace the framework and work with the Native Hawaiian Cultural Working Group, OHA, and the Native Hawaiian community to include the Mai Ka Pō Mai framework into the designation document, management plan, and regulations.

Fishing - The Magnuson–Stevens Fishery Conservation and Management Act (MSA) is the primary law that governs marine fisheries management in US federal waters. Its objectives are to prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable seafood supply. ONMS Director John Armor's letter of November 19, 2021, to Chairperson Soliai of the Western Pacific Regional Fishery Management Council stated that the MSA is the appropriate statute for managing fisheries within the proposed sanctuary. We strongly disagree and urge NOAA to adopt a joint regulatory approach at a minimum.

As mentioned above, the cultural and natural landscape of Papahānaumokuākea, their services, and the living and non-living resources in the Monument deserve protection under the sanctuary designation. Fish species are a critical part of the landscape, and their management must be part of the ecosystem. The National Marine Sanctuaries Act is the only ecosystem-based act that can achieve this goal through regulation. The ONMS regulations should be in addition to MSA regulations.

As mentioned above, the cultural and natural landscape of Papahānaumokuākea, their services, and the living and non-living resources in the Monument deserve protection under the sanctuary designation. Fish species are a critical part of the landscape, and their management must be part of the ecosystem. The National Marine Sanctuaries Act is the only

ecosystem-based act that can achieve this goal through regulation. The ONMS regulations should be in addition to MSA regulations and not a backstop.

Should ONMS choose not to regulate fisheries under the NMSA (a point we strongly disagree with), then the Secretary of Commerce must ensure the proposed regulations from the Western Pacific Fishery Management Council are consistent with Executive Order 13178 and Presidential Proclamations 8031 and 9478. If they are not, the Secretary of Commerce must reject the draft regulations.

Maritime Transportation - In 2008, the International Maritime Organization (IMO) designated the Monument a "Particularly Sensitive Sea Area." The Monument Management Board put additional domestic measures and best practices into place to protect the original Monument area. We recommend that the IMO designation applies to the Monument Expansion Area. Further, as part of the sanctuary designation process, ONMS should determine if additional regulatory and management controls are necessary.

Thank you for the opportunity to comment on the proposed sanctuary designation. We look forward to working with NOAA to enhance and strengthen protections for the Monument.

David McGuire, Director

Shark Stewards

Center for Sportfishing Policy

January 31, 2022

On behalf of the Center for Sportfishing Policy, thank you for the opportunity to comment on the Proposed Designation of a National Marine Sanctuary within Papahānaumokuākea Marine National Monument (Document ID NOAA-NOS2021-0114). As part of the scoping and environmental impact statement process, we strongly urge NOAA to allow and promote recreational fishing (noncommercial fishing) in the Monument Expansion Area as well as the entire Papahānaumokuākea Marine National Monument. We believe recreational anglers were wrongfully locked out of the Papahānaumokuākea Marine National Monument at its initial designation. And even though President Obama allowed recreational fishing in the expanded area, a permitting process has never been put into place. Recreational fishing has proven to be a compatible use in national marine sanctuaries and marine national monuments throughout America's oceans. Therefore, we ask NOAA to follow President Obama's proclamation 9478 permitting recreational fishing as a regulated activity within the Monument Expansion Area – "non-commercial fishing, provided that the fish harvested, either in whole or in part, cannot enter commerce through sale, barter, or trade, and that the resource is managed sustainably." Furthermore, allowing recreational fishing throughout the monument would also achieve President Biden's goal of increasing access for outdoor recreation while also meeting conservation objectives. Again, we appreciate the opportunity to comment on this process.

Sincerely,

Jefferson Angers

President

National Marine Sanctuary Foundation (and partners)

Dear Superintendent Clark,

We strongly support designating Papahānaumokuākea Marine National Monument as a national marine sanctuary to enhance protections and safeguard resources in the marine portions of the Monument. We believe sanctuary designation will complement the efforts of the Office of Hawaiian Affairs, the state of Hawaii, and other federal agencies to conserve this nationally significant area and its cultural resources and bolster strong and lasting protection for the marine environment.

Papahānaumokuākea is a sacred place with deep cosmological significance to Native Hawaiians who have a genealogical relationship to all living things in the Hawaiian archipelago. The Monument is a mixed (natural and cultural) World Heritage Site. It preserves sacred places, stories, artifacts, and strong Polynesian cultural ties to the land and seas, dating back more than a thousand years.

Coral islands, undersea volcanoes, flat-topped undersea mountains, banks, and shoals stretch 1,350 miles. The Monument supports a diversity of life, including over 7,000 species, many found nowhere else on earth. Threatened green sea turtles and endangered Hawaiian monk seals are among the rare species that inhabit the island chain.

The National Marine Sanctuaries Act established the National Marine Sanctuary System to protect areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or esthetic qualities. The monument is an area of national significance that merits this protection in addition to the protections provided by the Antiquities Act. It is critical that sanctuary designation strengthen and enhance the protection of Papahānaumokuākea, as designated under the Antiquities Act and the Presidential Proclamations. Those efforts should include integrating traditional Hawaiian knowledge systems, values, and practices into management. We oppose any regulatory or management measures that would decrease the current level of protection within the Monument and Monument Expansion Area.

In this letter, the terms "Papahānaumokuākea Marine National Monument" and "Monument" mean both the original Monument's boundaries and the Monument Expansion Area.

- *The role of scoping in the Environmental Impact Statement process.*

Scoping is a critical early step in the EIS process. It sets the boundaries of the analysis, helps to identify information sources, and helps to focus alternatives and identify issues to address within the EIS. A comprehensive scoping process is essential for identifying the "reasonable range" of alternatives in the EIS to address the purpose and need of proposed agency action. Each reasonable alternative must be rigorously explored and objectively evaluated, and each alternative considered in detail so that reviewers may evaluate their comparative merits. NOAA has an obligation under NEPA to compare the protections currently in place with the complexities of managing a national marine sanctuary. The environmental impact statement

should comprehensively explain the current protections and compare them to what would be changed by a sanctuary designation.

- *The spatial extent of the proposed sanctuary and boundary alternatives.*

The existing boundaries of Papahānaumokuākea Marine National Monument cover 582,578 square miles. We recommend that NOAA's preferred alternative for the sanctuary's boundaries follow the current Monument boundaries, including the Monument area originally designated in Presidential Proclamation 8041 of June 15, 2006, and the Monument Expansion Area as specified in Presidential Proclamation 9478 of August 26, 2016. The sanctuary should include all the waters, submerged lands, and living and non-living resources within these areas. The shoreward boundary should extend to the mean high tide.

- *The location, nature, and value of the resources to protect by a sanctuary.*

In 1999, President William J. Clinton established the Northwestern Hawaiian Island Coral Reef Ecosystem Reserve by Executive Order 13178. In 2006, President George W. Bush established Papahānaumokuākea Marine National Monument by Presidential Proclamation 8031. The proclamation included the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, the Midway National Wildlife Refuge, the Hawaiian Islands National Wildlife Refuge, and the Battle of Midway National Memorial. In 2010, UNESCO designated the monument as a mixed World Heritage site for its natural and cultural significance. In 2016, President Barack Obama expanded the monument to protect historic and scientific interest objects, geological and biological resources part of a highly pristine deep-sea and open ocean ecosystem, and an area of cultural significance to the Native Hawaiian community. The monument has significant living and non-living resources, cultural and natural seascapes, and geological features which deserve protection through sanctuary designation.

Papahānaumokuākea Marine National Monument is unique. The Monument is one of the few intact, large-scale predator-dominated reef ecosystems left in the world. It is home to more than 7,000 marine species. The islands and atolls—Kure (Hōlanikū), Midway (Kuaihelani), Pearl and Hermes (Manawai), Lisianski (Kapou), Laysan (Kamole), Maro Reef (Kamokuokamohoali'i), Gardner Pinnacles ('Ōnū nui and 'Ōnū iki), French Frigate Shoals (Lalo), Mokumanamana, and Nihoa—provide breeding areas for Hawaiian monk seals and four species of sea turtles, nesting sites for more than 14 million seabirds, and more than 5,000 square miles of coral reefs. Because this region is remote—nearly 3,000 miles from the nearest continent—life forms evolved here that exist nowhere else on earth. Researchers working in Papahānaumokuākea Marine National Monument continue to encounter new species: since 2000, scientists have discovered scores of new species of fish, coral, invertebrates, and even algae. Remarkably, on a 2015 expedition, scientists from NOAA and other institutions found that some deep reefs in Papahānaumokuākea were inhabited only by endemic species. This is the only known marine area where all resident species are endemic. At least 23 species protected under the US Endangered Species Act inhabit the Monument, two national wildlife refuges, and two state-protected areas within its boundaries. For example, Papahānaumokuākea provides nearly the entire Hawaiian nesting habitat for the threatened green turtle. On the undisturbed beaches, the turtles come ashore to bask in daylight, a behavior not seen in most other parts of the world. Critical geological features include

seamounts and a non-volcanic ridge that extends southwest towards the Johnston Atoll, which are biodiverse hotspots that provide habitat for deep-sea species. Seamounts, ridges, and other undersea topographic features enable marine organisms to range throughout the Hawaiian Archipelago and between Hawaii and other archipelagoes. Further, these features are home to species unknown to humans, with possible implications for research, medicine, and other uses. The Monument provides critical foraging habitats for marine species and birds. Laysan albatross, Black-footed albatross, Bonin petrels, shearwaters, petrels, tropicbirds, Short-tailed albatross, and other seabird species forage in the Monument, along with five species of protected sea turtles. Twenty-four species of whales and dolphins have been sighted in the Monument. Three species are threatened or endangered: sperm whales, fin whales, and sei whales. Acoustic evidence also shows that endangered blue whales visit the area and may migrate past the Hawaiian Islands twice a year. Sharks, including tiger sharks and Galapagos sharks, are key species in the Monument's ecosystems. Native Hawaiians regard the Monument's atolls, islands, and waters as sacred places from which all life springs and ancestral spirits return after death. The Native Hawaiian belief systems regarding this genealogical relationship inform a set of responsibilities, rights, and privileges that Hawaiian people inherited to honor and protect their ancestors. The Kumulipo describes the Hawaiian universe as comprising two realms, Pō and Ao. Ke ala polohiwa a Kāne (the dark shining path of Kāne), also known as the Tropic of Cancer, is considered the border between Pō and Ao. The island of Mokamanamana is located on this boundary and is the center of convergence between the two realms; the island sits near the entrance of Papahānaumokuākea Marine National Monument, as only the second island in the northwestern part of the chain. The Monument's name commemorates the union of Papahānaumoku and Wākea, the divine parents of the island chain, the taro plant, and the Hawaiian people. Some islands have several names: one or more Hawaiian names that highlight a natural feature such as an abundance of sharks or a sacred quality ascribed to the place in traditional teachings, and an English name that often commemorates a historic shipwreck nearby. Long-distance voyaging and wayfinding is a unique and valuable traditional practice that the Native Hawaiian community developed and advanced. Wayfinding relies on celestial, biological, and natural signs, such as winds, waves, currents, and the presence of birds and marine life. The Monument's open ocean ecosystem and its natural resources continue to be important in the Hawaiian Archipelago's cultural voyaging seascape and training ground for new generations of wayfinders. Shipwrecks and aircraft in the Monument are of great historical interest and importance. The Monument is the final resting place of thousands of people lost during World War II battles. The submerged sites and scattered artifacts tell the stories of sailors and navigators who ventured throughout the Pacific. Interpretation of these shipwreck sites and the broader maritime heritage of Papahānaumokuākea Monument further our understanding of our connection to this place and our role in protecting its natural and cultural resources. The sanctuary designation should protect all living, non-living, cultural, and maritime resources of the Monument and the cultural and natural seascapes of which they are an integral part.

- Management measures for the sanctuary and any additional regulations that should be added under the NMSA to protect Monument Resources.

Overall - Resource protection is the highest priority of the Monument, and the designation document, management plan, and regulations must be consistent with this priority. The sanctuary designation must augment and strengthen existing resource protections, increase regulatory compliance, ensure enforceability, and provide natural resources damage assessment authorities and interagency coordination of activities as provided in the National Marine Sanctuaries Act.

Presidential Proclamations 8031 and 9478 include prohibited activities which NOAA should incorporate into the sanctuary designation document, management plan, and regulations. Further, Presidential Proclamation 9478 provided a framework for managing the Monument Expansion Area, and NOAA should codify those protections in the designation document, regulations, and management plan.

Integration of Native Hawaiian cultural values and principles – "Mai Ka Pō Mai is a collaborative management framework intended to guide the Monument's co-trustees integration of traditional knowledge systems, values, and practices into management. Based on Hawaiian cosmology and worldview, the framework includes five management domains, four of the management domains are referred to as Kūkulu, and the central management domain is the Ho'oku'i. We strongly urge NOAA to embrace the framework and work with the Native Hawaiian Cultural Working Group, OHA, and the Native Hawaiian community to include the Mai Ka Pō Mai framework into the designation document, management plan, and regulations.

Fishing - The Magnuson–Stevens Fishery Conservation and Management Act (MSA) is the primary law that governs marine fisheries management in US federal waters. Its objectives are to prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable seafood supply. ONMS Director John Armor's letter of November 19, 2021, to Chairperson Soliai of the Western Pacific Regional Fishery Management Council stated that the MSA is the appropriate statute for managing fisheries within the proposed sanctuary. We strongly disagree and urge NOAA to adopt a joint regulatory approach at a minimum.

As mentioned above, the cultural and natural landscape of Papahānaumokuākea, their services, and the living and non-living resources in the Monument deserve protection under the sanctuary designation. Fish species are a critical part of the landscape, and their management must be part of the ecosystem. The National Marine Sanctuaries Act is the only ecosystem-based act that can achieve this goal through regulation. The ONMS regulations should be in addition to MSA regulations and not a backstop.

Should ONMS choose not to regulate fisheries under the NMSA (a point we strongly disagree with), then the Secretary of Commerce must ensure the proposed regulations from the Western Pacific Fishery Management Council are consistent with Executive Order 13178 and Presidential Proclamations 8031 and 9478. If they are not, the Secretary of Commerce must reject the draft regulations.

Maritime Transportation - In 2008, the International Maritime Organization (IMO) designated the Monument a "Particularly Sensitive Sea Area." The Monument Management

Board put additional domestic measures and best practices into place to protect the original Monument area. We recommend that the IMO designation applies to the Monument Expansion Area. Further, as part of the sanctuary designation process, ONMS should determine if additional regulatory and management controls are necessary. Thank you for the opportunity to comment on the proposed sanctuary designation.

We look forward to working with NOAA to enhance and strengthen protections for the Monument.

National Marine Sanctuary Foundation

Azul

Brown Girl Surf

Center for Biological Diversity

Creation Justice Ministries

EarthEcho International

Earthjustice Environment America

Friends of the Earth

GreenLatinos

Greenpeace USA

Healthy Ocean Coalition

Inland Ocean Coalition

League of Conservation Voters

Marine Conservation Institute

National Ocean Protection Coalition

National Parks Conservation Association

Oceana

Ocean Conservation Research

Ocean Defenders Alliance

Ocean Preservation Society

Only One

Patagonia

SeaLegacy

Shark Stewards

Sol Kaho'ohalahala

Surfrider Foundation

The Ocean Project

Tribal Trust Foundation

Virginia Aquarium & Marine Science Center

WILD COAST

WILD Foundation

International Marine Mammal Project of Earth Island Institute

We submitted comments by mistake to this online form for the Chumash Heritage National Marine Sanctuary. We are in favor of the proposed establishment of a National Marine Sanctuary within the boundaries of the Papahānaumokuākea Marine National Monument,

and encourage NOAA to proceed with the development of the Environmental Impact Statement. Thank you.

Ocean Sanctuaries

Only 2% of the world's oceans are unprotected by MPAs, so please, we need more of this type of legal protection.

Marine Mammal Commission

Dear Ms. Clark:

On 19 November 2021, the National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries (ONMS) published in the Federal Register a Notice of Intent (86 Fed. Reg. 64904) to prepare a draft environmental impact statement (DEIS) and hold public scoping meetings to consider designating the marine portions of the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary (NMS). That notice indicated that NOAA is working in cooperation with the U.S. Fish and Wildlife Service, the State of Hawai'i, and the Office of Hawaiian Affairs on the possible sanctuary designation and that "the DEIS will evaluate a reasonable range of alternatives that could include different options for management goals or actions, sanctuary regulations, and potential boundaries." NOAA is inviting comments on the scope of issues to be considered in the DEIS and their significance. The DEIS is expected to inform NOAA's decision on the sanctuary designation and development of a draft sanctuary management plan, proposed sanctuary regulations, and proposed terms of designation.

*The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors, has reviewed the Federal Register notice and other relevant documents and offers herein its comments and recommendations. The Commission's primary concern with a sanctuary designation is how it would affect marine mammals that occupy or travel through the Northwestern Hawaiian Islands and surrounding waters (NWHI), and the ecosystems that support those species. The Commission is especially interested in the impacts of potentially permitted human activities on Hawaiian monk seals (*Neomonachus schauinslandi*), the NWHI insular stock of false killer whales (*Pseudorca crassidens*), insular populations of other odontocetes, and the Central North Pacific stock of humpback whales (*Megaptera novaeangliae*) that winters in the Hawaiian Islands.*

Background

Threats to Marine Mammals

Because human activities in the Monument are currently limited to research, education, Native Hawaiian practices, and a small number of recreational trips to historical sites at Midway Atoll, current threats to marine mammals associated with those activities are being managed. However, the sanctuary designation process creates the potential for long-prohibited fishing to be permitted again, and the Commission considers fishing to be a significant threat to a number of marine mammals. In addition, there are at least two longstanding and ongoing significant human caused threats to marine mammals in the Monument. First, large quantities

of marine debris, including derelict fishing gear, can be found in Monument waters. Most of this debris comes from outside the Hawaiian Archipelago (Boland & Donohue 2003). Entanglement of endangered monk seals, especially young animals, is one of the largest sources of injury and mortality for the population in the NWHI. Second, global warming and its secondary and tertiary impacts (e.g., sea level rise, prey impacts) are potential threats to marine mammals in the Monument. The monk seal population relies on a relatively small amount of low-lying island habitat for giving birth, nursing young, and resting. Significant loss and degradation of this critical terrestrial habitat have already occurred and this is expected to continue, representing a threat to the persistence of monk seals in most of the NWHI (Baker et al. 2006, Reynolds et al. 2012, Baker et al. 2020).

*Two dozen species of marine mammals are found in the NWHI. Because of the remoteness of the islands, we know relatively little about most of the species or stocks, with the exception of the endangered Hawaiian monk seals, which have been studied intensively for decades. Because the islands are largely uninhabited by humans, the number of threats to these species and stocks from human activities is low compared to archipelagoes with or near large population centers. As elsewhere in the nation and the world, fishing poses the greatest threat to most species and stocks of marine mammals in the NWHI. Almost all fishing is currently prohibited in the Monument, but fishing was a concern in the past and could be again should regulations change. We know from scientific studies and data gathered in the Main Hawaiian Islands and elsewhere where the same or similar species occur that cetaceans and monk seals are at considerable risk from a variety of fishing gear types. In the Hawaiian Islands, fisheries that pose the greatest threat include those that deploy various types of hook and line gear (e.g., long lines, short lines, bottom hook and line, trolling lures), gill nets, and trap gear. The deep-set long-line fishery is known to kill or seriously injure substantial numbers of odontocetes, and is especially a problem for the pelagic stock of false killer whales (Carretta et al. 2021). In recent decades, bycatch of pelagic false killer whales within the U.S. Exclusive Economic Zone (EEZ) has often exceeded NMFS's sustainability reference point, the potential biological removal level (PBR). If long-line fishing were to be allowed within Monument waters, then it certainly would pose a significant threat to the insular population of false killer whales that occurs there, and possibly to other insular populations of odontocetes (e.g., pantropical spotted (*Stenella attenuata*) and spinner (*Stenella longirostris*) dolphins) (Baird et al. 2015). In the early 1990's, monk seal injuries in the NWHI resulted from interactions with the longline fleet (Nitta and Henderson 1993). If once again permitted in the NWHI, bottomfish hook and line gear has the potential to hook, snag or entangle cetaceans and monk seals. A wide variety of gear types is used in fisheries in near-shore waters of the MHI, many of which are known to cause hookings and entanglements of small cetaceans and monk seals. If such gear types were allowed to be used in the NWHI, they would pose a similar threat to the same species. Finally, elsewhere in the world, entanglement in gill nets and the buoy lines of trap gear is known to be a significant source of mortality for large whales, and the same could be true if certain types of these gears were allowed beyond the coral reefs in the NWHI.*

Protection of Marine Mammals in the NWHI

Early Fisheries Management Measures—In response to hookings and injuries of monk seals and other species, NMFS prohibited long-line fishing within 50 nm of the NWHI in 1991.

Commercial lobster fishing, which began in the NWHI in 1983, experienced declining catch rates over the next two decades, prompting the Western Pacific Fishery Management Council (WesPac) and NMFS to close the fishery temporarily several times in the 1990s. Apparently in response to a lawsuit brought by several environmental organizations and a recommendation from the Commission, NMFS set the annual harvest limit to zero for the 2000 season, and continued that policy through 2006, when the fishery closure was made permanent by a presidential proclamation (see below).

Executive Order 13178— President Clinton issued E.O. 13178 on 4 December 2000, (subsequently amended by E.O. 13196) creating the Northwest Hawaiian Islands Coral Reef Ecosystem Reserve (the Reserve) under the authority of the NMSA (16 U.S.C. § 1431 et seq.). Section 3 of E.O. 13178 defined the Reserve to “include submerged lands and waters of the Northwestern Hawaiian Islands, extending approximately 1,200 nautical miles (nm) long and 100nm wide.” Section 2 stated that the Reserve’s purpose was “to ensure the comprehensive, strong, and lasting protection of the coral reef ecosystem and related marine resources and species (resources) of the Northwestern Hawaiian Islands.” The Reserve’s management principles, established in section 4, and its management plan, in section 5(b), provided for:

- “The long-term conservation and protection of the coral reef ecosystem and related marine resources and species of the Northwestern Hawaiian Islands in their natural character” as the Reserve’s principal purpose;
- Using “available science and applying a precautionary approach with resource protection favored when there is a lack of information regarding any given activity, to the extent not contrary to law;”
- “The restoration or remediation of any degraded or injured resources of the Reserve;”
- The “enforcement and surveillance” of the Reserve’s regulations;
- The “identification of potential tourism, recreational, and commercial activities within the Reserve and actions necessary to ensure that these activities do not degrade the Reserve’s resources or diminish the Reserve’s natural character;” and
- Promulgation of “any regulations, in addition to the conservation measures and Reserve Preservation Areas established under [E.O. 13178], that the Secretary determines are necessary to manage the Reserve....”

Of particular interest to the Commission are the Reserve’s fishing regulations. The E.O. allowed commercial and recreational fishing to continue at levels no greater than were occurring in December 2000 (E.O. 13178 Section 7), except in the Reserve Preservation Areas established in Section 8 of the E.O., within which all fishing was prohibited.

Presidential Proclamation 8031

—President George W. Bush issued this proclamation on 15 June 2006 and a subsequent amendment later that year, using his authority under the Antiquities Act to establish the Papahānaumokuākea Marine National Monument (PMNM or the Monument). Presidential Proclamation 8031 required the Secretary of Commerce, in consultation with the Secretary of

the Interior and the State of Hawaii, to develop a management plan for the Monument that would “preserve the marine area of the Northwestern Hawaiian Islands and certain lands as necessary for the care and management of the historic and scientific objects therein.” The PMNM management plan was based on a management plan then being developed for a prospective NMS in the NWHI. The proclamation prohibited a number of activities within the Monument, including:

- “Exploring for, developing, or producing oil, gas, or minerals”;
- “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 monument resource;” and
- “Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the monument.”

The proclamation set the lobster harvest limit within the Monument to zero, but allowed commercial fishing for bottom and pelagic species to continue, subject to harvest limits and other requirements, for a five-year period, after which all commercial fishing would be prohibited. The Monument’s fishing prohibitions superseded the Reserve provisions that had allowed limited fishing indefinitely. The proclamation also allowed the Secretary to issue permits for other activities regulated by the proclamation, such as research, education, Native Hawaiian practices, and those that “will assist in the conservation of the monument, provided that the activity meets certain requirements,” including that:

- “The activity can be conducted with adequate safeguards for the resources and ecological integrity of the monument;”
- “The activity will be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance monument resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects;”
- “There is no practicable alternative to conducting the activity within the monument;” and
- “The end value of the activity outweighs its adverse impacts on monument resources, qualities and ecological integrity”

Presidential Proclamation 9478

—President Obama issued this proclamation on 25 August 2016, expanding the PMNM from the boundaries established in 2006 “to the extent of the seaward limit of the ... U.S. EEZ.” Proclamation 9478 relied on the authority of the Antiquities Act and noted that the extended waters contain “objects of historic and scientific interest.” This proclamation specifically referenced the area’s “biological resources,” “75 seamounts,” “unique biodiversity,” and value as a “sacred cultural, physical, and spiritual place for the Native Hawaiian community.” Further, the proclamation recognized that 24 species of marine mammals are found within the expanded area, several of which are endangered, and that the Hawaiian monk seal forages well beyond the original boundaries in demersal habitats almost 2,000 feet deep, and

therefore, would receive protection throughout its foraging range. Proclamation 9478 preserved all of the protections created under Presidential Proclamations 8031 and 8112, required the Secretary of Commerce to “consider initiating the process under the National Marine Sanctuaries Act...to designate the [expanded monument]...as a National Marine Sanctuary to supplement and complement existing authorities,” and established that the “Monument Expansion shall be the dominant reservation.” Importantly, the proclamation clarified one portion of Proclamation 8031, stating that “the Secretaries may permit...non-commercial fishing, provided that the fish harvested, either in whole or in part, cannot enter commerce through sale, barter, or trade, and that the resource is managed sustainably.”

Sanctuary Designation Process

As explained by ONMS in the Federal Register notice, “the primary objective of the NMSA is to protect the resources of the National Marine Sanctuary System, including biological and cultural resources, such as coral reefs, marine animals, archaeological sites, historic structures and historic shipwrecks.” The notice further states that “any proposed sanctuary regulations would be separate from, but supplementary and complementary to, existing Monument regulations and management provisions from the establishing executive order and proclamations.”

An important element in designating most sanctuaries is the inclusion of effective regulations specifying whether and what fishing activities are permitted. Section 305(a)(5) of the NMSA provides the opportunity for the appropriate Regional Fishery Management Council to prepare draft regulations pertaining to fishing within the proposed NMS. The NMSA states that “regulations prepared by a Council...shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council’s action fails to fulfill the purposes and this chapter and the goals and objectives of the proposed designation.” Further, the Act states that “in preparing draft regulations, a Regional Fishery Management Council shall use as guidance the national standards of section 301(a) of the Magnuson-Stevens Act (16 U.S.C. 1851) to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation.” In the case where a council’s draft regulations are rejected by the Secretary, the Secretary is required to prepare fishing regulations for the sanctuary. However, in this case, the Presidential Proclamations establishing the pre-existing PMNM, with which the sanctuary is expected to overlap, already address fishery issues in this area.

A 19 November 2021 letter from ONMS to WesPac describes the section 305(a)(5) consultation process and clarifies that, in this specific instance:

- “The goals and objectives of the sanctuary designation..., together with the purposes and policies of the National Marine Sanctuaries Act, as well as the existing Presidential Proclamations 8031, 8112, and 9478 specific to Papahānaumokuākea Marine National Monument, are the benchmarks against which the Council’s action shall ultimately be measured;”
- “For the area designated by Proclamation 8031, NOAA believes the current Magnuson Stevens Fishery Conservation and Management Act regulations under 50 CFR 404 are

consistent with both the relevant provisions of Proclamations 8031 and 8112 and the goals and objectives for the proposed sanctuary. However, in order to rely on Magnuson-Stevens Fishery Conservation and Management Act authority for sanctuary purposes within the Monument Expansion Area designated by Proclamation 9478, NOAA recommends the Council propose regulations for the Monument Expansion Area that are consistent with both the fishing provisions of Proclamation 9478, and the goals and objectives of the proposed sanctuary” (emphasis added).

In the documents described above, NOAA identifies the following elements, among others, as necessary components of this sanctuary designation:

- “develop objectives and actions that ensure lasting protections consistent with the existing Monument proclamations and regulations;”
- “safeguard natural and cultural values of the marine environment of the Monument;”
- “authorize NOAA to assess civil penalties for violations of sanctuary regulations or permits and to enforce provisions of the NMSA;”
- “prohibit destruction or loss of sanctuary resources and provide natural resource damage assessment authorities for loss of or injury to any sanctuary resource;”
- “require interagency consultation for any Federal agency action that is likely to destroy, cause the loss of, or injure any sanctuary resource;”
- “augment existing authorities under the Antiquities Act; Presidential Proclamations 8031, 8112 and 9478; Executive Order 13178; and 50 CFR 404 to provide additional regulatory and non-regulatory tools for management and protection of Monument resources.”

Summary of Existing Protections

The PMNM and the Reserve already are subject to a variety of protections under Executive Orders, Presidential Proclamations, and related documents. Key provisions are:

- Ensure strong, comprehensive conservation and protection of the coral reef ecosystem and related marine resources and species in their natural character (E.O. 13196)
- Ensure that degraded or injured resources are restored or remediated, and that ongoing permitted activities do not degrade Reserve resources (E.O. 13196)
- Prevent the actual or attempted removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging of any living or nonliving Monument resource (Proclamation 8031)
- Ensure that permitted activities are subject to adequate safeguards, are compatible with provisions of applicable proclamations, consider the extent to which the activity may diminish or enhance Monument resources, have a value that outweighs any adverse impacts, and lack a practicable alternative (Proclamation 8031).

The Federal Register notice and other documents provided by NOAA indicate that these protections will form the foundation for any additional protections and regulatory or non-regulatory tools to be established pursuant to a sanctuary designation and that any new

protections will augment the existing authorities. Key new provisions being considered by NOAA include:

- Ensuring lasting protections that safeguard the Monument’s natural and cultural values and that are consistent with the Monument’s existing proclamations and regulations;
- Prohibiting the destruction or loss of sanctuary resources;
- Requiring interagency consultation for any Federal action likely to destroy or injure any Sanctuary resource.

Further, NOAA’s Papahānaumokuākea NMS web page states that: “Sanctuary designation will provide another layer of protection to continue honoring this place and will not diminish any existing protections” (emphasis added). Further, the web page states: “Designation...would strengthen and increase the long term protections already existing in the monument, but cannot diminish them” (emphasis added). An infographic available on the page adds that: “National marine sanctuary designation would add the conservation benefits to the marine areas of Papahānaumokuākea Marine National Monument by providing a stable regulatory framework and additional protections to safeguard living, cultural, and maritime heritage resources” (emphasis added).

Recommendations

The Commission supports the Reserve and Monument goals, objectives and regulations.

The Commission also supports NOAA’s intention to supplement, complement, strengthen and add to these protections through designation of the Papahānaumokuākea NMS. Moreover, from the Commission’s perspective, the proposed sanctuary designation should adhere tightly to the principles identified by NOAA and the Reserve’s and Monument’s existing protections, which, relative to marine mammals and their ecosystems, should, at a minimum:

- Provide long-term, strong, comprehensive protections from anthropogenic threats;
- Prohibit any activity that would remove, injure or kill marine mammals, except as specifically authorized by a permit; and
- Allow for the issuance of permits for extractive activities or those with potentially adverse impacts only if the applicant, using the precautionary approach, demonstrates to NOAA’s satisfaction that the proposed activities are compatible with Sanctuary and Monument goals and regulations, and will have only a negligible impact on sanctuary resources, including marine mammals.

Accordingly, the Commission recommends that these principles be reflected in the alternatives in the DEIS.

The Commission recommends that the DEIS alternatives, draft sanctuary designation and draft regulations explicitly 1) re-affirm that protections provided by the Monument and the Reserve will not be diminished, and 2) describe in detail how existing protections will be strengthened, increased and added to under those alternatives. In particular, the Commission recommends that the

DEIS's preferred alternative permanently prohibit all commercial or recreational fishing in Sanctuary waters. As long as sustenance and traditional (subsistence) fishing by Native Hawaiians is accurately monitored, assessed and capped at minimal levels, those forms of fishing should not pose a serious threat to the NWHI marine environment or deplete resources important to marine mammals. As such, the alternatives in the DEIS should include their perpetuation.

The Commission notes that WesPac, at a recent Council meeting, expressed interest in exploring the potential for 'customary exchange' fishing to be permitted in the Sanctuary, and therefore in the Monument. The Commission believes that this practice would be contrary to the goals of the Sanctuary and the Monument, and Monument regulations. 'Customary exchange' is defined in the Magnuson-Stevens Act as: "The non-market exchange of marine resources between fishermen and community residents, including family and friends of community residents, for goods, and/or services for cultural, social, or religious reasons. Customary exchange may include cost recovery through monetary reimbursements and other means for actual trip expenses, including but not limited to ice, bait, fuel, or food, that may be necessary to participate in fisheries in the western Pacific."

Given this definition, which would allow exchange of fish for goods or services 'customary exchange' does not differ substantively from commercial fishing, which includes not only selling fish, but barter and trade. In addition, monetary reimbursements arguably involve, or could involve, commercial aspects. If the DEIS considers alternatives that would allow fishing for purposes of customary exchange, it should explain whether and how this would be consistent with fishing limits applicable to the Monument, examine closely distinctions between commercial fishing and customary exchange and consider limitations (e.g., gear restrictions) to minimize impacts on marine mammals and other Sanctuary resources.

The Commission recognizes that NOAA, in designating a national marine sanctuary within the PMNM, is in part seeking to:

- "provide a more stable regulatory framework and additional protections to safeguard living, cultural, and maritime heritage resources;"*
- "develop objectives and actions that ensure lasting protections consistent with the existing Monument proclamations and regulations;" and*
- "augment existing authorities...to provide additional regulatory and non-regulatory tools for management and protection of Monument resources."*

A national marine sanctuary arguably provides secure and lasting protections because, once designated, an act of Congress is needed to reverse it. However, applicable prohibitions and protections can be amended through periodic rulemaking. It remains an open question as to whether a marine national monument designation made under the Antiquities Act by Presidential Proclamation can be reversed or significantly downsized by a later President and subsequent Executive Order. Thus, there is some risk that the protections afforded the NWHI as a marine national monument could disappear or be curtailed through executive fiat. This being the case, the protections afforded via a sanctuary designation, even if duplicative of those applicable to the Monument, are necessary. For this reason, NOAA, in designating a

Papahānaumokuākea NMS, should look beyond a designation that is merely “separate from, but supplementary and complementary to, existing Monument regulations and management provisions.” Those regulations and management provisions should independently protect the area’s resources at least at the existing level should those provided through national monument status be reduced or lost.

Although not necessarily the case, a marine national monument created by proclamation often is more restrictive in terms of what activities are and are not allowed than would be expected through a sanctuary designation. National marine sanctuaries generally allow multiple uses, including, routinely, the extraction of resources. In contrast, almost all forms of resource extraction and potentially destructive human activities are prohibited in the PMNM. Further, the NMSA explicitly invites the appropriate fishery management council to play a major role in developing fishing regulations. As such, it is not surprising that most national marine sanctuaries allow at least some commercial and recreational fishing, and several are not subject to any sanctuary-specific fishing restrictions. During reviews that led to designation and expansion of the PMNM in 2006 and 2016, WesPac recommended that fishing be allowed in those areas. Moreover, on several occasions since 2006, WesPac has advocated that PMNM fishing prohibitions be removed. Thus, unless specifically tailored to reinforce the precedent established by the Monument with respect to fishing, it is not clear that an independently generated sanctuary designation would provide the same level of protection against impacts from fishing as do the PMNM provisions.

The Commission is pleased that NOAA has advised WesPac that any draft fishing regulations it develops should be “consistent with both the fishing provisions of Proclamation 9478, and the goals and objectives of the proposed sanctuary.” However, given the desirability of bolstering the Monument’s protections and uncertainty surrounding the durability of those protections, the Commission recommends that NOAA, in developing the draft sanctuary designation and its regulations provide, at a minimum, the same levels of protections to marine resources, including fishery resources and marine mammals, as are afforded by the Monument.

The NWHI are subject to a range of threats beyond those that would come with renewed fishing in the Sanctuary. The Commission supports NOAA in the protections it has implemented against those threats, and for its intention to strengthen and add to those protections with the proposed sanctuary designation. The Commission recommends that NOAA, in its DEIS, provide a range of options for effectively addressing the threats posed to marine mammals and their ecosystems in the NWHI from marine debris and global warming.

Finally, in commenting on and generally supporting the proposal to designate the marine portions of the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary (NMS), the Commission notes that there are other possible sanctuary designations under consideration around the United States. ONMS should consider giving higher priority to designating other areas nominated as sanctuaries (e.g., the St. George Unangan Heritage National Marine Sanctuary and the Chumash Heritage National Marine Sanctuary) that currently lack any site specific protections, before focusing on Papahānaumokuākea, which

already is rather well-protected as a monument and reserve, and which is likely to receive only incremental benefits from the overlay of a sanctuary designation.

We hope these comments and recommendations are helpful. Please contact me if you have questions.

Peter O. Thomas, Ph.D.

Executive Director

Center for Marine Conservation

Dear Mr. Armor:

I am responding to the National Oceanic and Atmospheric Administration's proposal regarding establishing a proposed national marine sanctuary within the Papahānaumokuākea National Marine Monument. I am the President Emeritus of the Center for Marine Conservation (CMC). CMC has been renamed by the Board of Directors as the "Ocean Conservancy."

During my tenure with CMC we developed a robust program of work to support NOAA's marine sanctuary program, including for designations, appropriations, and general support for NOAA's program of work for the management of these important marine places under its administration. Recognizing marine sanctuaries were essentially designed to be multiple use management areas, our efforts to designate these areas resulted in establishing authority for improved management of these important sites for multiple purposes, including regarding commercial fisheries.

The Papahānaumokuākea National Marine Monument is a different management regime from the sanctuary designation in that it establishes a level of protection that prohibits commercial fishing. As noted by the NOAA website, the Papahānaumokuākea Marine National Monument is the single largest fully protected marine conservation area in the United States, and one of the largest marine protected areas in the world. It is in fact the largest area in the world for maintaining marine habitat without significant human impact.

As such, it is an invaluable marine protected area for not only protecting a marine ecosystem, but for conducting research on a major large marine ecosystem unimpacted by extractive fishery activities. It would seem that the Papahānaumokuākea National Marine Monument, as currently protected and potential additional protections to be gained through additional regulation and management plan updates, is an irreplaceable research site for assessing the impacts of global change in the marine environment.

In the November 19 Federal Register, NOAA gives notice that it will conduct scoping and prepare an Environmental Impact Statement for proposing designation of a National Marine Sanctuary within the existing National Monument. The notice indicates that the scoping process will include securing information on possible draft fishing regulations for the Sanctuary in the Monument in which commercial fishing is currently prohibited.

In providing public information on the proposal, the Office of National Marine Sanctuaries indicates: the "National marine sanctuary designation would add conservation benefits to the

marine areas of the Papahānaumokuākea Marine Management Monument by providing a stable regulatory framework and additional protections to safeguard living, cultural, and maritime heritage resources.” In an additional public statement, the Office notes “The designation would add conservation benefits and permanency of a national marine sanctuary to safeguard resources in the marine portions of the monument.” “The sanctuary designation process does not change the area’s status as a marine national monument. It would add the protections of a national marine sanctuary to the monument’s waters.”

In these and other public statements, NOAA suggests deficiencies in current existing legal authority for maintaining the protection and management of the Monument.

The solution proposed is an overlapping or replacement of legal authority for managing the Monument that already exists. However, NOAA does not indicate any specific problems with the existing management regime in which there are deficiencies in authority needed for protection of what is now arguably the most comprehensively protected large marine area on the planet.

The problem seems to be that no commercial fishing is allowed in this world-class marine protected area. No other deficiencies are identified that are needed to be corrected to improve on the current protective management regime for the Monument – for which NOAA already shares management of the regime with other appropriate Federal management authorities.

I appreciate that commercial fishing interests would like to revisit and reopen the Monument to commercial fishing. By overlaying the “Sanctuary” management regime for the current Monument, the door is opened to new commercial fishing that would not otherwise be allowed. Is this not correct? The DEIS needs to analyze this issue in detail. If there are substantive deficiencies in the management regime of the Monument currently that need to be corrected with increased legal authority for that protected area, these needs to be clearly indicated so the available alternatives for a course correction can be identified.

As currently presented, NOAA does not appear to be clearly forthcoming that the underlying purpose of the proposed action is to open up this world class marine protected area to commercial fishing at the expense and values of the current Monument regime.

Sincerely,

Roger E. McManus

President Emeritus for The Center for Marine Conservation

The Deep Ocean Stewardship Initiative

As the organizers of a global coalition of deep-sea experts, the Executive Committee of the Deep Ocean Stewardship Initiative (DOSI) is thankful for this opportunity to comment on topics that should be addressed in NOAA’s draft EIS of designating marine portions of Papahānaumokuākea Marine National Monument as a National Marine Sanctuary. We would like to offer input from a deep-sea perspective regarding several of the themes on which NOAA has requested comments.

The location, nature, and value of ecosystems, species, and resources that would be protected by a sanctuary:

While shallow environments tend to be the most visible beneficiaries of protection, diverse ecosystems in the deep sea (commonly defined as the part of the ocean below a depth of 200 meters that is too dark to support photosynthesis) are widespread in the current monument. The most recent proof of this is the exploration cruise conducted in the area by Ocean Exploration Trust, NOAA, and other partners in 2021. That cruise discovered astoundingly rich and diverse deep-sea communities of sponges and corals, along with the creatures those communities support, on the Voyager Seamounts south of Kapou. Significant deep-sea biodiversity was also found during NOAA Ocean Exploration's CAPSTONE campaign expeditions in 2016 and previous Ocean Exploration Trust exploration expedition in 2018. Along with "pure" deep-sea environments, shallow reefs often continue into deeper water, with a high level of connectivity and interdependence between their shallow and deep parts.

While impressive, deep-sea environments like these are exceptionally fragile. Organisms in the deep tend to grow very slowly because of limited food and cold temperatures, which makes the deep sea slow to recover from any human-caused damage or disturbance. Deep-sea species are also especially vulnerable to climate change; because their environment usually changes very little compared to shallow water, warming, acidification or deoxygenation of the deep can be devastating.

Protected area regulations and monitoring plans worldwide often fail to account for deep-sea environments and their particular needs in a world affected by climate change, which can leave these environments vulnerable to harm. NOAA should therefore consider the particular impact of sanctuary designation, and any change in regulation that comes with it, on the rich, deep-sea ecosystems in the area.

The potential socioeconomic, cultural, and biological impacts of sanctuary designation:

In providing more streamlined and politically durable protection of marine portions of Papahānaumokuākea than the current Marine National Monument, sanctuary designation may have a positive impact on the deep-sea life in the area. Deep-sea environments globally are at increasing risk of damage from deep-seabed mining, bottom trawling, and other uses. Creating a National Marine Sanctuary in the area with regulations that disallow such activities would

ensure local deep-sea life remains protected. Sanctuary designation would not protect the deep-sea environment from climate change, but in many cases reduction of other risks is believed to help ocean species survive its effects.

This continued protection may have socioeconomic and cultural benefits. Deep-sea research, which is currently allowed by permit in the Monument, provides valuable contributions to many branches of science. These include the development of new materials, medical research, and the study of climate change. The deep sea also holds cultural and aesthetic value for many, with this archipelago in particular being the sacred wahi kupuna of the Native Hawaiian people. NOAA should consider the value that the deep-sea portions of Papahānaumokuākea provide in these areas and the corresponding benefits of improved protection. At the same

time, NOAA should consider the risks that any future changes to sanctuary regulations could pose to deep-sea environments and their uses.

Spatial extent of the sanctuary and boundary alternatives NOAA should consider:

As Dr. Beth Orcutt stated in her comment, a 2021 research cruise conducted by Ocean Exploration Trust and partners found diverse deep-sea communities on seamounts outside of the current Monument boundaries. NOAA's EIS should consider the benefits of expanding the area of a future Sanctuary to include these deep-sea communities, and others in the Pacific Remote Islands Marine National Monument, while also considering the impacts of this action on local people and current human activities in the area.

Important management measures for the sanctuary:

Future management of a National Marine Sanctuary in marine portions of Papahānaumokuākea should take the following recommendations into account:

- 1. Design management measures for deep-sea and mesophotic environments within the Sanctuary so that the particular needs of these communities are accounted for, avoiding regulatory gaps.*
- 2. Ensure that monitoring plans for the Sanctuary include plans for monitoring of deep-sea environments. Effective use of ROVs and AUVs can help inform management measures.*
- 3. Due to a limited ability to monitor changes and apply adaptive management in the deep sea, especially across such a wide area, apply the precautionary principle to any activities under consideration in deep portions of the future Sanctuary.*

Thank you once again for the opportunity to comment in advance of this important decision for Papahānaumokuākea.

Sincerely,

The Executive Committee of the Deep Ocean Stewardship Initiative (DOSI):

Maria Baker, Lisa Levin, Elva Escobar, Kristina Gjerde, Harriet Harden-Davies, Diva Amon, and

Brandon Gertz

With assistance from DOSI members Erik Cordes, Megan Cook, and Bobbi-Jo Dobush

Cruise Lines International Association

Thank you for the opportunity to comment on the Notice of Intent to Conduct Scoping and to Prepare an Environmental Impact Statement for the Proposed Designation of a National Marine Sanctuary within Papahānaumokuākea Marine National Monument and provide the following comments for consideration:

CLIA Members recommend that the National Marine Sanctuary designation apply to the original boundary of the Papahānaumokuākea Marine National Monument, and not to the 2016 expanded boundary. The expanded boundary encompasses the exclusive economic zone

and discharge restrictions applied to this substantial area would have far reaching operational impacts, including ships in transit. If, however, the expanded boundary is designated a National Marine Sanctuary, CLIA Members recommend that the applicable discharge restrictions only apply to the original boundary, not the 2016 expanded boundary, maintaining the discharge restrictions per 50 CFR § 404 that are currently applied in the Papahānaumokuākea Marine National Monument.

CLIA Members welcome the National Marine Sanctuary designation given that the prohibited and regulated activities in the area are similar to the restrictions in other existing National Marine Sanctuaries, detailed in 15 CFR § 922, such as approved marine sanitation device effluent, cooling water, etc. Members also recommend that the list of discharges currently restricted in the Papahānaumokuākea Marine National Monument presently under 50 CFR § 404 correlate to the waste stream restrictions under the proposed National Marine Sanctuary.

Thank you for the opportunity to comment on the Proposed Designation of a National Marine Sanctuary within Papahānaumokuākea Marine National Monument. CLIA is available to discuss these comments with you should you have any follow up questions. The CLIA point of contact is Maureen Hayes, Technical Advisor, Maritime Policy. Phone [REDACTED]. Email: [REDACTED].

Sincerely, Maureen Hayes

Technical Advisor, Maritime Policy

Cruise Lines International Association (CLIA) is the world's largest cruise industry trade association, providing a unified voice and leading authority of the global cruise community. The association has 15 offices globally with representation in North and South America, Europe, Asia, and Australasia. CLIA supports policies and practices that foster a safe, secure, healthy, and sustainable cruise ship environment for the more than 30 million passengers who typically cruise annually and is dedicated to promoting the cruise travel experience. The CLIA Community is comprised of the world's most prestigious ocean, river, and specialty cruise lines; a highly trained and certified travel agent community; and cruise line suppliers and partners, including ports & destinations, ship development, suppliers, and business services. The organization's mission is to be the unified global organization that helps its members succeed by advocating, educating, and promoting for the common interests of the cruise community.

American Sportfishing Association

To NOAA's Office of National Marine Sanctuaries,

Thank you for the opportunity to comment on NOAA-NOS-2021-0114, National Marine Sanctuary Designation for Papahānaumokuākea Marine National Monument. The American Sportfishing Association represents the sportfishing industry and the recreational fishing community. Our over 900 members include manufacturers, retailers and allied organizations that comprise the \$125 billion recreational fishing economy. We provide a unified voice for the industry and anglers when emerging laws and policies could significantly affect business or sportfishing itself.

Accordingly, we seek to ensure recreational fishing access to our nation's marine sanctuaries. As you are aware, commercial fishing is prohibited in the entire Papahānaumokuākea Marine National Monument. In the Monument Expansion Area, non-commercial (e.g., recreational) fishing may be allowed through a permit.

However, there are currently no regulations or a permitting process in place to allow non-commercial fishing in this area. As NOAA prepares a draft environmental impact statement (DEIS) for the sanctuary designation process, we urge the agency to include consideration of regulations or a permitting process to allow non-commercial fishing, not only in the Monument Expansion Area, but throughout the entire Papahānaumokuākea Marine National Monument.

Through Proclamation 94781, which established the Monument Expansion area, President Barack Obama stated that non-commercial fishing would be permitted. Given the compatibility between recreational fishing and conservation, and that recreational fishing is allowed in nearly all National Marine Sanctuary waters, we believe it is warranted to revisit the prohibition on recreational fishing in the original Monument boundaries as well. Allowing recreational fishing throughout Papahānaumokuākea would help this action more fully achieve the goals of the Biden Administration's America the Beautiful initiative, particularly the recommendation to, "Increase Access for Outdoor Recreation."² We therefore urge that such considerations be included in the DEIS.

Sincerely,

Mike Leonard

Vice President of Government Affairs

Mystic Aquarium

Dear Superintendent Clark,

We strongly support NOAA initiating the designation process for Papahānaumokuākea Marine National Monument as a National Marine Sanctuary, including preparation and release of draft designation documents, and developing alternatives for the DEIS. Per the request for specific comments in the referenced Federal Register Notice, we offer the following while recognizing that the stated need for designation is to "[d]evelop objectives and actions that ensure lasting protections consistent with the existing Monument proclamations and regulations."

The sanctuary boundaries should mirror the current Monument boundaries, including the area originally designated in Presidential Proclamation 8041 of June 15, 2006 and Proclamation 9478 of August 26, 2016. The sanctuary should include all the waters, submerged lands, and living and non-living resources within these areas. The shoreward boundary should extend to the line of mean high tide. Alternatives that encompass a larger region (e.g., to the southeast) could enhance resource protection while not diminishing protections dictated in the Monument proclamations.

Management measures should maintain or enhance existing resource protections, increase regulatory compliance, ensure enforceability, and provide natural resources damage assessment authorities and interagency coordination of activities as provided in the National Marine Sanctuaries Act. The Presidential Proclamations for the Monument include prohibited activities which NOAA should incorporate into the sanctuary designation document, management plan, and regulations. Further, Presidential Proclamation 9478 provided a framework for managing the Monument Expansion Area, and NOAA should codify those protections in the designation document, regulations, and management plan. Integrating traditional Hawaiian knowledge systems, values, and practices into management, consistent with the provisions of the Proclamations, should be sustained.

Regional fisheries and fishery management plans are clearly managed under Magnuson authorities. As part of the Monument and sanctuary management plan processes, fishery management plans will need to be amended (by the Western Pacific Fishery Management Council) or by Secretarial action, to be consistent with protections directed by the Presidential Proclamation.

While some discussions in the public arena suggest the sanctuary designation process opens a blank page to revisit fishery management of the area, proposing any alternatives that would decrease the current level of protection within the Monument and Monument Expansion Area would defy the logic of stated goals of the designation process. We oppose any such alternatives for future consideration. We support the Office of National Marine Sanctuaries in overlaying Sanctuary authorities to this Monument for “... continued or enhanced long-term protection of the Monument’s natural, cultural and historic resources; improved planning and coordination of research, monitoring, and management actions; reducing disturbance of special status species; reducing threats and stressors to Monument resources; and minimal disturbance during research or restoration actions.” Thank you, in advance, for your consideration. We would be happy to discuss any of these issues with you in the future.

Sincerely,

Katie Cubina

Sr. VP for Mission Programs

Mystic Aquarium

Creation Justice Ministries

Subject: Scoping period for Papahānaumokuākea Marine National Monument

Document #: 2021-25207

Federal Register #: 86 FR 64904

Creation Justice Ministries represents the creation care and environmental justice policies of 38 major Christian denominations and communions throughout the United States to protect and restore God's Creation.

Creation Justice Ministries educates, equips and mobilizes Christian communions/denominations, congregations and individuals to protect, restore, and rightly share God's creation.

Based on the priorities of its members, with a particular concern for the vulnerable and marginalized, we provide collaborative opportunities to build ecumenical community, guide people of faith and faith communities towards eco-justice transformations, and raise a collective witness in the public arena echoing Christ's call for just relationships among all of creation. As Christians, we support designating Papahānaumokuākea Marine National Monument (MNM) as a national marine sanctuary to enhance protections and safeguard resources in the marine portions of the Monument. By changing the status of Papahānaumokuākea from a Marine National Monument to a National Marine Sanctuary, higher protections for the monument would be put in place. Within the bounds of Papahānaumokuākea MNM reside coral islands, undersea volcanoes, flat-topped undersea mountains, banks, and shoals stretch 1,350 miles.

This Monument supports a diversity of life, including over 7,000 species, many found nowhere else on earth. Threatened green sea turtles and endangered Hawaiian monk seals are among the rare species that inhabit the island chain.

A Sanctuary status would not only protect the incredible biodiversity listed above, but would also preserve the incredible cultural and genealogical ties that Native Hawaiians have with this sacred space. We believe sanctuary designation will complement the efforts of the Office of Hawaiian Affairs, the state of Hawaii, and other federal agencies to conserve this nationally significant area and its cultural resources and bolster strong and lasting protection for the marine environment.

We believe that living in right relationship with God's creation means advocating for the best protections possible for each of God's creatures. We also acknowledge that Indigenous peoples have been caring for this land for centuries longer than us. As such, we turn to Indigenous peoples for their guidance and knowledge in caring for Papahānaumokuākea Marine National Monument.

In an effort to preserve and protect all those listed above, we support;

- *The scoping and environmental impact statement process.*
- *The NOAA proposed, spatial extension of the monument's current boundaries to include all the waters, submerged lands, and living and non-living resources within these areas. The shoreward boundary should extend to the mean high tide.*
- *Management measures for the sanctuary and any additional regulations that should be added under the National Marine Sanctuary Act (NMSA) to protect Monument Resources.*

It is critical that sanctuary designation strengthen and enhance the protection of Papahānaumokuākea, as designated under the Antiquities Act and the Presidential Proclamations. Those efforts need to include integrating traditional Hawaiian knowledge systems, values, and practices into management.

We support this scoping and environmental impact study period and urge NOAA to move forward with the designation of Papahānaumokuākea as a National Marine Sanctuary.

Defenders of Wildlife

Dear Superintendent Clark:

Defenders of Wildlife (“Defenders”) respectfully submits the following comments on the proposed designation of a national marine sanctuary within the Papahānaumokuākea Marine National Monument. Defenders of Wildlife is a national non-profit conservation organization dedicated to conserving and restoring native species and the habitats on which they depend. Defenders is deeply involved in the conservation of marine species and ocean habitats, including the protection and recovery of species that occur in U.S. waters in the Pacific Ocean. We submit these comments on behalf of nearly 2.2 million members and supporters nationwide.

Papahānaumokuākea Marine National Monument is located in the Pacific Ocean, encompassing 582,578 square miles and is the “largest contiguous fully protected conservation area under the U.S. flag.”

1 The Monument protects shallow water habitats that are essential for several species of birds, marine mammals, fish, and coral.

2 Many of the species found within the Monument are endemic and not found anywhere else in the world. As many as twenty-three species protected under the Endangered Species Act can be found within the boundaries of the Monument. Among them are the threatened green sea turtle, whose nesting habitat is within the Monument, and the endangered Hawaiian monk seal, which is found only in Hawai‘i.

In addition to protecting wildlife, the Monument is a natural and cultural World Heritage Site and protects places, including areas located on the islands of Nihoa and Mokumanamana, of cultural significance to Native Hawaiians.

3 The island of Mokumanamana has the highest number of sacred sites in the Hawaiian Archipelago and “has spiritual significance in Hawaiian cosmology.” Defenders supports the designation of portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary. The sanctuary designation will provide added protections to highly productive ecosystems that are necessary for biological diversity and the overall health of the oceans.

Considering the number of ESA-protected species found within the Monument, the agencies involved have a responsibility under section 7(a)(2) of the ESA to avoid jeopardizing the existence of any listed species. But the agencies also have a responsibility under section 7(1)(a) of the ESA, which states that all federal agencies – including the ones involved in management of the Monument – are required to use their authorities to conserve threatened and endangered species, defined as recovering species to the point where they no longer need the protections of the ESA.

5 The agencies can meet this obligation by ensuring strong protections for those species within the Monument. Likewise, a national marine sanctuary designation will advance the conservation purposes of other federal statutes, including the Marine Mammal Protection Act, Migratory Bird Treaty Act, and Magnuson-Stevens Fishery Conservation and Management Act.

Papahānaumokuākea is also extremely important for Native Hawaiians and added protections will ensure that the waters there will be accessible for future generations.

Currently, Papahānaumokuākea is co-managed with four co-trustees and seven co-managing agencies including the Office of Hawaiian Affairs that represents local indigenous communities.⁶ We support this continued shared governance for the marine sanctuary as many sites within the Monument are sacred to Native Hawaiians and efforts to further protect them should incorporate traditional ecological knowledge as well as shared management with Native Hawaiians.

Thank you for the opportunity to submit these comments.

Sincerely,

Monique Paul

Conservation Law Coordinator

Defenders of Wildlife

[REDACTED]

[REDACTED]

Northwest Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC)

[January 19, 2022]

Mr. John Armor, Director

NOAA-Office of National Marine Sanctuaries 1305 East-West Highway, 11th Floor

Silver Spring, MD 20910

*c/o Athline Clark, Superintendent Papahānaumokuākea Marine National Monument
NOAA/DKIRC/NOS/ONMS/PMNM*

1845 Wasp Boulevard, Building 176

Honolulu, HI 96818

RE: RAC Response to Federal Register 86 FR 64904: NOAA's Notice of Intent to Conduct Scoping and to Prepare an EIS for the Proposed Designation of a National Marine Sanctuary within Papahānaumokuākea Marine National Monument.

Aloha mai Director Armor,

On December 9, 2020, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) sent a letter to the Office of National Marine Sanctuaries (ONMS) requesting NOAA to move forward with the designation of a National Marine Sanctuary in the Northwestern Hawaiian Islands pursuant to President William J. Clinton's Executive Order (EO) 13178 of December 4, 2000, (Federal Register/Vol.65, No. 236/Thursday, December 7, 2000/Presidential Documents). We are pleased that ONMS has initiated the process and would like to reaffirm that ONMS has the full support of the RAC in proceeding with the process of sanctuary designation. Over the past few months, two RAC subcommittees have been working to formulate a set of recommendations for the public scoping phase of the sanctuary designation process.

The RAC offers the following recommendations on sanctuary designation for the management plan's framework and content. These recommendations are focused mainly on the subcommittee review of the 2008 Monument Management Plan. The recommendations are summarized as follows:

General Recommendations:

- *In all sanctuary and management plan documents, consider the use of 'PMNM' vs. 'NWHI.'*
- *Ensure Mai Ka Po Mai guidance is considered in the revision process.*

Vision Statement:

The 2008 Monument Management Plan vision statement is:

"To forever protect and perpetuate ecosystem health and diversity and Native Hawaiian cultural sign[f]icance of Papahānaumokuākea. "

- *The RAC recommends revisiting the vision statement for clarity and impact. Examples for consideration include:*
 - a. *That the vast coral reefs, diverse ecosystems and historical, cultural and natural resources of the Northwestern Hawaiian Islands - unique in the world - be preserved and protected forever.*
 - b. *To forever protect and perpetuate the rich diversity, ecosystem health, and Native Hawaiian cultural resources of Papahānaumokuākea.*

Mission Statement

The 2008 Monument Management Plan mission statement is:

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

- *The RAC recommends retaining this mission statement as-is.*

Management Plan Principles

The RAC recommends minor revisions to six of the existing principles, and proposes an additional principle, as follows:

Principle I. "Management actions are consistent with the mission and vision. "

- *The RAC recommends keeping this principle as is.*

Principle 2. "Management actions recognize the resources of Papahānaumokuākea are administered by the Co-Trustees for the benefit of present and future generations."

- *The RAC recommends revising Principle 2 to clarify the meaning of 'benefit'.*

Principle 3. "Management actions affirm Papahānaumokuākea and its resources are important, unique and irreplaceable."

- *The RAC recommends keeping this principle as is.*

Principle 4. "Management actions honor the sign[ificance] of the region for Native Hawaiians."

- *The RAC recommends incorporating reference from Mai Ka Po Mai.*

Principle 5. "Management actions honor the historic importance of the region."

- *The RAC recommends keeping this principle as is.*

Principle 6. "Management actions incorporate best practices, scient[ific] principles, traditional knowledge and an adaptive management approach."

- *The RAC recommends keeping this principle as is.*

Principle 7. "Management actions err on the side o_f protection when there is uncertainty in available in?formation on the impacts o_f an activity."

- *The RAC recommends keeping this principle as is.*

Principle 8. "Management actions enhance public appreciation o_f the unique character and environment o_f the Northwestern Hawaiian Islands."

- *The RAC recommends incorporating additional language to the effect of, 'bringing the place to the people instead of the people to the place.'*

Principle 9. "Management actions authorize only uses consistent with Presidential Proclamation 803 I and applicable Laws."

- *The RAC recommends updating Principle 9 to include reference to new Presidential Proclamations and laws.*

Principle I o. "Management actions coordinate with federal, state and Local governments, Native Hawaiians, relevant organizations and the public."

- *The RAC recommends keeping this principle as is.*

Principle I I. "Management actions carry out effective outreach, monitoring, & enforcement to promote compliance. "

- *The RAC recommends revising the ending of this principle as follows: ... to promote management effectiveness and compliance.*

NEW Principle 12. Co-management Principle

- *The RAC recommends that a new co-management principle be developed that highlights the cooperative multi-agency aspect of PMNM management.*

Management Plan Goals

The RAC recommends minor revisions to two of the goals, and proposes two new goals, as follows:

Goal 1. "Protect, preserve, maintain, and where appropriate restore the physical environment and the natural biological communities and their associated biodiversity, habitats, populations, native species, and ecological integrity."

- *The RAC recommends keeping this goal as is.*

Goal 2. "Support, promote, and coordinate research, characterization and monitoring that increase understanding of the NWHI, improve management decision making, and are consistent with conservation and protection."

- *The RAC recommends revising Goal 2 to incorporate 'cumulative impact assessment.'*

Goal 3. 'Manage and only allow human activities consistent with Proclamation 8031 to maintain ecological integrity and prevent or minimize negative impacts for Long-term protection.'

- *The RAC recommends updating Goal 3 to reflect 'applicable proclamations and laws.'*

Goal 4. "Provide for cooperative conservation including community involvement that achieves effective Monument operations and integrated management."

- *The RAC recommends keeping this goal as is.*

Goal 5. "Enhance public understanding, appreciation, and support for protection of the natural, cultural and historic resources. "

- *The RAC recommends keeping this goal as is.*

Goal 6. "Support Native Hawaiian practices consistent with long-term conservation and protection. "

- *The RAC recommends keeping this goal as is.*

Goal 7. "Identify, interpret, and protect Monument historic and cultural resources."

- *The RAC recommends keeping this goal as is.*

Goal 8. "Offer visitor opportunities at Midway Atoll to discover and appreciate the wildlife and beauty of the NWHJ, enhance conservation and honor its unique human history."

- *The RAC recommends keeping this goal as is.*

NEW Goal 9. Threats

- *The RAC supports a goal recognizing and addressing threats: climate change, marine debris, invasive species, maritime transportation, and others.*

NEW Goal 10. Evaluation and Adaptive Management

- *The RAC supports a goal that supports evaluation and adaptive management as described in the 2008 Monument Management Plan.*

Mahalo for the opportunity to provide initial input. The RAC looks forward to assisting NOAA in moving forward with the sanctuary designation process for Papahānaumokuākea Marine National Monument.

Sincerely,



William Ailā Jr., Chair

[January 28, 2022]

John Armor, Director

NOAA-Office of National Marine Sanctuaries 1305 East-West Highway, 1 Ith Floor

Silver Spring, MD 20910

*c/o Athline Clark, Superintendent Papahānaumokuākea Marine National Monument
NOAA/DKJRC/NOS/ONMS/PMNM*

1845 Wasp Boulevard, Building 176

Honolulu, HI 96818

Re: Additional RAC scoping recommendations for the proposed National Marine Sanctuary for Papahānaumokuākea Marine National Monument.

Aloha mai Director Armor,

The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (NWHICRER) Advisory Council (RAC) wishes to provide additional recommendations for a proposed national marine sanctuary. These recommendations extend and supplement those recommendations provided by the RAC in our January 19, 2022 letter. The new recommendations consist of six potential boundary options to be considered for analysis in the sanctuary environmental impact statement (EIS), and two recommendations aimed at increasing protections within the Monument and the proposed national marine sanctuary.

These recommendations were drafted by the RAC's Planning, Evaluation, and Sanctuary Designation Subcommittee, with input from the Research Subcommittee and were thoroughly discussed and deliberated before being forwarded to the greater RAC for consideration at its January 12th meeting.

After focused discussions, the RAC achieved its desired outcome of consensus to put forward most of the items. However, approval of one proposed boundary option that included Middle Bank was controversial and was not achieved by consensus; instead it was approved based on a majority vote of council members present at the meeting.

RAC Recommendations on Sanctuary Boundaries and Related Items

1. *The RAC recommends that the following six boundary alternatives be considered in the EIS, The boundary options A-E were agreed upon by RAC consensus.*
 - A. *No action (no sanctuary, no boundary);*
 - B. *Only the original Monument area waters; no state waters; and not Midway;*
 - C. *Original Monument area waters; state waters; and not Midway;*
 - D. *Original Monument area waters: state waters; Monument Expansion Area (MEA); and not Midway.*
 - E. *Any combination of B-D above that is inclusive of Midway marine waters;*
 - F. *Original Monument area: state waters; MEA; not Midway: and some larger portion of Middle Bank. that is, incorporate an area that is presently outside of the eastern PMNM boundary.*

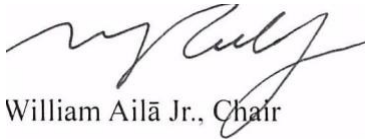
Diverse perspectives were shared in the RAC's discussion of boundary option F. Proponents mainly cited biological reasons for incorporating Middle Bank within a sanctuary. Dissenting opinions tended to focus more on socio-cultural and political aspects, including some they felt had the potential to derail a sanctuary process and that there were promises made to some of the Kauai fishermen during expansion that needed to be considered. Since the RAC did not achieve consensus on this item, a roll-call vote was taken. The inclusion of this boundary option as a recommendation to ONMS was approved based on a majority vote of 5:4

2. *The RAC unanimously recommends that the biological, cultural & historic significance of each option be explored and documented by the Co-Trustees and appropriate partners. to develop clear recommendations for effective management of important resources.*
3. *The RAC unanimously recommends that sanctuary planning examine opportunities for comprehensive management inclusive or Midway Atoll due to its connections as a critical part of the ecosystem and its cultural connection to the archipelago: and explore the feasibility of including Midway waters in the new sanctuary.*

The council is an advisory body to the Reserve/NOAA Monument superintendent. The opinions and findings of this document do not necessarily reflect the position of the Reserve, the Monument, or the National Oceanic and Atmospheric Administration.

Maha lo for the opportunity to provide this additional input on a sanctuary designation for Papahānaumokuākea Marine National Monument. Do not hesitate to contact us if you have questions.

Sincerely,



William Ailā Jr., Chair

3.1.3 Individuals

Michelle Johnston, Galveston, TX:

I fully support NOAA's Office of National Marine Sanctuaries initiation to consider designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary. This designation would add the conservation benefits and permanency of a national marine sanctuary to safeguard resources in the marine portions of the monument, particularly the coral reef habitat, highly endangered Hawaiian monk seal, and threatened green turtles.

Callan Fromm, Evanston, IL:

The wildlife I've seen during the Nautilus expedition's dives in the Monument have been absolutely jaw-dropping, and it's been so incredible to see so much seabed that's almost totally free of human debris. I've added some screenshots of a few of the amazing things from just one hour of watching tonight, November 28th, 2021, and they honestly don't capture the crispness of the video. There have been anglerfish, starfish, fuzzy pink lobsters, double-headed sponges covered in crinoids like living versions of the fossils I found as a kid in Indiana, and just so, so many beautiful corals-- I had no idea corals came in so many shapes and colours! Please give this area even greater protection under the law to better defend this sacred ground and deep-sea wonderland of life.

John Pechin, Kuna, ID:

I support designation as a national marine sanctuary the original Papahāfl naumokuāfl kea Marine National Monument and the Monument Expansion Area (collectively "Papahāfl naumokuāfl kea" or "Monument"). The designation as a national marine sanctuary would strengthen and increase the long term protections already existing in the monument, In addition the designation would enhance existing authorities and the regulatory and enforcement framework. The scoping study should include a section on means of funding sources to support the monument over the long term. Please consider a voluntary tax provision similar to state of Minnesota Non Game Wildlife Fund. Sincerely, John H. Pechin

Constance, Lombard, Melbourne, Australia:

Watching EV Nautilus' livestream exploring the Papahānaumokuākea Marine National Monument has inspired an interest in marine life, for me and thousands of other people across the world. Papahānaumokuākea is an example of a diverse and culturally significant ecosystem that currently has a massive engagement with the public. This shows that people care about marine life, and its preservation and protection. Providing Papahānaumokuākea Marine National Monument with additional legal protection means that an important cultural legacy will be respected and that human impact to the monument will be limited. In a time where climate change and pollution are destroying marine ecosystems around the world, for

example parts of the Great Barrier Reef here in Australia, it is important that we save what we can.

Rick V. Macys, Lockport, IL

To Whom it May Concern, I believe we should, as a civilized society, do whatever we have at our disposal to care for all animal life, and to live in harmony with nature as best as we can. To protect wildlife areas is akin to protecting life in general. We should always take care of the animals, wherever they may dwell. I am all for the added protections. Thank you!

Anonymous

I am 100% in support of a marine sanctuary at Papahānaumokuākea, but a Native Hawaiian must be in charge of it. Despite making up such a small amount of the population, indigenous peoples make up the largest numbers of the worlds' conservationists, and someone with ancestral knowledge of the land and waters should be the one to oversee a sanctuary there.

Anonymous

While the Papahānaumokuākea Marine National Monument is currently closed to tourism, tourism's impact on the marine environment can not be forgotten when protecting these species. Hawaii had 10 million visitors in 2019 alone and with that, marine life is significantly impacted. This sanctuary needs to have protections in place from tourist activities that could potentially harm marine habitats and ecosystems like wake activities and scuba diving. These impacts need to be evaluated and accounted for. Currently, since there are no visitors, there are virtual tours and other places suggested to visit and these may need to stay permanently in place in order to protect the marine life around the monument. Further, the NOAA must also take into account climate change and the effects it has on the marine environment within what is now the Papahānaumokuākea Marine National Monument, especially with regard to ocean acidification, when completing this EIS. Across the world, climate change and its correlated sea level rise, water acidification, and rise in surface temperatures have been well documented and Papahānaumokuākea is no exception. As humans continue to release carbon dioxide into the atmosphere, the ocean will be forced to absorb higher and higher levels of it. This means corals will become bleached, reefs slowly killed, and organisms relying on carbonate based skeletons and shells will be weakened, if not killed. Although these effects are already ongoing in the national monument, they are projected to continually worsen this decade. In preparation of this EIS, the NOAA should account for climate change and the continued need to understand its causes and impacts. This will ensure the ability to better plan for the future of the vast ecosystems and wildlife in Papahānaumokuākea, such as its reef system. Finally, ocean pollution is becoming an increasing concern and one that is especially alarming to the Papahānaumokuākea Marine National Monument. The North Pacific Subtropical Gyre surrounds the Hawaiian Islands, and the National Monument specifically, circulating pollution through currents of the North Pacific. Even though the islands are the most remote island chain in the world, they act as a filter, slowly collecting pieces of marine debris on their reefs and beaches. This collection is seriously endangering the marine life in the National Monument. The EIS needs to evaluate both the impacts of designating part of the Papahānaumokuākea Marine National Monument a marine sanctuary and how pollution

would continue to affect the National Monument in the event the sanctuary is not designated. The regulations under the new sanctuary should be more restrictive on the allowances of plastic in its zone than the current National Monument, because the amount of plastic being circulated by the Subtropical Gyre is ever-increasing. In the event No Action is initiated, the decision needs to be supported by accurate findings as to why designating a sanctuary would not succeed in removing plastic debris from the National Monument.

Karie Waka, Kailua-Kona, HI

As a resident of Hawaii Island, I fully support designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary under the National Marine Sanctuaries Act. I see everyday the need to protect our ocean, and the creatures that live in/on it.

Dave Treichel, Madison, WI

I would like to say that the Papahānaumokuākea Marine National Monument needs to be expanded from the east end. So that it will include more area and including that one area that is divided then. Thanks -Dave

Beth Orcutt, East Boothbay, ME

I am writing in full support of the consideration of designating the marine parts of the Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary. As the largest current fully protected marine protected area, sanctuary status would strengthen these protections into the future. Such strengthening is important to achieve sustainable development goals to ensure a healthy ocean.

The current PMNM management structure is a model for shared governance with local Indigenous communities, with the involvement of the Office of Hawaiian Affairs as a co-trustee. I highly encourage maintaining and strengthening this shared governance model in the consideration of sanctuary status. Studies have documented that local Indigenous communities are the best stewards of marine protection because of their framework of the responsibility for reciprocal caring for sacred non-human kin, which increases the likelihood of success of Papahānaumokuākea in achieving sanctuary goals. The vision and guidance provided in "Mai Ka Pō Mai" (<https://www.oha.org/maikapomai/>), reflecting the Native Hawaiian perspective on incorporating traditional concepts and cultural traditions into management of this area considered sacred by Native Hawaiian culture, is a welcome tool for moving this vision forward.

I look forward to the preparation of the attendant Environmental Impact Assessment (EIA) of sanctuary designation. As a deep-sea marine scientist, I recently had the great privilege to participate in a deep-sea exploration expedition of the Ocean Exploration Trust within the boundaries of the PMNM (<https://nautiluslive.org/cruise/na134>). On this expedition, we documented diverse and distinct communities of deep-sea corals, sponges, and fishes within the Voyager Seamount range south of Kapou/Lisianski Island and Kamole/Laysan Island. Some of these seamounts exist outside the current monument boundary. We observed that different communities existed on the seamount flanks, but more exploration is needed to

determine if these differences are due to predominant current direction versus seamount flank orientation, water depth, oxygen and temperature conditions, overlying productivity in the upper ocean, or other factors. The information generated during this expedition may be helpful to managers when preparing the EIA. If our scientific expertise can be of any use during this process, please do not hesitate to contact us.

Dr. Beth N. Orcutt, Senior Research Scientist, Bigelow Laboratory for Ocean Sciences, Maine

Katherine Weeks, Harvard, MA

I am an official volunteer for NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary during the winter months. I am also familiar, as a layperson, with the value of deep sea corals such as those that have been found off the reefs at the Papahānaumokuākea National Monument. The islands, atolls, and reefs that make up this archipelago are very important not only for the corals that line the walls of the sea mounts, but also for turtle nests of the local turtles such as the Green Sea Turtle (aka Honu to the native Hawaiians), Ridley's, and the Hawkbill, as well as resting places for birds and sea mammals. This area needs to be protected for the future of our planet's ecosystem. Please make this area a new National Marine Sanctuary.

Cory H., Hilo, HI:

I support sanctuary designation, but only if the purpose and regulations provide environmental protections that are as strong, or stronger, than existing monument proclamations. For example, the prohibited activities provisions could designate Papahānaumokuākea as a limited access reserve that requires a permit for entry. Those permits should include restrictions as strong, or stronger, than those imposed for monument entry.

Maureen Kellman, East Longmeadow, MA

I have never been to Hawaii, yet I have a personal interest in seeing PAPAHAUMOKUAKEA as a National Marine Monument. You see, I taught fourth graders for twenty years. All of them learned that there is really one ocean and that it plays a critical role in the health of the whole planet. So I join with everyone, especially Hawaiians, who support this designation which will contribute to protecting the area.

Christopher Kelley, Port Townsend, WA

I am writing in support of a sanctuary designation for Papahānaumokuākea Marine National Monument (PMNM). I have been involved in various deep water research projects inside PMNM starting in 2001, with my most latest visit being this past fall in 2021. Over the years, we have made numerous new discoveries that warrant the additional protection a sanctuary designation would provide including numerous potential new species and spectacular high density communities many of which living on the type of substrate and at the depth that deep sea mining will likely occur in the future. PMNM, while its original intent may have been to protect terrestrial and shallow water species such as sea birds, monk seals, top predators, and turtles, is also providing very important protection to deep water species and communities that will be threatened in the future by mining activities.

PMNM is also providing protection from deep sea fishing that used to take place before it became a monument. Deepwater bottomfishing is a very active fishery in the Main Hawaiian Islands (MHI) and has experienced various levels of stock depletion over the years. PMNM is forming a critical function as a recruitment source for this fishery. It's no fishing regulations are not only providing protection and sustainability for bottomfish in the monument itself, it is helping the Bottomfish fishery in the main islands by its proximity and by providing a nearby source of bottomfish larvae that no doubt is already helping the replenishment of depleted stocks in the MHI.

There is one absolutely critical site for this fishery in Hawaii, which is Middle Bank. Unfortunately, the original monument boundary was drawn in a manner that bisects this bank, with the northwest part being inside PMNM whereas the rest of the bank remains outside. Bottomfishers are very actively fishing this bank, probably because of its proximity to the monument boundary. At least two commercially valuable species, onaga and opakapaka, are no doubt moving in and out across the boundary. Ehu and Gindai would not be and kalekale may or may not be. The monuments side of the bank at least offers a "TimeOut" or temporary refuge for the mobile species.

But this is not enough because of the importance of this bank and also because fishermen may be fishing inside PMNM here since activity on Middle Bank is extremely difficult to monitor. As a result, I strongly urge that during the sanctuary designation process, the monument boundary be expanded southward to enclose Middle Bank entirely. If this happens, then a significant buffer will be created between the monument and the closest island, Niihau. If the monument were to extend entirely over the bank, then no Bottomfisher should ever be even close to the monument, which seems like it would make it more enforceable. Another argument comes from Ana Vaz's PhD research modeling larval transport between the MHI and PMNM. Her model revealed that Middle Bank is crucial to the connectivity between the MHI and PMNM. Closing Middle Bank entirely to fishing would not make fishers happy. However, Kaula Rock does not play anywhere near such an important role for the bottomfish fishery and therefore one idea is to make an agreement with the state and bottomfishers whereby the Kaula Rock Restricted Fishing Area be removed as an exchange for expanding the monument over Middle Bank. Fishermen as well as the state would only benefit from this deal since it would be providing a protected recruitment source to the MHI for this fishery. If Middle Bank were fished down and if Ana was correct, this could be a real problem. Recruitment sources further north in the monument would not be as effective in proving recruits simply due to distance and current flow.

In 2017, a single Okeanos Explorer ROV dive was conducted on Middle Bank just outside of the boundary. The dive site was no doubt on a fishing site since it was a little cone feature. It was an amazing dive with precious corals, new species of black corals, a new fish that no one has yet to identify, and a conger eel condominium on the summit. We did not see any bottomfish species, which is alarming. Furthermore, the corals we saw are clearly vulnerable to damage from anchors and weights from bottomfishers. This is not the main reason for extending the boundary but rather just adds an additional argument.

Please seriously consider supporting the expansion of the monument boundary to include Middle Bank for the reasons described above. While this may make the sanctuary designation process more contentious, if successful, it could provide a significant benefit to both the monument and the Hawaiian Islands as a whole.

Christopher Kelley

Affiliate Research Faculty

Department of Oceanography

University of Hawaii

Linda M.B. Paul, Kailua, HI

Linda M. B. Paul Esq.

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To: John Armor, Director of the Office of National Marine Sanctuaries

c/o PMNM-Sanctuary Designation, NOAA/ONMS

1845 Wasp Blvd., Bldg 176, Honolulu, HI 96818

From: Linda M.B. Paul

RE: Public Comment on National Marine Sanctuary Designation for the Northwestern Hawaiian Islands.

Aloha John,

As a member of the public I would like to offer the following comments on the designation of a National Marine Sanctuary in the Northwestern Hawaiian Islands. I support the establishment of a National Marine Sanctuary in the Northwestern Hawaiian Islands as a means of improving the legal protections currently in place to preserve the endemic wildlife and ecosystems of this unique, remote and important marine area. In addition to complying with President William J. Clinton's Executive Order 13178 of December 4, 2000, which is still in effect, designating a NWHI National Marine Sanctuary will provide NOAA with the authorization under the National Marine Sanctuaries Act to carry out the following necessary management actions that it currently has no authority to take:

- a. *Assess civil penalties for violations of Monument regulations and for damages to NWHI resources that occur due to actions within the sanctuary and actions from outside sanctuary boundaries. Some amount of any penalties collected will help fund resource protection efforts.*
- b. *Access Natural Resource Damage Assessment funds to recover costs associated with responding to and remediating the destruction, loss or injury (or potential destruction, loss or injury) to sanctuary resources.*
- c. *Enter directly into agreements with other agencies. Currently the Monument must go through the Pacific Island Region for all MOAs, MOUs, etc.*
- d. *Establish a mechanism to charge fees for commercial Special Ocean Use permits. This includes charging for permitting staff time, cost of vessel hull inspections, cost of providing Resource Monitors, etc. The revenue from these fees will stay with the site. The sanctuary implementation language can also provide that the Monument's current joint permitting system will continue.*
- e. *Establish a Sanctuary Advisory Council regulated by the NMSA that can provide consensus advice to sanctuary managers as representatives of various community constituencies.*

2 Like many other marine areas Hawaii's coral reef ecosystems are being increasingly impacted by a whole host of threats including ocean warming, climate change, coral bleaching, sea level rise, habitat degradation and destruction, disease, invasive species and pollution, which includes marine debris, oil and chemical spills, sediment runoff, plastics, etc. Studies show that large marine protected areas (MPAs) increase biodiversity, abundance and the size and productivity of species, as well as protecting the structure and function of ecosystems.

I also think the boundaries of a NWHI NMS should include all waters and marine habitat out to 200 nautical miles from the baseline of the U.S. territorial sea for all marine areas northwest of the Main Hawaiian Islands and include the State Marine Refuge and all of the undersea volcano referred to on nautical charts a "Middle Bank." Middle Bank rises up to 60 meters below the water's surface and is a critically important biodiversity connectivity bridge between the Main Hawaiian Islands and the Northwestern Hawaiian Islands. Larvae from both these areas move in both directions. Middle Bank is also essential habitat for humpback whales.

Recent research has determined that this species use it for feeding, breeding and navigation. It is also an important foraging area for the highly endangered monk seal. Research also indicates that networks of fully protected reserves linked ecologically through currents are much more likely to work than a single isolated MPA. Networks provide insurance against catastrophic events such as oil spills, typhoons, ocean warming and acidification, invasive species, and population collapse due to overharvesting. Large and replicate MPAs maximize effectiveness and help mitigate damage from catastrophic events such as hurricanes by protecting similar habitats and biotic communities along the entire length of an archipelago.

Middle Bank is much closer to Nihoa, the first island in the Northwestern island chain, and is separated from Kauai in the Main Hawaiian islands by a very deep moat, providing a significant buffer from the impacts of over harvesting in the Main islands. Any regulations short of total closure will be very difficult to enforce due to the distance. Most of the older fishermen that used to fish Middle Bank have retired. According to a former State Division of Aquatic Resources staffer a skilled fisherman employing new fishing technology and a larger boat can easily fish out Middle Bank in two years. It's a natural boundary line and including it in the new Sanctuary is a once-in-a-lifetime opportunity to protect it as a biodiversity reserve and nursery area for fish stocks, which will benefit fishermen in the long run due to the spillover effect.

Larval spillover helps replenish the ocean beyond a protected area; larvae dispersal distances of 20-50 kms or more are not uncommon. Protecting Middle Bank is consistent with the vision, mission, principles and goals of the Monument and those recommended for the new NWHI NMS by the NWHICRER Advisory Council.

3 Regarding a name for a National Marine Sanctuary in the NWHI, I don't support giving it the same name as the Papahānaumokuākea Marine National Monument. The Monument is its own thing and was established under a different and far weaker statute, which is likely to be amended to prevent using it in the future to protect large marine areas. It's important that the public, and Congress, do not confuse the Monument with the Sanctuary. I personally prefer giving the Sanctuary by its own unique and readily recognizable place name, namely the Northwestern Hawaiian Islands National Marine Sanctuary.

Thank you for the opportunity to submit comments on this important matter.

Linda M. B. Paul

Anonymous Citizen

I fully support the national marine sanctuary designation for Papahānaumokuākea. This is yet another place threatened by climate collapse, and all efforts to preserve it should be undertaken.

Michele Paularena, Kahului, HI

I am in favor of designating Papahānaumokuākea as a National Marine Sanctuary as it will give that pristine area the protection it so richly deserves. The Hawaiian cultural sites, the World War II sites, the marine life and the birds that nest there are definitely worth protecting.

Nancy Fleming, Lake Oswego, OR

Papahānaumokuākea Marine National Monument is the largest contiguous fully-protected conservation area under the U.S. flag, encompassing an area of 582,578 square miles of the Pacific Ocean. These waters host the highly endangered Hawaiian monk seal, threatened green turtles, several species of sharks and several species found nowhere else on earth. The large reef systems and protected waters in the monument are significant contributors to the biological diversity of the ocean.

The sanctuary designation process will not change the area’s status as a marine national monument. However, it will add the protections of a national marine sanctuary to the monument’s waters. We must act now to protect the natural resources and habitat of this extraordinary area.

Diane Kastel, Wheaton, IL

[1/28/22]

Our family's objective is to save sharks from overfishing, and, by protecting where they live, including the critical, habitat and ecosystem, all, species depend upon! Supporting the creation of NO fishing zones, in the Pacific, leading in developing, and, monitoring, behavior in "California Marine Protected Areas," and, supporting the expansion of the boundaries of our "National Marine Sanctuary" in the "Greater Farallones National Marine Sanctuary" in 2015, have been a major, focus.

In the, next, three years, we have our sights on increasing, marine, protection, in US waters, through the creation of, two, new “National Marine Sanctuaries”: one in California with the “Chumash Heritage National Marine Sanctuary,” and, one, in Hawaii, with the creation of the “Papahānaumokuākea National Marine Sanctuary.”

Creating these, two, new “National Marine Sanctuaries,” with NOAA, and, stakeholders, in U.S. waters, are, major, goals towards achieving the global 30% by 2030 goals protecting our oceans!

In January the "United Nations Convention on Biological Diversity" released its ‘zero draft’, text, proposal for a, post-2020, global, biodiversity framework. Featured, in the text, is a target to protect at least 30% of the planet — land, and, sea — by 2030. The, draft, text is a, proposed, framing for a, 10-year, strategy to halt, and, reverse, species decline, and, restore, ecosystem, services that are critical to, humanity’s, survival. Included, in the draft, is retaining, all, intact, ecosystems with a, strong, linkage to, nature-based, climate mitigation.

Dr. Enric Sala, “Explorer in Residence” at “National Geographic,” and, co-author of the "Global Deal for Nature," recommends 30 percent of Earth to be, formally, protected, and, an, additional, 20 percent designated as, climate, stabilization areas: “We cannot continue, just, writing the obituary of the ocean.”

On October 7, 2020, California Governor, Gavin Newsom, ordered the state to create a, new, "California Biodiversity Collaborative," and, conserve 30 percent of its land, and, coastal, waters, by 2030. This program aligns with the, international, “30 by 30” goal shared by the "United Nations Convention on Biological Diversity," the "International Union for Conservation of Nature," and, many of the world’s, most prominent, conservation, scientists.

[1/28/22 – additional]

On November 19th, “NOAA” initiated the process to designate portions of the Papahānaumokuākea Marine National Monument" as a, national, marine sanctuary. This designation would build on, existing, management by adding, conservation, benefits, and, enhancing, long-term, protection of these areas.

“NOAA’s Office of National Marine Sanctuaries” is initiating the process to consider designating, marine, portions of "Papahānaumokuākea Marine National Monument" as a, national, marine sanctuary. This designation would add the conservation benefits, and, permanency, of a, "National, Marine Sanctuary" to safeguard resources in the, marine, portions of the monument.

"Papahānaumokuākea Marine National Monument" is the, largest, contiguous, fully-protected, conservation area, under the U.S. flag, encompassing an area of 582,578 square miles of the Pacific Ocean, This is an area larger than, all, the country’s, National Parks combined. These waters host the, highly, endangered Hawaiian monk seal, threatened, green turtles, several, species of sharks, and, several, species found nowhere else on earth. The large, reef systems, and, protected, waters, in the monument, are, significant, contributors to the, biological, diversity of the ocean.

The, sanctuary, designation process will not change the area’s status as a Marine National Monument. However, it will add the protections of a "National Marine Sanctuary" to the Monument’s waters. The, co-management, structure that is a hallmark of "Papahānaumokuākea Marine National Monument" will continue, and, the process to designate a National Marine Sanctuary" will be conducted, in concert, with the monument’s, co-managing, agencies.

The spiritual, and, cultural, associations, of the Papahānaumokuākea, by Native Hawaiians will be a, foundational, element in the management of these, sacred, waters.

J. Thew

We support any and all national marine sanctuary designations.

Jennifer Valentine, Massa Park, NY

NOAA’s Office of National Marine Sanctuaries is initiating the process to consider designating marine portions of Papahānaumokuākea Marine National Monument as a national marine sanctuary. This designation would add the conservation benefits and permanency of a national marine sanctuary to safeguard resources in the marine portions of the monument. Please designate it as a sanctuary.

Daphne Alden, San Francisco, CA

Papahānaumokuākea Marine National Monument is the largest contiguous fully-protected conservation area under the U.S. flag, encompassing an area of 582,578 square miles of the Pacific Ocean, This is an area larger than all the country’s national parks combined. These waters host the highly endangered Hawaiian monk seal, threatened green turtles, several species of sharks and several species found nowhere else on earth. The large reef systems and protected waters in the monument are significant contributors to the biological diversity of the ocean. Please vote to designate this area as a national marine sanctuary. This designation would add the conservation benefits and permanency of a national marine sanctuary to safeguard resources and marine life.

Denise Martini, Las Vegas, NV

The sanctuary designation process does not change the area's status as a marine national monument. It would add the protections of a national marine sanctuary to the monument's waters.

Anonymous

I support the designation of Papahānaumokuākea as a National Marine Sanctuary, and support completely closing it off to commercial and recreational fishing in order to protect the sea life within it, but urge you to keep it open in a limited capacity to recreational scuba divers that dive with guides that hold proper permits. Having a limited number of experienced recreational divers in a marine sanctuary can help in managing the danger of invasive species, disposal of "ghost nets" and other discarded fishing equipment that inevitably drift into the area and threaten marine life, and even help to generate data for researchers on sightings of species of interest, much more than if the area is completely closed to visitors.

Gordon Gregory, Wilmington, NC

I 100% support this attempt to protect our oceans for future generations. Please approve this proposal.

Vic Bostock, CA

Papahānaumokuākea Marine National Monument is the largest contiguous fully-protected conservation area under the U.S. flag, encompassing an area of 582,578 square miles of the Pacific Ocean, This is an area larger than all the country's national parks combined. These waters host the highly endangered Hawaiian monk seal, threatened green turtles, several species of sharks and several species found nowhere else on earth. The large reef systems and protected waters in the monument are significant contributors to the biological diversity of the ocean.

The sanctuary designation process will not change the area's status as a marine national monument. However, it will add the protections of a national marine sanctuary to the monument's waters. The co-management structure that is a hallmark of Papahānaumokuākea Marine National Monument will continue, and the process to designate a national marine sanctuary will be conducted in concert with the monument's co-managing agencies.

Scott Wolland, Oakland, CA

NOAA,

I am writing to show my support of a new designation for parts of the Papahānaumokuākea Marine National Monument as a national marine sanctuary.

It is critical that we increase conservation benefits in this vital area and enhance long-term protection of these areas through the NMS Designation.

Please hold a hearing to discuss this opportunity.

Sincerely,

Scott Wolland

Risa Mandell, Ambler, PA

Marine megafauna like sharks, marine mammals, and sea turtles, need large areas of healthy habitat to safely forage and successfully reproduce. Help us achieve our national goals of 30% ocean protection by 2030 to help protect endangered sharks and rays. Marine protected areas buffer against climate change, and provide important habitat for marine species important to ocean and human health. As a US citizen, I urge you to protect endangered sharks and rays.

Julie Nagase Miller, Kailua-Kona, HI

Hawaii and it's surrounding areas are rare gems that need to be aggressively protected! Papahānaumokuākea Marine National Monument should be awarded national marine sanctuary status!

Stephanie Shorter, Pacifica, CA

Please protect our ocean ecosystems and wildlife! I request that you support the National Oceanographic and Atmospheric Administration's (NOAA) proposed designation of new National Marine Sanctuaries in California and Hawaiian waters. Thank you.

Julie Miller, Berkeley, CA

30% of the ocean by 2030 is the very minimal goal we should have. Our planet needs protection!

Jacqui Smith-Bates, Seattle WA

I am writing to support the National Oceanographic and Atmospheric Administration's (NOAA) proposed designation of new National Marine Sanctuaries in California and Hawaiian waters. According to the MPA Atlas by the Marine Conservation Institute, 7.7% of the ocean is protected and of that, only 2.8% is fully or highly protected from fishing. We have a long way to meet the UN and national goals of protecting 30% of our oceans, but we have the opportunity to help achieve this now. Marine megafauna like sharks, marine mammals, and sea turtles, need large areas of healthy habitat to safely forage and successfully reproduce. Marine sanctuaries are crucial to a healthy ocean ecosystem, which is a key component of supporting life on earth.

Neil Finlay, Blaydon, Tyne & Wear, UK

While in my younger days I spend over forty years, and a large amount of money learning and studying sharks at my expense, dealing with other Countries you find most are trying to reach a goal in Conservation, some are restricted due to Government intervention, I found in my Travels Education is major factor, teaching the youth, Children of Today and the Future will help towards the preservation of our Oceans

Today there is a bigger push from all walks of live World Wide to protect the Planet and the Oceans, Governments all over the World have to come on board to help save this Planet, problem is the rich are not getting involved and the poor are struggling, commonly known as a attitude problem, setting out protection area is a great Idea, who will provide the protection and cost, we need a commitment from the United Nations and sanctioned by the Big Countries

to pay and implement it, start with a world ban on long line fishing, Ban on Shark finning, and that will be the best start to help protect our Oceans.

Maria Gritsch, Los Angeles, CA

I strongly support designating parts of the Papahānaumokuākea Marine National Monument as a national marine sanctuary to enhance protections and safeguard resources in the marine portions of the Monument. We believe sanctuary designation will complement the efforts of the Office of Hawaiian Affairs, the state of Hawaii, and other federal agencies to conserve this nationally significant area and its cultural resources and bolster strong and lasting protection for the marine environment.

Papahānaumokuākea is a sacred place with deep cosmological significance to Native Hawaiians who have a genealogical relationship to all living things in the Hawaiian archipelago. The Monument is a mixed (natural and cultural) World Heritage Site.

Coral islands, undersea volcanoes, flat-topped undersea mountains, banks, and shoals stretch 1,350 miles. The Monument supports a diversity of life, including over 7,000 species, many found nowhere else on earth. Threatened green sea turtles and endangered Hawaiian monk seals are among the rare species that inhabit the island chain.

The National Marine Sanctuaries Act established the National Marine Sanctuary System to protect areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or esthetic qualities. The monument is an area of national significance that merits this protection in addition to the protections provided by the Antiquities Act.

It is critical that sanctuary designation strengthen and enhance the protection of Papahānaumokuākea, as designated under the Antiquities Act and the Presidential Proclamations. Those efforts should include integrating traditional Hawaiian knowledge systems, values, and practices into management. We oppose any regulatory or management measures that would decrease the current level of protection within the Monument and Monument Expansion Area.

Scoping is a critical early step in the EIS process. It sets the boundaries of the analysis, helps to identify information sources, and helps to focus alternatives and identify issues to address within the EIS. A comprehensive scoping process is essential for identifying the “reasonable range” of alternatives in the EIS to address the purpose and need of proposed agency action.

Papahānaumokuākea Marine National Monument is unique. The Monument is one of the few intact, large-scale predator-dominated reef ecosystems left in the world. It is home to more than 7,000 marine species. The islands and atolls—Kure (Hōlanikū), Midway (Kuaihelani), Pearl and Hermes (Manawai), Lisianski (Kapou), Laysan (Kamole), Maro Reef (Kamokuokamohoali'i), Gardner Pinnacles (‘Ōnū nui and ‘Ōnū iki), French Frigate Shoals (Lalo), Mokumanamana, and Nihoa—provide breeding areas for Hawaiian monk seals and four species of sea turtles, nesting sites for more than 14 million seabirds, and more than 5,000 square miles of coral reefs. This is the only known marine area where all resident species are endemic.

At least 23 species protected under the US Endangered Species Act inhabit the Monument, two national wildlife refuges, and two state-protected areas within its boundaries. For example, Papahānaumokuākea provides nearly the entire Hawaiian nesting habitat for the threatened green turtle. On the undisturbed beaches, the turtles come ashore to bask in daylight, a behavior not seen in most other parts of the world.

The Monument provides critical foraging habitats for marine species and birds. Laysan albatross, Black-footed albatross, Bonin petrels, shearwaters, petrels, tropicbirds, Short-tailed albatross, and other seabird species forage in the Monument, along with five species of protected sea turtles. Twenty-four species of whales and dolphins have been sighted in the Monument. Three species are threatened or endangered: sperm whales, fin whales, and sei whales. Acoustic evidence also shows that endangered blue whales visit the area and may migrate past the Hawaiian Islands twice a year. Sharks, including tiger sharks and Galapagos sharks, are key species in the Monument's ecosystems

Thank you for the opportunity to comment on the proposed sanctuary designation. We look forward to working with NOAA to enhance and strengthen protections for the Monument.

Joe Smith

In California, 16% of our state waters are under ecosystem-connected, well-managed and well-studied marine protected areas, including four federally managed national marine sanctuaries. We now have the opportunity to increase protection in two sensitive and biodiverse regions in US waters, also protecting culturally significant Native American and Hawaiian areas.

The principal goal of the 16 U.S. national marine sanctuaries is to protect places with special natural, cultural, or historical significance. Marine protected areas buffer against climate change, and provide important habitat for marine species important to ocean and human health. please protect our oceans and wildlife.

Warren TenHouten, Los Angeles, CA

I absolutely support designating parts of the Papahānaumokuākea Marine National Monument as a national marine sanctuary to enhance protections and safeguard resources in the marine portions of the Monument. We believe sanctuary designation will complement the efforts of the Office of Hawaiian Affairs, the state of Hawaii, and other federal agencies to conserve this nationally significant area and its cultural resources and bolster strong and lasting protection for the marine environment.

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Thank you for the opportunity to comment on the proposed sanctuary designation. We look forward to working with NOAA to enhance and strengthen protections for the Monument.

Nancy Meehan, Ponce de Leon, FL

We need to protect our ocean & waters. Between pollution & bombs being dropped in the waters, it's hard to believe anything left. Off shore drilling needs to end as well as pipelines. Water is life! Sealife & river life are important! Protect it!

Kelly Eigler, Alexandria, VA

Sharks are the wolves of the sea and as top level predators, are responsible for an entire food chain. More over, they have significant research value as live, not dead subjects. They are in trouble almost worldwide and our country can set a positive example of conservation leadership by enacting proactive and protective legislation. We need to help this vulnerable and mysterious species to survive with all our legal might. Thank you.

Carol Jagiello, Bloomingdale, NJ

Sanctuary designation free from fishing is vital to ensure protection.

Georgia Braithwaite, Cottonwood, AZ

Please set aside 30% of our oceans as protected areas.

Kristina Dutton, Iverness, CA

Marine megafauna like sharks, marine mammals, and sea turtles, need large areas of healthy habitat to safely forage and successfully reproduce. Please adopt NOAA's proposal to designate two National Marine Sanctuaries in California and Hawaiian waters. I am a resident of Marin County, CA, and the Greater Farallones and Cordell Bank are an immeasurable gift to our coast, our economy, our health, and the global ecosystem that relies on ocean health and productivity. We need to protect our oceans and meet the UN and national goal to reserve 30% of our waters for marine sanctuaries.

Brad Nahill, Portland, OR

I strongly support increased protections for Papahānaumokuākea Marine National Monument including inclusion of as much of an area of the monument as possible to be designated as a National Marine Sanctuary. This monument is incredibly unique in US waters.

Susan Fleming, Plainfield, IL

Our Sanctuaries and monuments need our support, and additional funding for NOAA to study, protect and manage these important marine areas.

Anonymous

I have been viewing the Nautilus expeditions for several years and am in amazement of all the beautiful underwater locations. The expedition of the Papahānaumokuākea Marine National Monument was especially exciting to see. Please consider expanding this wonderful marine monument and give it the national marine sanctuary protection it deserves, to keep it safe for

our future generations. We need to do something now to help add additional protection to this beautiful marine location.

Elizabeth McCloskey, La Porte, IN

The Papahānaumokuākea Marine National Monument is an extremely vital area for the protection of ocean life, especially the Hawaiian monk seal, which is critically endangered. The designation of this Monument as a marine sanctuary would build on existing management by adding conservation benefits and enhancing long-term protection of this area. I fully support this designation and look forward to reviewing the EIS.

Sarah Milson, Kailua-Kona, HI

I have been fortunate enough to see Papahānaumokuākea National Marine Monument in person, and help clean it up on the last NOAA Marine Debris mission in the fall of 2021. I support the proposal to work towards PNMM becoming a National Marine Sanctuary. It is an extremely rare, fragile place with very endangered animals and must be protected as an utmost priority. Thank you.

Nancy Fleming, Lake Oswego, OR

We now have the opportunity to increase protection in two sensitive and biodiverse regions in US waters, also protecting culturally significant Native American and Hawaiian areas. We must protect these vulnerable areas now. Please act in a responsible manner to ensure the viability of species that reside in these waters.

Dinah Bear (and Lois Schafer), Tucson AZ

Dear Mr. Armor:

We are responding to the National Oceanic and Atmospheric Administration's (NOAA) Notice of Intent (NOI) of November 19, 2021, in which NOAA seeks public scoping comments regarding the draft environmental impact statement (DEIS) being prepared for the consideration of designating the marine components of the Papahānaumokuākea Marine National Monument as a national marine sanctuary. We understand, of course, that Presidential Proclamation 9478 directs the Secretary of Commerce to consider initiating the process to designate components of the Monument as a National Marine Sanctuary. Further,

the Conference Report for the Appropriations Act of 2021 directs NOAA to initiate that process "to supplement and complement, rather than supplant, existing authorities." In contrast, in NOAA's NOI, it appears that NOAA is seeking scoping comment on what should be in the Environmental Impact Statement that would inform what a designation as a Sanctuary should look like, rather than whether a designation of the marine areas of the Monument as a Sanctuary is appropriate and warranted. NOAA clearly has the discretion to decide whether to finalize a sanctuary designation. We set forth below some basic background points and then an analysis that the exact question at issue must be clarified in the purpose and need statement and appropriate alternatives must be analyzed.

I. Background points:

A. In general, Monuments established under the Antiquities Act are more protective of designated objects than Sanctuaries designated under the National Marine Sanctuaries Act. The Antiquities Act specifies: “Sec. 2. That the President of the United States is hereby authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected” (emphasis added).

In contrast, the National Marine Sanctuaries Act (NMSA) provides:

STANDARDS.—The Secretary may designate any discrete area of the marine environment as a national marine sanctuary and promulgate regulations implementing the designation if the Secretary determines that—

- (1) the designation will fulfill the purposes and policies of this chapter;*
- (2) the area is of special national significance due to—*
 - (A) its conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or esthetic qualities;*
 - (B) the communities of living marine resources it harbors; or*
 - (C) its resource or human-use values;*
- (3) existing State and Federal authorities are inadequate or should be supplemented to ensure coordinated and comprehensive conservation and management of the area, including resource protection, scientific research, and public education;*
- (4) designation of the area as a national marine sanctuary will facilitate the objectives stated in paragraph (3); and*
- (5) the area is of a size and nature that will permit comprehensive and coordinated conservation and management.”*

In addition, under NMSA, a series of factors and consultations are required that turn the act into more of a multiple-use statute. In implementing NMSA, NOAA has permitted a fair amount of commercial activity in the Sanctuaries, including commercial fishing. Several reports are helpful in evaluating the comparison between Monument proclamations and Sanctuary designations.

B. Under the Justice Department’s Office of Legal Counsel memoranda, Monuments must be managed at least in part by a component of the Department of the Interior --several Monuments are managed jointly or primarily by a non-Interior agency; Sanctuaries are managed under the Sanctuaries Act by NOAA. The Office of Legal Counsel in the US Department of Justice issued an Opinion in the year 2000 about establishment of monuments in the ocean that has useful information.

C. *The Monument in question is currently managed under a 2008 Management Plan that is five volumes long. The specified federal and state trustee agencies have not yet updated that plan despite the Expansion Proclamation of 2016 and the 2017 Memorandum of Agreement.*

D. *As set forth in more detail below, the 2006 Proclamation specified that the Monument includes but does not affect the management of the five existing management units in the same area. Indeed the NOAA website notes: “The Monument comprises several previously existing federal conservation areas, including the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial, Hawaiian Islands National Wildlife Refuge, Northwestern Hawaiian Islands Marine Refuge, and the State Wildlife Sanctuary at Kure Atoll.”*

E. *A significant component of protection specified in the original and the expansion Proclamations for the Monument is the provision prohibiting commercial fishing (with a five-year phase out for two species) and providing for recreational and Native Hawaiian traditional fishing under specific regulation.*

II. Comments on the Scoping Process:

A. The Purpose and Need Statement Must Be Revised.

As noted in the background information above, NOAA is responding to Conference Report direction to initiate the marine sanctuary designation process; nevertheless, NOAA retains full discretion regarding whether ultimately to make that designation. The current statement of purpose and need begins by providing that the “purpose of the designation is to fulfill the purpose and policies of ... the National Marine Sanctuaries Act.” This sentence inappropriately assumes that a sanctuary will be designated and demonstrates circular reasoning; that is, NOAA assumes it is going to designate a Sanctuary and therefore must comply with the Sanctuaries Act.

However, many of the other needs identified in the NOI could be achieved through existing Monument or other existing protections without sanctuary designation. For example, nothing in NOAA’s notice explains why the current management regime under the Monument and other land management units cannot “safeguard natural and cultural values of the marine environment of the Monument,” “strengthen the existing interagency management regulations,” require interagency consultation for federal agency action that is likely to adversely impact Monument resources, or enhance the joint permitting system for activities in the Monument expansion area. The “needs” to authorize NOAA to assess civil penalties, prohibit destruction or loss of natural resources and provide natural resource damage assessment authorities should be reframed to an issue of how the resources can best be protected utilizing legal authority available to any of the Monument co-trustees.

There is another identified need that is to “augment existing authorities [cites omitted] to provide additional regulatory and non-regulatory tools for management and protection of Monument resources.” The scoping notice does not specify what the additional tools are, or why they are needed. That NOAA appears to have pre-decided the question whether of

designation of a Sanctuary is appropriate is made further evident by the accompanying FAQ's and memo, linked here.

Preferably, NOAA should republish the scoping notice with a statement that does not prejudice the designation of a marine sanctuary and with a designation of needs that does not prejudice it either. Such a statement would be legally proper and would provide more appropriate opportunity for public input, better information for the decision-maker, and a more effective evaluation of environmental and management choices for protection. Indeed, NOAA's NEPA Manual provides: "The purpose and need statement, however, cannot be so arbitrarily narrow that it preordains the outcome of the NEPA analysis." In the event NOAA decides not to republish, the agency must insure that the purpose and need statement in the draft EIS (DEIS), including the specification of needs, reflects an intent to evaluate and then determine whether the current designations and protections without a Sanctuary or an added Sanctuary designation most effectively provides the means to protect and manage the resources in the marine areas of the existing Monument.

III. Additional Scoping Comments for the Draft Environmental Impact Statement

A. Alternatives

NOAA's most important responsibility in this DEIS is to identify and analyze the effects of two types of reasonable alternatives: 1) reasonable alternatives to its current proposed action of designating a marine sanctuary and 2) reasonable alternatives within the context of designating a marine sanctuary. As discussed in this memo, it is not at all evident what additional protection would be afforded by a marine sanctuary designation. It is, however, clear, that a marine sanctuary designation without some additional permanent legal protection provides a new opening for commercial fishing. The DEIS must set forth a robust discussion of the effects of the legal status quo – that is, the Monument with no Sanctuary designation (formally known as the "no action alternative") and provide a detailed comparison between the protections today and what would be added and diminished by marine sanctuary designation.

As to the first type of alternative, it must be stressed that what is called the "no action" alternative does not mean that everything will stay the same if, for example, a Sanctuary is ultimately not designated. As discussed herein, the Monument Management Plan needs to be updated, the pertinent Monument 2008 regulations can and should be modified and extended, other implementing guidance and institutional arrangements can be developed. Thus, the EIS must contain, and NOAA must engage in far more extensive development of information, analysis, and legal analysis before the agency decides whether to move forward with a Sanctuary designation for the marine areas of the Monument as it now stands or might be modified through a new management plan, new regulations, or an additional Presidential Proclamation. Further, neither the decisionmaker, the co-trustees, nor anyone who cares about this ecologically significant area that is of such unique importance to Native Hawaiians would be well-served without such analyses.

As to the alternatives within the context of a potential designation of a marine sanctuary, the DEIS must analyze alternatives that would meet the reformulated "need" of ensuring lasting

protections consistent with existing Monument Proclamations and regulations. Factors that are essential in a sanctuary designation to help assure that protections under the Proclamations as they now exist will remain include:

1. Preserving existing Monument protections.

The Federal Register Notice, in the first bullet under the “need” for designation, makes clear that a goal is to preserve the protections in the existing Monument proclamations. Those protections include a prohibition on all commercial fishing that was put in place after a phase out period for certain stocks and significant payments to the small number of affected commercial fishermen. Currently those protections are assured under the Monument proclamations and any Sanctuary designation must be consistent with or more protective than those requirements.

However, both the Notice and the supporting NOAA Materials linked above assume with no analysis that a Sanctuary designation could assure the current protections in the Paphānaumokuākea Monument even if a future President seeks to weaken them, as President Trump did by proclaiming the end of a ban on commercial fishing in the Northeast Canyons and Seamounts Marine National Monument.

This purpose of maintaining permanently the protections in the current Paphānaumokuākea Proclamations is important and worthy; however, how a Sanctuary designation would achieve it is unspecified. If, for example, a future President issues a proclamation like President Trump did to allow commercial fishing, a provision in a Sanctuary designation that it be operated consistent with the Monument Proclamations could simply follow that weakening. If the Sanctuary designation specifies that protections will be no less than what is in the Proclamations of 2006, 2007, and 2016, could the Sanctuary designation and regulations be amended by either the Western Pacific Fishery Management Council (WESPAC) or the Secretary of Commerce to weaken them consistent with the then-Presidential action? Under the Sanctuaries Act, after certain consultations a Sanctuary designation may be modified in the same way it is initially issued.

As part of its analysis, NOAA should evaluate what provisions can be or must be included in the Sanctuary designation to actually “ensure” that commercial fishing can never be allowed in the Sanctuary, and whether those are more protective than the current Monument protections would be in the face of a Presidential or Secretarial or WESPAC action to weaken them. A similar analysis is essential for each of the protections for the current Monument proclamations that prior Presidents found necessary.

2. Analyzing other “needs” specified in the Federal Register notice.

For each of these reformulated needs, NOAA should evaluate how the need is met by the Monument proclamation, how it could be met by a management plan and/or regulations for the Monument (now or as amended), and how or whether it would be met if a Sanctuary designation were added. For example, one of the “needs” is to “safeguard natural and cultural values of the marine environment of the Monument.” A management structure has been established for the Monument, but the most recent Management Plan is from 2008, before the Expansion. Would updating that Plan, incorporating the recently prepared Mai Ka Pō Mai

guidance document released by the co-trustees, be as effective or more effective at safeguarding the natural and cultures values of the Monument than overlaying a Sanctuary designation would be? The DEIS should be analytic and specific about this evaluation, and if the Sanctuary designation is found to be more effective, the analysis should be clear how and why it would be.

Another example: the “needs” specify that a purpose of the Sanctuary designation is to “authorize NOAA to assess civil penalties for violations of sanctuary regulations or permits and to enforce provisions of the NMSA.” In addition to the prejudgment and circularity of this “need,” the real question that the DEIS and related documents must evaluate is what legal authorities there are for enforcing protections in the area by any of the co-trustees, what agency coordination there is or may be to use them, and how much are the agencies using them with what level of cooperation. Since use of the authorities may depend on issuance of regulations, what Monument regulations have been issued, what will be issued, and what is the schedule? The “need” to authorize NOAA to enforce the provisions of the Marine Sanctuaries Act should be reformulated to analyze how resources can be protected by using the authorities of any of the co-trustees. For example, if the Fish & Wildlife Service has effective authority to cite and penalize a person destroying Monument resources, how is providing additional authority to NOAA to enforce for the same resources as a Sanctuary more protective? If NOAA already has authority to enforce fisheries violations under the Magnuson-Stevens Act once long overdue Monument regulations are issued, what additional protection for fisheries are provided by a Sanctuary designation? What is the schedule for issuing Magnuson Act regulations for protection and how would that be improved or delayed by a schedule for Sanctuary designation?

Finally, the notice cites the “need” to enhance existing authorities under the Antiquities Act and Presidential Proclamations to provide regulatory and non-regulatory tools for management and protection of marine resources” as a reason for designating a Sanctuary. Instead, this should be part of the evaluation, discussed above, of what tools there are available throughout the federal and state governments to protect these resources, and how they can be used cooperatively. The 2016 Proclamation specifies a long list of authorities for that purpose, and it is not evident that those authorities “need” to be enhanced without an evaluation of how they are being used now, to what protective effect, as well as how they could be used if the Management Plan and regulations were updated. These are, of course, examples and all of the needs should be evaluated in light of all co-trustees’ authorities and responsibilities.

3. Management issues.

The NOI in Section IV specifies that NOAA will develop among other documents a draft Sanctuary Management Plan. In addition, one of the “needs” specified for Sanctuary designation is to “strengthen the existing interagency management regulations (50 CFR 404).” In the DEIS, NOAA must evaluate the existing management arrangements and how adding a layer of Sanctuary designation would or could enhance or detract from implementation of those arrangements. For example, the existing Monument regulations referenced are issued jointly by the Fish and Wildlife Service (DOI) and NOAA (Department of Commerce). They date generally from 2006. Nothing prohibits the agencies from moving forward with

amendments to these regulations that would include the Monument Expansion of 2016. Yet, more than five years after the expansion, no regulations have been issued for the expanded marine portion of the Monument and no final revised Management Plan has been developed. An evaluation of how a Sanctuary designation would complement those existing and updated (when they are in fact updated) regulations is essential, including an analysis of how a designation that provides for Sanctuary management by NOAA would interact and intersect with the process of updating the Monument regulations. Such an analysis should include the roles for the U.S. Fish and Wildlife Service, State of Hawaii, and the Office of Hawaiian Affairs (OHA) in issuing any regulations. Further, the evaluation must include an analysis of how and whether having some component, but not all, of the Monument designated as a Sanctuary will make management and regulation effective and efficient or less effective and efficient.

Additionally, the Sanctuaries Act requires as part of the designation process that NOAA develop a management plan for the Sanctuary. That plan and its implementation must be evaluated every 5 years. NOAA should evaluate how the Sanctuaries management plan and the Monument management plan will intersect and how these duties to update both the Monument and Sanctuary plans—if there is a sanctuary designation--will be made compatible and complementary.

4. Use of resources.

Much time and attention has been given to developing management arrangements for the Monument including the Monument Expansion. They are set forth most recently in the Management Agreement of 2017. Any evaluation of whether a Sanctuary designation would be useful must consider whether agency resources could be better used in developing an updated management plan, and developing cooperative arrangements for implementing that plan. For example, how are the managing agencies cooperating in enforcing existing regulations? What is the record of protection of the resources? What would be the most effective way to arrange for development of effective scientific analysis of the area? For evaluating how protections are working in the area? For considering and implementing improved protections for the resources? And, importantly, what is the best use of always scarce agency resources: promulgating a new Monument management plan and Monument regulations to cover the expanded area or spending the time and effort to launch another new planning process and regulations for a Sanctuary?

5. Complexities for the public and regulators.

Under the current Monument proclamations, the Monument with expansion encompasses several management areas. The Monument covers marine areas, areas that overlay the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, the Midway Atoll National Wildlife Refuge; areas that overly the Battle of Midway National Memorial; and areas that overlay the Hawaiian Islands National Wildlife Refuge. While four entities are involved in management of the entire Monument, each of these included areas falls under specific management authority. Providing an additional layer—a Sanctuary—for some, but not all, of the Monument—provides an additional complexity. Any analysis of whether Sanctuary designation is useful or effective for protection must evaluate complexity and how it affects protection of the relevant resources (objects in the Monument). Additionally, it should consider

how an additional management unit with a planning process and regulations will affect public involvement in the various management units within the Monument.

6. Complexities of Sanctuary designation.

The process for designating a National Marine Sanctuary is complex. The statute specifies a series of factors to be taken into account and consultations required. These include, as some of the factors, evaluation of “(H) the negative impacts produced by management restrictions on income-generating activities such as living and nonliving resources development; and (I) the socioeconomic effects of sanctuary designation.” Consultation must include any Regional Fishery Management Council under the Magnuson-Stevens Act, in this case WESPAC, which vigorously opposed the original Monument, the expanded Monument and the bans on commercial fishing. Indeed, a WESPAC advisory committee member recently stated that, “Turning this monument into a sanctuary gives the council another crack at developing fishery regulations.”

These complexities, and whether in light of them, Sanctuary designation would be more or less protective of the Monument resources, is an essential component of the environmental analysis in the DEIS and related documents evaluating whether Sanctuary designation is useful or appropriate. For example, the provision in the Sanctuaries Act that permits the Secretary of Commerce to override the Regional Fishery Management Council (Sanctuaries Act at 304(a)(5)) should be considered in the DEIS analysis, including its history and potential use if Monument protections were weakened.

B. Protective Provisions to Evaluate in the DEIS

We recommend that the following provisions be considered in the context of a proposed Sanctuary:

-A provision to ban commercial fishing permanently. To truly increase protection of Monument resources, commercial fishing must remain prohibited as it now is under the Proclamations, even if a future President seeks to permit it under a revised Proclamation. The Sanctuary description and record would have to make clear how essential this protection is to the purposes of the Sanctuary and how it must never be changed even if the Monument recognized in the Sanctuary designation is modified. It is important to note that under the NMSA, the terms of designation may be modified in the same way as the designation is made. Therefore commitment to the goal of complete and permanent ban on commercial fishing in the Sanctuary is essential, but how to lock in this protection even if the Monument is modified requires thoughtful legal analysis set forth in the DEIS.

-A provision specifying a fixed “reasonable time” for the Regional Fishery Management Council to issue regulations, so that if the Council does not act within a fixed number of days (“a reasonable period”) to develop regulations barring all commercial fishing and restricting recreational fishing in the same manner as within the Monument, the Secretary will act under Sec.304 (a)(5) of the Act. While the Act does not provide for mandatory Secretarial action, a provision requiring action within a certain time period appears consistent with the goals and purposes of the Act.

-A provision setting forth each and every prohibition for any person and each and every regulated activity for any person with the understanding, evident from the proclamations, that those prohibitions apply to any persons including those working for federal or state agencies except as specified in the Proclamations for the Armed Forces, the U.S. Coast Guard, and in emergency situations. The Sanctuaries Act provides that if another agency is proposing to take an action that will destroy, cause the loss of, or injure a sanctuary resource, there is a process for consultation and mitigation. NMSA, Section 304 (d). The Monument protections are for most agency workers and officials stronger and more protective than these Sanctuary Act negotiation provisions. The DEIS should identify this problem and how, under a Sanctuary designation, the stronger standards would pertain and be implemented to be as protective as the Proclamation provisions.

-A provision broadening representation for an Advisory Council. The Sanctuaries Act provides that the Secretary may establish Sanctuary Advisory Councils that are exempt from the Federal Advisory Committee Act. These Councils are generally comprised of people in the geographic area of the Sanctuary. Section 315(b) of the Act provides:

“MEMBERSHIP.—Members of the Advisory Councils may be appointed from among—

(1) persons employed by Federal or State agencies with expertise in management of natural resources;

(2) members of relevant Regional Fishery Management Councils established under section 1852 of this title; and

(3) representatives of local user groups, conservation and other public interest organizations, scientific organizations, educational organizations, or others interested in the protection and multiple use management of sanctuary resources.”

Because of the national and indeed international importance of this protected area, and to underscore the point that these are resources that belong to everyone in the nation, any Sanctuary designation here should specify that Advisory Council members must include nationally knowledgeable and appropriate people. NOAA should consider whether it wants to include a member of WESPAC given its strong stance for commercial fishing and against the Monument that bans commercial fishing.

-A provision addressing permits. The Sanctuaries Act, at Section 310, permits NOAA to issue permits so long as they are consistent with the purposes for which the sanctuary was designated and for protection of sanctuary resources. To assure protections as effective as those in the Proclamations, any Sanctuary designation should incorporate not only the prohibitions and regulated activity designations noted above, but indeed provide in the designating document each of the prohibitions and restrictions in each of the Proclamations with an analysis, including a sound legal analysis, of how they are supported by the NMSA and how they will remain a permanent part of any Sanctuary designation.

Finally, any evaluation of how the current Monument proclamation protections are or are not as protective as adding a Sanctuary overlay and how protections under any Sanctuary designation are lawfully maintained permanently requires a careful and accurate legal

analysis. The material NOAA has placed on its website related to this potential Sanctuary designation has legal mistakes and misstatements. For example, in the Q&A section related to commenting on the Federal Register notice there is the following:

“Q: How does sanctuary designation provide a more stable framework and additional protection?”

A: The sanctuary designation process includes significant opportunities for public involvement and procedural steps including environmental review under National Environmental Policy Act and rulemaking under the Administrative Procedure Act. Designation can augment and strengthen existing protections for Papahānaumokuākea ecosystems, living resources, and cultural and maritime heritage resources through the addition of sanctuary regulations. National Marine Sanctuaries Act authorities and regulations would enhance resource protection, increase regulatory compliance, ensure enforceability of protections, provide natural resource damage assessment authorities, and provide for interagency consultation.”

The implication that development of Monument regulations and management plans does not provide the opportunity for public input, does not provide for public notice and comment, and does not provide for NEPA analysis is simply legally wrong. Moreover, there is absolutely no legal explanation or analysis for the assertions that a sanctuary designation would “enhance resource protection, increase regulatory compliance, ensure enforceability of protections, provide natural resource damage assessment authorities, and provide for interagency consultation.” Simply stating something does not make it fact. However, these repeated assertions may persuade commentators that such assertions are valid. Throughout the process of considering whether Sanctuary designation is appropriate or helpful, it is essential that NOAA and its co-trustee cooperating agencies have accurate legal analysis and support for the information and reasoning it uses in the DEIS.

Sincerely,

Dinah Bear

Lois Schiffer

Environmental attorney; General Counsel, Council on Environmental Quality, Executive Office of the President (1983-1993; 1995-2007) (Deputy General Counsel, 1981-1983).

Environmental attorney; General Counsel, NOAA (2010-2017); Assistant Attorney General, Environment and Natural Resources Division, U.S. Dept. of Justice (1994-2001).

Victor Carmichael, Pacifica CA

Surfing for over 50 years and traveling all over the world pursuing waves, I, too, at times have feared sharks especially locally here in Northern California which is in an area known as the ‘Red Triangle’ due to an abundance of Great Whites. But I also have respected their existence and right to live. They are an alpha predator in a complex food chain. Through exaggerated fear and overfishing (for their prized dorsal fins) they are being seriously reduced in numbers and many species are endangered. I support public hearings by NOAA to address the problem.

3.2 Oral Comments

The text below may contain errors, as it is taken from auto-generated transcripts, and has not been reviewed by the speakers.

3.2.1 Federal Agencies

U.S. Environmental Protection Agency (EPA) (via Andrew Zellinger)- December 16, 2021 Meeting

“Hi, thank you for the opportunity to comment. I appreciate the opportunity to work with you throughout the planning process. I represent US EPA Region 9 based in San Francisco.

I don't have any other formal comments at this time, just wanted to make myself available if you have any questions for the kinds of resources that we work on. Our focuses include environmental justice, air, and water quality, and I'll be here throughout the process.”

3.2.2 Organizations

Surfrider Foundation Hawaii Region (via Kaitlyn Jacobs)- December 8, 2021 Meeting

“Hi everyone, my name is Kaitlyn Jacobs, and I am here on behalf of the Surfrider Foundation Hawaii region. I'm just going to keep it short here we're in the initial stages still but at Surfrider, we definitely support this movement from monument to sanctuary, especially because of the additional protections and benefits, while still maintaining the co-management structure.

We're really excited to be involved as an organization in the designation process and follow along with the management plans, as everything moves forward. So I would love to thank you guys for all your hard work on this and we're really excited to keep moving forward.”

Godfrey Akaka- December 8, 2021 Meeting

“I'm, I live, I reside on Molokai. I represent the Native Hawaiian Gathering Rights Association I am native Hawaiian And I guess, I had a question, is it possible for somebody to give me just a brief is it possible for me to ask a question and then I can continue comment. Hello?... I'm trying to, I'm trying to get more information regarding this one thing that I failed to hear from William Ailā was what you guys trying to protect. The area from I never catch that, you know I heard need to protect, but from what Protect them from what. We are in the State of Hawaii, we are getting constantly bombarded by your fishing restrictions, constantly to the point where people are just participating and making rules, just because. There's no science behind it, no data behind it. And then, even when data is provided, it's used against a fisherman. So if you use fish, if you eat fish, consider where the impacts that is being made when whenever you close off one area, but I'm just curious to know, what is this area being protected from? So at this time, we cannot support this, this proposal. And I think hopefully, somebody can get back with me with that answer in the discussion. Mahalo.”

3.2.3 Individuals

Klayton Kubo- December 8, 2021 Meeting

“Okay, so at this point in time, I don't know if I can support this measure I need way more information and about six or seven years ago, we had an agreement Yes, again I want to reiterate, we had an agreement That the monument was not going to get closer to the island and county of Kaua ‘i Nor does, it’s going to encompass the two weather buoys that is out there to the northwest of the island of Kaua ‘i. So please remember that agreement and that is why the expansion did not come closer to county of Kaua ‘i nor Ka ‘ula Rock, nor [unintelligible], nor [unintelligible]. And I want to reiterate, please remember that. Because let's put it this way: Why is the monk seal coming from the northwest Hawaiian Islands, why were they relocated to the main Hawaiian Islands? If it is a monument up there, some protected area to begin with, so that is what I don't understand, why is it that the calculation of monk seals that NOAA wanna bring is looking like 500 in the main Hawaiian Islands. And that, I cannot understand that one there. Unless if Malia or Jeff Walters, or Athline Clark, you guys can give me the answers. Athline, you know my phone number. Malia, you know my phone number. I don't know if Jeff is on but it's all good, so just remember the agreement that was made six or seven years ago. Please remember that. A year, I've been hearing talk about encompassing the whole middle banks in between [unintelligible] and the county of Kaua ‘i. I don't know if that is true, but remember again, the agreement that was made six or seven years ago, and Athline, you know what I'm talking about. That's all I'd like to say for now. I might you know come on to some other meetings, and I might have more to say later on. Thank you very much for your time, mahalo nui, again, Klayton Kubo. [Hawaiian language] aloha.”

Devin Silva- December 8, 2021 Meeting

“Just to start I do make, you know, a substantial part of my livelihood off commercial fishing so that's where I'm coming from and I'm, thank you Godfrey for your last comment

in support of the fishermen but uh I was just wondering what is happening what are we looking at as far as like Godfrey said, science and what are we protecting it from? My vision, would be to grant us, you know, Hawaiian fishermen not to get into the issue of the foreign crews out of Oahu allow us to respectfully provide to our communities through you know regulation and monitored fishery I don't see why, if it's monitored and regulated, why we can't provide to our community. I've worked in the, also in the air cargo industry for like five or five years, and I see thousands of pounds of fish being brought into Hawaii and you do have to look at where your fish is coming from. You know it's coming from factories, is being processed with copper oxide, which is another issue when we can provide fresh fish here through regulation, that's sustainable. So, I mean, I'll leave it at that, hopefully that's something that you guys can consider when you're closing off this section of the ocean to us. Thank you.”

Kenton Geer- December 8, 2021 Meeting

“I'm good, I unfortunately missed part of, the beginning part of the meeting here, but this has been a subject that has, you know, getting passed around, and I know that it concerns a lot of

people in different walks of the industry. I'm personally concerned with the expansion, because of, there's two weather buoys that could potentially encompass up to the northwest

that at in the past had been part of our fishing grounds. And what I worry about is that I have watched historically that nothing ever comes back, aside from I can think of one time in history of maybe giving a little bit of Kona crab quota back like years after the, most of the fleet that was doing it. It's pretty much gone. I have historically watched that when you take something away it just never comes back, and I just watched more and more and more regulations get put on the little guy in Hawaii while the lobbyists and Wespac and the bigger groups continue you know, really advocating for bigger boats that have vessels and the capability to go other places, as you encroach further and further into the Hawaiian Islands, you're, you're basically going after the people that don't have an option and that's what I'm concerned about, especially if you're talking about up towards middle bank, Kaua'i. You know those guys, everyone, mostly smaller range boats, have boats that are designed purposely for what they have. As you talk about taking away fishing grounds from people, you're literally taking away full livelihoods, with no, there's no talk of reimbursement and stuff because our State fisheries for the most part, you've never had a good bailout because it's not Federally regulated. So the problem is, is that you guys continue to take away, but you're not offering anything back to the people that you're taking the jobs from. And I would just really like to emphasize that although oftentimes monuments, have the best, you know, feel good story in mind, the reality is often the people that are doing the least amount of damage or no damage at all, are the people who become the sacrificial lambs on this. And I will just really ask that they, you know, you try to remember the rules, or the agreements that have come up with in the past, and try and honor, particularly the smaller boat fleet because those are the people that you're going to hurt the most so that's all I have to say. Thank you."

Kolomona Kaho'ohalahala- December 11, 2021 Meeting

"Aloha kakou.

I am here and I, in my capacity as an individual who's residing on the island of Lanai, and so I would like to make my comments as a native Hawaiian and thank you for this opportunity. I registered but did not expect to make the comment, so I'm happy for this opportunity. I'm,

the one thing that I would like to speak to is this idea of the boundaries that are potential for the sanctuary designation, and it's clear that in the map that was displayed earlier by the superintendent that there are two specific boundaries, one which was the 2006

boundaries which created the monument designations that I believe at 50 miles of from the land outward to sea, and the the second was the monument expansion boundaries of 2016

which go out to the 200-mile boundaries. But I would like to comment that it would be in my opinion as a native Hawaiian that separating the authority within a sanctuary that would be within the 50-mile and not include the expanded area of 200 miles would not be how I would view the connection between the people, the place, the culture, and the resources. That all of this area should be, continue to be viewed as one place, and if we're going to be managing this place, then we should not try to separate and divide any more than we have been divided in many other instances, so I would hope that moving forward, that the view of the newly

proposed sanctuary designation would be inclusive of the 50 to the 200-mile expansion boundaries, and at the same time protecting the fishing rights that had been established by the expanded boundary areas in 2016 for those fisher families that have, access the area close to Papahānaumokuākea

and keep that intact, but again I want to emphasize that as a native Hawaiian, we view all things as interrelated, and if we're going to be managing an area of this kind of magnitude in the sanctuary, then I would want to ensure that we could continue to view the sanctuary as a single unit that integrates not only the resources within these boundaries, but also with the people and the place as related and not separated because of political jurisdictions or authorities. But if we're truly going to help to support a native Hawaiian perspective to be inclusive, in the, not only the co-management through the Office of Hawaiian affairs, but also in our view of how ecosystems are managed, then I would like us to consider not separating this but keeping it intact and then I think when we advance and move forward with that kind of designation

that's all inclusive, it will help us to understand best the interrelationship between what matters for any particular time or any particular issues that may arise in the future, and that we give it a total comprehensive view from a native Hawaiian perspective that is inclusive of all things, and not just separate and divide into individual components which make it impossible to try and find the true relationships and perhaps even finding better solutions if they were considered separate individual and divided in terms of authority. So that is my hope is that we will continue to view it in that manner. So I thank you for this opportunity. As I said, I had not expected to speak but I'm hoping that this will be helpful in this process so mahalo. Thank you."

Doug Fetterly- December 14, 2021 Meeting

"Papahānaumokuākea stands as a beacon of hope, one that must continue to be protected if we have any chance of saving the dwindling numbers of sea life, along with the integrity of the ocean itself, if not human life. A mere 7% of ocean waters have some degree of protection, while extraction of fish for one has accelerated and at an unsustainable read, one that regeneration of the fish populations cannot keep up with. Fishing methods have advanced far beyond those of recent decades. We are mistaken if we think we can continue business as usual. We must all come together and give serious thought to what we leave or don't leave for future generations, we ask ourselves, will we be the cause of continued extinctions? I stand behind Papahānaumokuākea becoming to protect marine sanctuary with no loss of the protections and boundaries put forth in the Monument. I also recognize that the voices of the native Hawaiians, the lifelong stewards of conservation here in the islands, must be an integral part of the associated economic, socioeconomic, and cultural consultations and considerations moving forward, and we must contribute to, not detract from, the goal of protecting 30% of the world's ocean by 2030. Without question life as we know it depends on healthy oceans and ecosystems. Mahalo."

Tammy Harp- December 16, 2022 Meeting

"I'll just say some few lines, and I'll probably write in more than I want to speak.

I like the supplement and compliment, because I was, I was very leery about the you know slacking of protections up there, you know, over the years and those who know me know that I really was you know troubled by you know, seeing it, not seeing it become less you know

protected up, though, but anyway um I just wanted to say that previous management of fisheries have negatively impacted the NWHI, which is the monument but to you know I'll say NWHI

marine resource through mismanagement. And also too that you know I am unsure sure why the long-line permits weren't subjected to the use it or lose it quota set by the Fishers Council for the bottom fisheries and not for the long-line fishers. This is like around nine, late 1990s and as for now, that's pretty much you know, give kitty time for justify why they want to come and fish in there, but you know nowadays, there's talk about harvesting of Honu for consumption and

you know I never was privileged to eat Honu growing up. It's because we had other things we ate. And mostly the Honu went for commercial like, the sale to restaurants and for home consumption, too, but it was like unregulated and everything just went downhill for true mismanagement, and so that's not a concern about the, I want protection because we get the,

honu you know they can travel far from up there, it can take them six days to get from FFS, oh I forgot the Hawaii name right now and French Frigate Shoals shows down to Maalaea, took only 6 days for that Honu, so you know, we know that they're traveling back and forth and

you know, so when the time comes to make the decision to harvest for home consumption

see which that is not in the language, everything is noncommercial, subsistence, sustenance, all those words but nothing says home consumption. But meanwhile, with the, you know, throughout the whole marine resource language, there you know there's some stuff missing. But anyway um and then we see long-term sustainability talking, you know that kind of stuff, which is good, but then we forget about the long time, the old time, long time families that resides still in the same places of you know, for generations and and, and we hardly have any say in know, in management of turtle, the resource actually crashed [Hawaiian language] actually not really [Hawaiian language] but in a sense, it is because we have to know, you know, is this, I call them if the meek is to inherit the earth, you know it's like we inherit the failure of commercialism because they drained us out. They like took our ecosystem, our juvenile habitat away from us because of overfishing for black coral and things like that so yeah. Sorry about getting off track, but I can't help but go back to the 'Au 'au Channel. But my love for that place is just as much as I do under the Monument or the NWHI. And you know Uncle Buzzy, he epitomizes who we are, you know, we have this innate ability to try to fix what we kind of like damaged, you know and,

I'm glad that he came into our lives because he made me more aware of you know what is really happening out there, especially like in fisheries, but anyway, yes, I am for the supplement and compliment and I And I really, you know and there's this one thing that really gets me. I don't mind all the high resolution you know pictures and things that go on up there in the water up in the Monument. But I am dismayed and disappointed in seeing those things happening in the 'Au 'au Channel, and it's been like 20 years since I had expressed my concern

about things like that and I felt that time you know, in the front of the coral reef task force, that they brought more damage to the place and so Isaac, my husband, he mentioned that at that same meeting .., and he said oh look in under my mom, mother's dress, and I thought what is that? What's he saying, And then, on the way home, after all that meetings, went home and coming over towards Lahaina, I looked over and looked at our channel, and I thought, and I yelled out they made it, made her naked. So yeah you know I, you know it's like, science is good for some stuff and science is good for you know, and sometimes they're not good, because they get so overzealous and excited that they're exposing more than what the people actually really want exposed and that's one hang up for me about you know the bad part of science

And now okay, so I guess I did enough preaching. So I wish everybody a safe holiday season, and I'll go and submit my written testimony. Mahalo.”

[second comment- same meeting]

...Aloha again, I just wanted to just leave a quote that Isaac had said in front of the coral reef task force. ‘One thousand years of knowledge is better than one hundred years of assumptions’, and you know, the room roared and a lot of scientists were in there and the room roared in laughter because everybody knew that was the truth so anyway, again mahalo and pleasant evening to you folks.”

Brian Bowen- December 16, 2021 Meeting

“My name is Brian Bowen B-R-I-A-N B-O-W-E-N And I work as a marine biologist for the University of Hawaii, but today I speak as a private citizen. And I want to say that that there's a universal consensus among scientists that the northwest Hawaiian Islands, not only is it desirable to be protected it must be protected, and the reasons are so many. I'm talking about Laysan albatross. They nest almost exclusively in the northwest Hawaiian Islands. If that area isn't protected, they could be gone. The Green turtle, Honu, nest almost exclusively at French Frigate Shoals. If that area isn't protected, they're gone. And the other thing that scientists know is that the, is the lesson of Uncle Buzzy Agard, that the area is relatively fragile. There was a gold rush in the lobster fishery 40, 50 years ago that provided a great livelihood for some fishermen, fisher persons, but by 40 years ago, it was fished out And in 2021, 30, 40 years later it hasn't recovered. The lobsters are still scarce there, so not only is it a precious place, a necessary place for our endemic Hawaiian wildlife, it's a fragile place that deserves the fullest protection we can give it. That's all, thank you.”

4. Response to Scoping Comments

This section provides responses from the State of Hawai‘i and NOAA to substantive comments received on the NOI and EISPN during the public comment period. As discussed in Section 2, comments were considered substantive if they pertained directly to the development of the EIS.

Statements considered to not be substantive were general comments with no specific information, such as those that stated preferences for or against the Proposed Action. Those comments are not further addressed here.

A total of 51 comments were deemed substantive and were subsequently placed into 1 of 4 categories pertaining to the development of the draft EIS:

- 1) Purpose and Need
- 2) Alternatives
- 3) Affected Environment
- 4) Environmental Consequences

Multiple people commented on each of the topics and those who commented on each topic are listed below the heading. The responses to the substantive comments raised is provided under each topic.

4.1 Purpose and Need for the Proposed Action

Response to comments received from: Dinah Bear and Lois Schiffer

DLNR would like to clarify that this EIS review process is for the initiation of a *potential* national marine sanctuary designation and that the analysis, public scoping, and consultation done through both the HEPA and NEPA processes will inform state and federal decision makers whether a sanctuary *should* be designated in this area. The assumption has not been made that a sanctuary will certainly be designated. The scoping and EIS review process will include analyses on whether a sanctuary should be designated in this area as well as what the potential alternatives for the sanctuary and its management would be. DLNR and NOAA acknowledge that it is possible the language used within the EISPN may have been vague or unclear in this regard and will edit any future public information documents to better elucidate the intent of the EIS.

Additionally, DLNR and NOAA acknowledge the request to explicate and clarify the needs which will be achieved through potential sanctuary protections (through the National Marine Sanctuaries Act) which cannot be achieved through the existing Monument Proclamation (Antiquities Act) including tools for management and protection. DLNR and NOAA will address these requests that purpose and need statements of the EIS include the specification of needs and reflect an intent to evaluate and determine whether an added sanctuary designation supplements and complements the existing protections.

4.2. Alternatives to the Proposed Action

Response to comments received from Shark Stewards, Marine Mammal Commission, Center for Marine Conservation, Cruise Line Industry, the U.S. Navy, the American Sportfishing Association, National Marine Sanctuary Foundation (and partners) Deep Ocean Stewardship Initiative, Mystic Aquarium, Dave Treichel, Linda M.B. Paul, NWHI Coral Reef Ecosystem Reserve Advisory Council (RAC), Dinah Bear and Lois Schiffer, Center for Sportfishing Policy, Sol Kaho'ohalahala:

An EIS analyzes potential impacts from implementation of the Proposed Action via a range of reasonable alternatives. This EIS will include reasonable alternatives to both the Proposed Action of designating a national marine sanctuary, and reasonable alternatives within the context of designating a national marine sanctuary. There will be a robust discussion of

protections associated with a sanctuary designation, and whether they will replicate or differ from the current Monument protections. This includes the effects of a “no action” (legal status quo) alternative vs the range of protections which may be afforded by a marine sanctuary designation.

Some of the resources which will be considered when analyzing the range of environmental protection needs and alternatives include but are not limited to marine mammals and protected species, sustainability and accessibility of fisheries, coral reefs, deep sea environments, and living and non-living Native Hawaiian cultural and maritime cultural resources. Additional economic, sociological, ecological and cultural topics to be analyzed include but are not limited to discharge restrictions within potential sanctuary boundaries, the spatial extent of the proposed sanctuary and various boundary alternatives, permitting, national defense and Armed Forces activities, and potential IMO designation in the proposed sanctuary.

As part of the 304(a)(5) process, NOAA will assess whether fishing regulations proposed by the Western Pacific Fishery Management Council for the sanctuary are consistent with Executive Order 13178 and Presidential Proclamations 8031 and 9478 and with the goals and objectives of the proposed sanctuary.

4.3 Affected Environment

Response to comments received from Christopher Kelley, Marine Mammal Commission, Shark Stewards, EPA, Linda M.B. Paul, and U.S. Navy:

The Agencies knowledge and put great importance on the fact that Papahānaumokuākea is a place of sacred cultural, historical, cosmological, and ecological resources including threatened and endangered wildlife species, high-density marine communities on substrates at all depths, fish and other marine life and reef communities, sunken military aircraft and various other World War II heritage and artifacts, Native Hawaiian traditional areas and artifacts, and more. Many of these are subject to a host of threats including ocean warming, climate change, invasive species, and marine pollution. DLNR acknowledges the various comments that highlighted their importance and that suggested the protections would be maintained and/or enhanced with the designation of a national marine sanctuary. The draft EIS will describe the significance of the affected environment as well as the threats to resources

4.4 Environmental Consequences of the Proposed Action

Response to comments received from Anonymous, EPA, Deep Ocean Stewardship Initiative, Marine Mammal Commission, Dinah Bear and Lois Schiffer, and Michele Paularena.

The draft EIS analysis will describe how the environment within proposed sanctuary waters may be impacted directly, indirectly, or cumulatively by the Proposed Action.

Information received through consultation with co-managing agencies cultural practitioners scientists and others regarding potential impacts of proposed action will be taken into account. Actions that would be taken to mitigate or reduce any adverse impacts discovered will be described within the draft EIS and final EIS, and specific cultural impacts will be closely

evaluated and described within the Cultural Impact Assessment (CIA) and through the National Historic Preservation Act Section 106 process.

The various provisions, resources and consequences of the Proposed Action that have been suggested from commenters has been acknowledged and will be considered though the HEPA/NEPA draft EIS process include but are not limited to broadening representation for an Advisory Council, and addressing permits. DLNR will recommend that NOAA consider strategies within a sanctuary management plan that include ensuring adherence to the Clean Air Act, Clean Water Act, and other applicable acts, and an evaluation of environmental justice populations within the scope of the project area. The protection of any sunken military aircraft in the project area and the rights, freedoms, and lawful uses of the sea recognized in customary international law also will be addressed in the draft EIS.

Appendix G:

Heritage and Historic Resources Supplemental Information

This appendix presents a summary of known maritime heritage resources within the proposed sanctuary. This information is supplementary to the draft environmental impact statement and provides documentation of the substantial resources that will benefit from the proposed sanctuary. The National Oceanic and Atmospheric Administration (NOAA) Maritime Heritage Program, created in 2002, is an initiative of the Office of National Marine Sanctuaries. The program focuses on maritime heritage resources within the National Marine Sanctuary System, and also promotes maritime heritage appreciation throughout the entire nation.

NOAA is legally responsible for the management of maritime heritage resources within sanctuary boundaries. Congress directs NOAA, through the National Marine Sanctuaries Act, to comply with the Federal Archaeological Program, a collection of laws and regulations that pertain to the protection of historical and archaeological properties on federal and federally managed lands. These resources also are impacted by natural factors such as storms, currents and corrosion. Therefore, responsible, informed decisions must be made on how to manage these resources for the enjoyment and appreciation of current and future generations. Maritime heritage resources, unlike living resources, are nonrenewable, so it is especially important that we protect these important links to our past.

Background on Maritime Heritage Resources within Papahānaumokuākea

Papahānaumokuākea not only features unique natural ecosystems, the area possesses important cultural, historical, and archaeological significance as well. The Hawaiian Archipelago's history consists of hundreds of years of intensive maritime activity, resulting in shipwrecks and other types of maritime heritage resources across Papahānaumokuākea.

Responsibilities under the National Historic Preservation Act of 1966

When federal agencies propose undertakings that may affect the cultural landscape, the potential impacts to these values must be taken into consideration. The National Historic Preservation Act of 1966 (NHPA), specifically NHPA Section 106, is one part of this process. Section 106 review requires federal agencies to consider the effects of their undertakings on certain cultural, historical, and archaeological resources which the Act defines as “historic properties.”¹⁵

Historic properties as defined by the NHPA means any prehistoric or historic districts, sites, buildings, structures, or objects included in, or eligible for, inclusion in the National Register of Historic Places maintained by the Secretary of Interior. The term includes properties of traditional religious and cultural importance to Native Hawaiian Organizations and that meet the National Register criteria. As part of sanctuary designation, these cultural values are also

¹⁵ Under NHPA, all ONMS sites are responsible for known “historic properties.” ONMS sites may also have maritime heritage resources that may not meet the definition of NHPA “historic properties.”

considered within the framework of the National Environmental Policy Act (e.g., within the environmental impact statement, management plan, and the State’s Cultural Impact Assessment).

Historic properties as defined by NHPA also include historical and archaeological resources that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and exhibit one or more criteria:

- That are associated with events that have made a significant contribution to the broad patterns of our history;
- That are associated with the lives of persons significant in our past;
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That have yielded, or may be likely to yield, information important in prehistory or history.

Management activities conducted in support of maritime heritage protection

NOAA, the State of Hawai‘i, and the U.S. Fish and Wildlife Service share statutory responsibility to inventory, evaluate, and protect these resources, guided by the NHPA and other preservation laws. Archaeological survey within Papahānaumokuākea was begun during the NOWRAMP research expedition in 2002 and continued opportunistically through 2018. In addition to the terrestrial archaeological resources of the atolls and islands, there are more than 60 reported vessel losses in the historic record, and hundreds of sunken naval aircraft lost within the monument’s currently existing marine boundaries. NOAA’s Maritime Heritage Program maintains the database on these maritime heritage resources within the monument.

This document acknowledges the cultural significance of Papahānaumokuākea and, additionally, provides a brief summary of the subset of currently known (discovered/located) maritime heritage shipwreck and aircraft resources within the marine environment of Papahānaumokuākea prior to sanctuary designation-related Section 106 consultations.

Whaling Vessels

Western whaling activities represent a global industrial pursuit, one which brought European and American voyagers into the Pacific in the late 18th/early 19th centuries. Whaling was often the context for cultural contacts with the foreigners. At the peak of historic whaling activity, hundreds of whaling vessels called in Hawai‘i annually. Ships not only needed provisions, they needed crews; whaling captains constantly needed to recruit for labor. Hawaiians quickly adapted the skills necessary to sail and work these foreign vessels, and many young Hawaiian men found employment on board whalers, venturing again for the first time in hundreds of years beyond the waters of the Hawaiian Kingdom.

The wrecks of whaling vessels can preserve aspects of ship construction and fitting out for the voyage, the tools and whale craft of the 19th century, and evidence of the wrecking event and subsequent rescue and salvage itself. Certain individuals, such as carpenter James Robinson, had an important influence on the history of the islands (opening the first modern shipyard) following the dual shipwrecks of the British whalers Pearl and Hermes in 1822. There are ten recorded losses of British and American whaling vessels in Papahānaumokuākea, five of which have been located by NOAA and assessed. These whaler wrecks are scattered archaeological sites composed generally of heavy ceramics and iron/copper artifacts (e.g., bricks, anchors, try pots, ballast, cannon, hull sheathing); the wooden structure having deteriorated long ago, subject to powerful shallow water surf, surge, and storm effects. The predominantly low integrity ratings for all sites reflect the dynamic environment of Papahānaumokuākea. The whaler *Two Brothers*, discovered in 2008, is now listed on the National Register of Historic Places.

Table G.1. Known Whaling Vessels within Papahānaumokuākea

Site Name (whalers)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
Parker	Kure	1842	arch site	TBD	406-ton American whaling ship; built New Bedford	ship's equipment elements (windlass, anchors, rigging, ship's bell); whalecraft (blubber hook, tryworks bricks)	low; scattered artifact site	Discovered 2003; survey complete in 2006; site plan, cruise report, web content, digital images
Gledstanes	Kure	1837	arch site	TBD	428-ton British whaling ship; built 1827 Leith, Scotland	ship's equipment elements (ballast, anchor, cannon)	low; scattered artifact site	Discovered/surveyed 2008; site plan, cruise report, web content, digital images
Pearl	Pearl and Hermes	1822	arch site	eligible (D)	British whaling vessel	ship structure (keel/keelson); ship's equipment elements (anchors, rigging, fasteners, cannon, grinding wheel, pintle/gudgeon); whalecraft (tryworks bricks, trypots)	medium; confined scatter site	Discovered 2005; surveyed 2006-2007; site plan, cruise report, web content, digital images
Hermes	Pearl and Hermes	1822	arch site	eligible (D)	British whaling vessel	ship's equipment elements (anchors, rigging, fasteners, cannon; whalecraft (tryworks bricks, trypots)	medium; scattered arch site	Discovered 2005; surveyed 2006-2007; site plan, cruise report, web content, digital images
Two Brothers	French Frigate Shoals	1823	arch site	listed NRHP (A, B, D)	217-ton whaling ship out of Nantucket, Captain George Pollard Jr.	ship's equipment elements (rigging, anchors, cast iron cooking pots, ceramics, and glass); whalecraft (blubber hooks, lances, try pots, tryworks bricks, harpoon tips)	low; large arch scatter site	Discovered 2008; site plan, cruise report, web content, digital images; possible associated site east of original location discovered 2021

Merchantmen

Even after they had been placed on Western charts, the low islands and atolls of the Hawaiian Archipelago (without navigational aids) presented hazardous obstacles for commercial vessels transiting the Pacific. Ships that strayed off course and fell prey to these shallow and unseen reefs included iconic Pacific lumber schooners and iron-hulled square-rigged tall ships of a bygone age. Wooden sailing vessels like *Carrollton* and *Churchill* are archaeological sites of scattered iron and steel artifacts and features (e.g., anchors, windlass, ship's pumps, chain), while iron and steel-hulled ships like *Dunnottar Castle*, *Quartette*, and *Mission San Miguel*, have greater site integrity, exhibiting more complete site structure. Even relatively modern ships like *Mission San Miguel*, a former 500-foot WWII T2 tanker, are subject to the forces of nature. The steel ship's aft section lies crushed on its side, the ship's forward section broken and lost altogether.

Table G.2. Known Merchant Vessels within Papahānaumokuākea

Site Name (merchants)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
Carrollton	Midway	1906	arch site	not eligible	1450-ton American sailing bark; built Bath, Maine 1872	ship's equipment elements (windlass, aux boiler, ship's pump, hawse pipes, rigging, pintle/gudgeon, anchors, anchor chain, fasteners)	low; scattered artifact site	Surveyed 2003; site plan; site photographs; historical docs
Dunnottar Castle	Kure	1886	arch site	eligible (D)	1750-ton British iron-hulled tall ship; built Glasgow 1874	hull sections, deck machinery, anchors, cargo (coal blocks), mast sections, rigging	high; large area major site, hull portions, features, artifacts	Discovered 2006, survey 2007 and 2008; site plan, cruise report, web content, digital images
Churchill	French Frigate Shoals	1917	arch site	TBD	four-masted wooden merchant lumber schooner built	deck machinery, ships pumps, hawse pipes, wire rigging, fasteners, blocks	medium; large arch scatter site	Surveyed 2007; site plan, cruise report, web content, digital images
Quartette	Pearl and Hermes	1952	arch site	TBD	former WWII Liberty ship built	major engine shaft propeller features and large steel hull/cargo mast sections	high; arch confined scatter site both inside/outside reef crest	Surveyed 2002, follow up 2006; GPS survey started 2007, survey outside reef 2008; site photographs; historical photographs; historical docs
USNS Mission San Miguel	Maro Reef	1957	structure	TBD	523-foot WWII T2 tanker built	gun tubs, cargo masts	medium; intact stern on port side; mangled midships area	site photographs; ship plans; historic photographs; salvage and assessment docs

Fishing/Miscellaneous Vessels

Fishing in the Northwestern atolls has a long and varied history, from Native Hawaiians making regular canoe trips to Holaniku for turtles and seabirds and traditional resources, to Western sailing ship exploits in the area in the 19th century for seals, reef fish, turtles, sharks, birds, pearl oysters, and sea cucumbers. The history of some of these shipwrecks remains unknown, but the types of propulsion make it very likely that some were long-range fishing sampans.

Distinctive Hawaiian fishing sampans, a local hybrid of original Japanese traditional watercraft design with modernized diesel engines, are historically associated with Hawaii's commercial tuna fishery, centered at Kewalo Basin on O'ahu, and Hawaiian Tuna Packers Ltd. established in 1916.

Table G.3. Known Fishing and Miscellaneous Vessels within Papahānaumokuākea

Site Name (fishing vessels)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
<i>Mimi</i>	Pearl and Hermes	1989	arch site	not eligible	possible fishing vessel	engine component	low; single object	2006
"Oshima" wreck	Pearl and Hermes	UNK	arch site	not eligible	possible fishing sampan	engine house cover and stack; engine, anchors, hawse pipes	low; partial structure and discrete features	Surveyed 2006-2007; site plan, cruise report, web content, digital images
<i>Kaiyo Maru</i>	Laysan	1959	arch site	not eligible	possible fishing sampan	bow structure on beach	low; partial hull	2005
steel bow wreck site	Kure	UNK	structure	not eligible	modern (fishing) vessel?	cabin house	low; partial hull	assessed 2002
<i>Hoei Maru</i>	Kure	1976	structure	not eligible	diesel powered steel fishing vessel	bow structure (ashore)	low; bow and stern sections intact	assessed 2002
sailing vessel	Pearl and Hermes	UNK	object	not eligible	modern sloop	fiberglass hull/cabin	medium; intact hull portion	assessed 2002
motorized vessel	Pearl and Hermes	UNK	arch site	not eligible	possible fishing sampan	single engine block	low; single object	2002; 2005 site photographs;
<i>Paradise Queen-II</i>	Kure	1998	object	not eligible	longline steel fishing vessel	single deck	low; partial structure	assessed 2002

Sunken Military Craft

The military's activities within the Northwestern atolls dates back to the survey of the Civil War-era sloop-of-war USS *Lackawanna* at Midway Atoll in 1867, and extends through the closure of Midway Naval Air Station in 1993. Sunken military craft range in time from USS *Saginaw* lost at Kure Atoll in 1870 to a Sikorsky helicopter of more recent years. However, the significance of World War II and the Battle of Midway overshadow resources associated with other periods.

The bulk of wartime preparations took place in the main Hawaiian Islands, but the strategic location of Midway and the other islands and atolls within Papahānaumokuākea was clear. Tern Island at French Frigate Shoals was developed as a staging point for flights. French Frigate Shoals had been used before World War II for seaplane maneuvers, and the shoals were a staging point for two Japanese seaplane attack/reconnaissance patrols between December 1941 and June 1942. Construction of the landing strip on Tern Island began in July 1942, but by late 1942, expendable wing tanks became available, making the intermediate staging at French Frigate Shoals unnecessary.

Midway had previously been an important stop for PanAmerican transpacific commercial flights. Initial naval plans included support for one squadron of seaplanes at the atoll. War-construction PNAB contract work began at Midway in March 1940. Three runways and two hangars were constructed on Eastern Island. Sand Island featured seaplane ramps and hangar, ordnance, radio, engine, and repair shops, communication facilities, a naval hospital, and housing. Following the Battle of Midway, plans for Midway intensified. By the spring of 1943 Midway's role was changed from a defensive to an offensive base, and construction of a major submarine base was begun. By 1944, three 471-foot piers, a 769-foot tender pier, and an ARD wharf had been completed.

The Battle of Midway, June 4–7 1942, was one of the major watershed moments of World War II and a significant historical factor in the designation of the marine national monument in 2006. The monument's expansion in 2016 likely encompasses the many Japanese and American vessels and aircraft lost in the conflict. American losses totaled one fleet carrier (USS *Yorktown*) and one destroyer (USS *Hammann*) sunk, along with approximately 150 aircraft and 307 casualties. Japanese losses totaled four fleet carriers (IJN *Kaga*, *Akagi*, *Hiryu*, *Soryu*) and one heavy cruiser (IJN *Mikuma*) sunk, along with approximately 248 aircraft and 3,057 casualties. USS *Yorktown* was discovered and recorded by Robert Ballard/National Geographic in 1998. IJN *Kaga* and *Akagi* were discovered and recorded by Rob Kraft/Vulcan Inc. in 2019. Data (including positions) from these private surveys remains proprietary and has not been shared with the management agencies.

Table G.4. Known Sunken Military Craft within Papahānaumokuākea

Site Name (military)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
USS <i>Macaw</i>	Midway	1944	structure	eligible (A, D)	Naval submarine rescue/salvage vessel built	salvage machinery, naval auxiliary fittings, anchors	high; large area major site, hull portions, features, artifacts	Surveyed 2003; site plan; site photographs; site mosaic; salvage docs; historical docs; monograph published 2022
LCVP landing craft	Midway	UNK	structure	not eligible	naval amphibious craft	ramp	medium; intact	assessed 2002
navy water barge	Midway	UNK	structure	not eligible	ferro-concrete barge	ferro-concrete construction	medium; intact	assessed 2002, 2005
navy barge	Midway	UNK	structure	not eligible	steel barge	hull	medium; intact	assessed 2002, 2007
navy landing craft	French Frigate Shoals	UNK	structure	not eligible	inverted LC	ramp	medium; relatively intact	
IJN <i>Akagi</i>	Midway	1942	structure	eligible (A, D)	Japanese Amagi-class battlecruiser converted to WWII aircraft carrier	hull, flight deck, gunnery, primary flight control, aircraft, assoc aircraft in vicinity (presumably)	high; intact vessel	Vulcan Inc. video and survey data proprietary (not shared) 2019
IJN <i>Kaga</i>	Midway	1942	structure	eligible A, D)	Japanese Amagi-class battlecruiser converted to WWII aircraft carrier	hull, flight deck, gunnery, primary flight control, aircraft, assoc aircraft in vicinity (presumably)	high; intact vessel	Vulcan Inc. video and survey data proprietary (not shared) 2019

Site Name (military)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
USS <i>Saginaw</i>	Kure	1870	arch site	eligible (A, B, D)	508-ton U.S. Civil War-era Navy steam sloop; built Mare Island 1859	boiler face, anchors, cannon, engine components, rigging components	medium; large scattered artifact site	Survey complete in 2006; site plan, cruise report, web content, digital images, historical documents, 2010 monograph published University Press of Florida
USS <i>Yorktown</i>	Midway	1942	structure	eligible A, D)	Yorktown-class aircraft carrier	hull, flight deck, gunnery, primary flight control,	high; intact vessel	video and survey data proprietary (not shared) 1998

Naval Aircraft

It would be difficult to overemphasize the impact of naval aviation on Hawai‘i and in the Pacific. Hawai‘i evolved very quickly from a few small seaplane bases to six major naval air stations operating during World War II, not to mention the aviation training activities conducted from aircraft carriers in Hawaiian waters. Naval aviation exercises in the Northwestern Hawaiian Islands began in the early 1930s, and activity at French Frigate Shoal and Midway Atoll increased during wartime preparations. Losses during the Battle of Midway June 4–7, 1942, and subsequent intensive aviation activities at Midway during subsequent decades, have added to the submerged aircraft resource.

The wrecks of naval aircraft are a specific subset of archaeological resources. Even though mass produced in great numbers, with interchangeable engines and components, submerged aircraft wreck sites are still capable of revealing details of aircraft construction, modifications over time, and even use by aircrews. Like sunken military craft, submerged aircraft may be war graves as well. Sunken aircraft can exhibit evidence of water ditching and emergency escape, engine failure, or combat loss events that led to the crash. Except for heavier features like machine guns, rotary engines, and landing gear, naval aircraft are relatively fragile (composed of lightweight aluminum skin). Aircraft which ditched in “low impact” events and lost in deep waters are often amazingly intact on the seafloor. However, aircraft which crashed in “high impact” events or sunk in shallow waters are impacted by surf and surge and a very scattered archaeological sites, sometimes consisting only of a few landing gear components, or propeller, or single machine gun.

Table G.5. Known Naval Aircraft within Papahānaumokuākea

Site Name (aircraft)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/Record
F4U-1 Corsair	Kure	1945	object	TBD	single-seat navy fighter aircraft		low; partial feature	survey complete in 2008
Sikorsky helicopter	Kure	UNK	arch site	not eligible	partial rotor and engine elements	engine part	low; feature partially buried	
F4U Corsair	Midway	UNK	structure	TBD	single-seat navy fighter aircraft	wing/landing gear design	low; wing/partial fuselage only (inverted); engine nearby	Surveyed 2002, 2007; site plan, cruise report, web content, digital images
P-40K Warhawk	Midway	1943	arch site	not eligible	single-seat army fighter aircraft		low; few artifacts	Surveyed 2014;
F2A Brewster Buffalo	Midway		arch site	not eligible	single-seat navy fighter aircraft	landing gear	low; only partial landing gear	Surveyed 2015; cruise report, web content, digital images

Miscellaneous Features

Flotsam and jetsam have deposited numerous items on the seafloor. Debris which has drifted into the PMNM or been left randomly behind (e.g., timbers from elsewhere, isolated anchors, fishing gear, discarded materials) is to be expected and, while included in research records, is without context and generally not associated with archaeological sites or historic resources. The exceptions to this are those artifacts that may be evidence of more complex properties or wreck sites, and artifacts associated with specific locations (context), such as multiple anchors within a known historic anchorage. Anchors in particular are multifunctional and tend to be used and reused once being lost or abandoned by a ship (for moorings, navigational markers, stored on reefs for later use, etc.).

Table G.6. Miscellaneous Features within Papahānaumokuākea

Site Name (misc features)	Atoll Location	Year Lost	Property Type	NRHP status and criteria (ONMS)	Description	Defining Features	Site Integrity	Survey Date(s)/ Record
3 anchors near landing site	Laysan	UNK	features	not eligible		historic iron admiralty-style anchors in context	low; features	2002
2 anchors and debris	Laysan	UNK	features	not eligible	possible wreck site	historic iron admiralty-style anchors in context	low; features	2002
anchor in Welles Harbor lagoon anchorage	Midway	UNK	object	TBD		historic iron admiralty-style anchor in context	low; features	2003

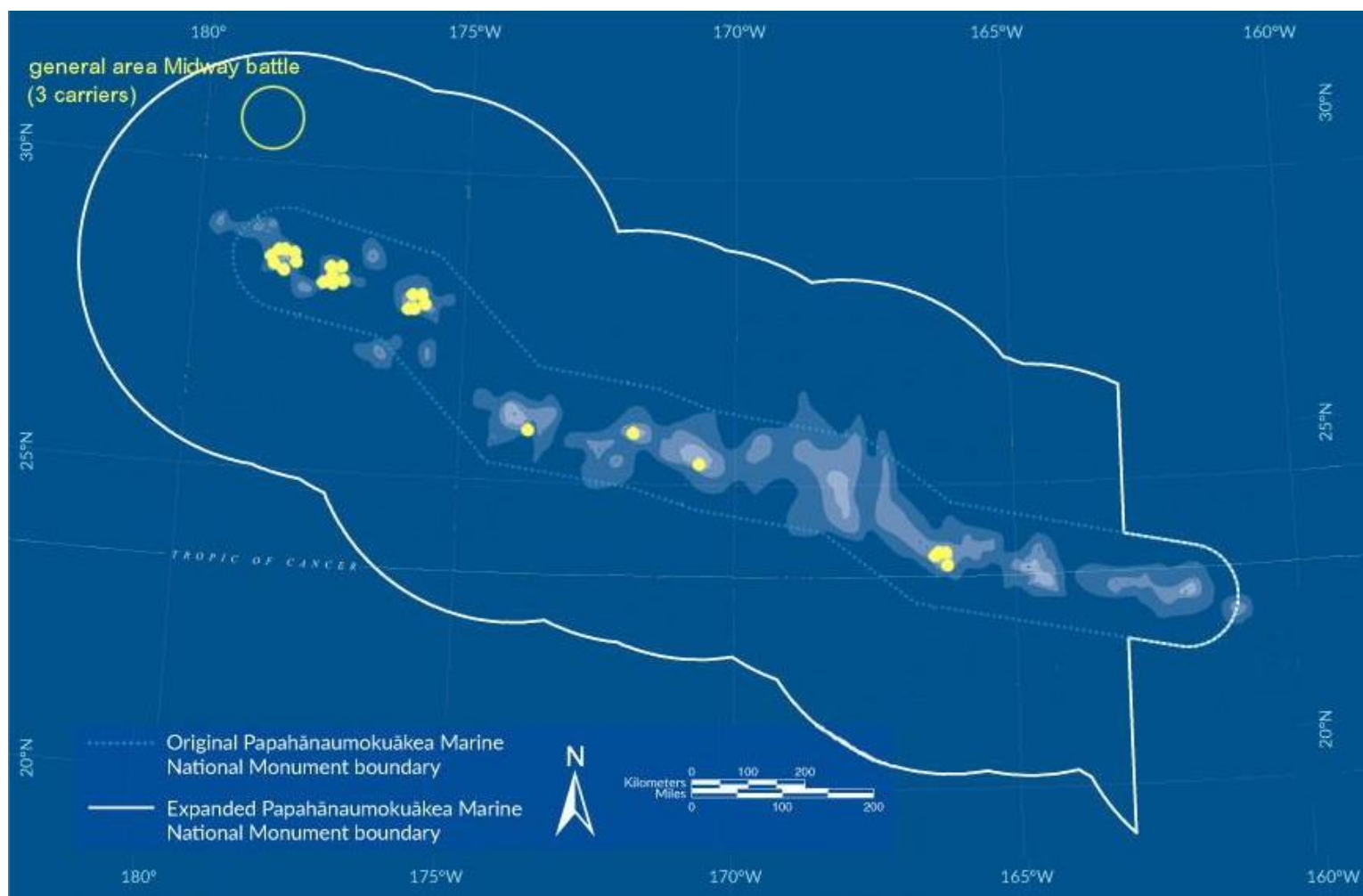


Figure G.1. Known maritime heritage properties within the Action Area, 2022 (ONMS Maritime Heritage Program)

Appendix H: Agencies, Organizations, and Persons Consulted¹⁶ in Preparing the EIS

Name	Affiliation
Elected Officials	
David Ige	Governor of Hawai'i
Josh Green	Governor of Hawai'i
Brian Schatz	Senator
Ed Case	U.S. Representative
Government Agencies	
Department of Land and Natural Resources, Office of the Chair	State of Hawai'i
Department of Land and Natural Resources, Division of Aquatic Resources	State of Hawai'i
Department of Land and Natural Resources, Division of Forestry and Wildlife	State of Hawai'i
Department of Land and Natural Resources, State Historic Preservation Division	State of Hawai'i
Department of Land and Natural Resources, Office of Conservation and Coastal Lands	State of Hawai'i
Office of Planning and Sustainable Development, Environmental Review Program	State of Hawai'i
Department of Accounting and General Services, Land Survey Division	State of Hawai'i
Office of Planning and Sustainable Development, Hawai'i Coastal Zone Management Program	State of Hawai'i
Office of Hawaiian Affairs	State of Hawai'i, and Native Hawaiian Organization
Environmental Protection Agency, Region 9	Federal
U.S. Fish and Wildlife Service, Environmental Services	Federal
U.S. Fish and Wildlife Service, National Wildlife Refuges	Federal
U.S. Fish and Wildlife Service, Pacific Islands	Federal
NOAA-NMFS-Pacific Islands Regional Office	Federal
Advisory Council on Historic Preservation	Federal
U.S. Department of the Navy	Federal
Naval History and Heritage Command, Department of the Navy	Federal

¹⁶ Consulted parties include federal and state agencies, subject matter experts and other individuals who provided relevant information for the EIS and appendices. Many of the above parties participated in the federal and state historic preservation consultation process and the state cultural impact assessment and legal analysis processes.

Name	Affiliation
CNO Office, Infrastructure, Posture and Environmental Planning Branch	Federal
Western Pacific Regional Fishery Management Council	Federal
Organizations / Groups / Individuals	
Papahānaumokuākea Native Hawaiian Cultural Working Group	Group
NWHI Coral Ecosystem Reserve Advisory Council	Group
Society for Hawaiian Archaeology	Native Hawaiian Organization
Kanehunamoku Voyaging Academy	Native Hawaiian Organization
'Ohana Hāpai	Native Hawaiian Organization
'Ohana Kahaunaele	Native Hawaiian Organization
'Ohana Ayau	Native Hawaiian Organization
Isaac Harp	Individual
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Nā Maka Onaona	Native Hawaiian Organization
Kiamanu Project - Nā Kia'i Nihokū	Native Hawaiian Organization
Tokyo University of Marine Science and Technology	Organization
Tokai University School of Humanities	Organization
International Midway Memorial Foundation	Organization

Appendix I: EIS Distribution List

Name	Affiliation
Elected Officials	
Natural Resources Committee	U.S. House of Representatives
Committee on Commerce, Science, and Transportation	U.S. Senate
David Ige	Governor of Hawai'i
Josh Green	Governor of Hawai'i
Brian Schatz	U.S. Senator
Ed Case	U.S. Representative
Government Agencies	
Department of Land and Natural Resources, Office of the Chair	State of Hawai'i
Department of Land and Natural Resources, Division of Aquatic Resources	State of Hawai'i
Department of Land and Natural Resources, Division of Forestry and Wildlife	State of Hawai'i
Department of Land and Natural Resources, Division of Historic Preservation	State of Hawai'i
Office of Planning and Sustainable Development, Environmental Review Program	State of Hawai'i
Office of Hawaiian Affairs	State of Hawai'i, Native Hawaiian Organization
Environmental Protection Agency, Region 9	Federal
U.S. Fish and Wildlife Service, Environmental Services	Federal
U.S. Fish and Wildlife Service, National Wildlife Refuges	Federal
U.S. Fish and Wildlife Service, Pacific Islands	Federal
NOAA-NMFS-Pacific Islands Regional Office	Federal
Department of Defense	Federal
Department of the Navy	Federal
Naval History and Heritage Command, Department of the Navy	Federal
Advisory Council on Historic Preservation	Federal
Department of State	Federal
Department of Transportation	Federal

Name	Affiliation
Department of the Interior	Federal
U.S Army Corps of Engineers	Federal
U.S. Geological Survey	Federal
U.S. Coast Guard	Federal
Organizations / Groups / Individuals	
Papahānaumokuākea Native Hawaiian Cultural Working Group	Native Hawaiian Organization
NWHI Coral Ecosystem Reserve Advisory Council	Group
Daughters of Hawaii	Native Hawaiian Organization
'Āina Momona	Native Hawaiian Organization
Honolulu Community College	Organization
Pacific Agricultural Land Management Systems	Native Hawaiian Organization
Society for Hawaiian Archaeology	Organization
Hale Halawai 'Ohana O Hanalei	Native Hawaiian Organization
Piihonua Hawaiian Homestead Community Association/Sovereign Council of Hawaiian Homestead Associations	Native Hawaiian Organization
'Ohana Hāpai	Native Hawaiian Organization
'Ohana Kahaunaele	Native Hawaiian Organization
'Ohana Ayau	Native Hawaiian Organization
Shad Kane	Individual
Isaac Harp	Individual
Tammy Harp	Individual
Mauiola Endowment	Native Hawaiian Organization
Na Maka Onaona	Native Hawaiian Organization
Kai Palaoa	Native Hawaiian Organization
Mauna Kea Anaina Hou	Native Hawaiian Organization
Malama Mano	Native Hawaiian Organization
Moana 'Ohana	Native Hawaiian Organization

Name	Affiliation
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Devin Forrest	Individual
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International Midway Memorial Foundation	Organization
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Tokyo University of Marine Science and Technology	Organization

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NATIONAL MARINE
SANCTUARIES

AMERICA'S UNDERWATER TREASURES

E Ho'i i ke Au a Kanaloa

Return to the Cycles of Kanaloa

Cultural Impact Assessment (Part I) &
Legal & Ka Pa'akai Analysis (Part II)







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This report was prepared by Nohopapa Hawai'i, LLC for National Marine Sanctuary Foundation (NMSF), and in partnership with the State of Hawai'i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR).

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Table of Contents

‘ŌLELO HAWAI‘I GLOSSARY	8
HE LEO MAHALO.....	15
EXECUTIVE SUMMARY.....	17
PROJECT SUMMARY	19
INTRODUCTION AND METHODS.....	30
STUDY REGULATORY CONTEXTS.....	30
STUDY PURPOSES	30
METHODS AND APPROACHES.....	31
LIMITATIONS	37
NATURAL LANDSCAPE AND RESOURCES.....	41
CULTURAL HISTORICAL OVERVIEW	48
INTRODUCTION	48
KUMULIPO, COSMOGONIC ORIGINS, AND SETTING	49
KUIAHELANI, KAHIKI, AND OTHER ANCESTRAL PLACE NAMES	59
INOA ‘ĀINA (PLACE NAMES).....	75
HAWAIIAN ORAL TRADITIONS	82
HISTORICAL PAPAĀNAUMOKUĀKEA AWARENESS AND ACCESS.....	90
INTO MORE MODERN TIMES	110
CONTINUED CULTURAL CONNECTIONS.....	111
COMMUNITY CONSULTATION	120
HE LEO MAHALO	124
COMMUNITY MANA‘O SYNTHESIS.....	124
MO‘OKŪ‘AUHAU.....	126
CULTURAL RESOURCES, PRACTICES, BELIEFS, AND CONNECTIONS	145
ORAL TRADITIONS ASSOCIATED WITH PAPAĀNAUMOKUĀKEA.....	166
PRESERVATION AND MANAGEMENT CONCERNS AND RECOMMENDATIONS	174
ADDITIONAL MANA‘O.....	205
CULTURAL IMPACT ASSESSMENT	210
CULTURAL RESOURCES (PRACTICES, BELIEFS, FEATURES) WITHIN OR ASSOCIATED WITH PAPAĀNAUMOKUĀKEA.....	210



MO‘OKŪ‘AUHAU.....	215
CULTURAL RESOURCES, PRACTICES, BELIEFS, AND CONNECTIONS	223
ORAL TRADITIONS ASSOCIATED WITH PAPA HĀNAUMOKUĀKEA -.....	238
POTENTIAL IMPACTS POSED TO CULTURAL RESOURCES BY THE PROPOSED SANCTUARY DESIGNATION....	245
RECOMMENDATIONS	262
ADDITIONAL MANA‘O.....	275
BEST MANAGEMENT PRACTICES CONSIDERATIONS FOR WAHI KŪPUNA STEWARDSHIP (WKS) AT PMNM	280
REFERENCES.....	285
APPENDIX A: COMMUNITY CONSULTATION LETTER	296
APPENDIX B: INTERVIEW THEMES AND QUESTIONS.....	301
APPENDIX C: INFORMED CONSENT FORM	308
APPENDIX D: GUIDELINES FOR ASSESSING CULTURAL IMPACTS	310
APPENDIX E: ACT 50 [STATE OF HAWAII 2000].....	316
APPENDIX E: PMNM NATIVE HAWAIIAN PRACTICES PERMIT APPLICATION.....	318

List of Figures

FIGURE 1. MAP OF THE CURRENT PROPOSED PMNM SANCTUARY DESIGNATION OF THE MARINE PORTION OF THE EXISTING MONUMENT (STUDY PROJECT AREA).....	44
FIGURE 2. THE HAWAIIAN ARCHIPELAGO AND ASSOCIATED BATHYMETRY (KIKILOI ET AL. 2017:438).	45
FIGURE 3. KE ALA POLOHIWA A KĀNE BORDER BETWEEN PŌ AND AO (KIKILOI 2010, 2012)	51
FIGURE 4. ILLUSTRATION OF VARIOUS STRATA BORN TO PAPA AND WĀKEA PRIOR TO THE BIRTH OF THE ARCHIPELAGO (OHA ET AL. 2021:22).....	54
FIGURE 5. GENEALOGICAL CHART OF PAPAĀNAUMOKU AND WĀKEA, A “COSMOGENIC PEDIGREE” COMPILED BY KEKUEWA KIKILOI (2010:112, APPENDIX A).....	59
FIGURE 6. MAP OF THE HAWAIIAN ARCHIPELAGO WITH PROPOSED CORRELATIONS OF ANCIENT ISLAND NAMES AND PLACE NAMES WITH CONTEMPORARY NORTH WESTERN HAWAIIAN ISLAND LOCATIONS (KIKILOI 2010:77).....	77
FIGURE 7. KAI‘AIKAWAHA GENEALOGY OF ISLAND NAMES (1835) AS COMPILED BY KEKUEWA KIKILOI (2010:88).....	78
FIGURE 8. BENIZET’S 1786 MAP OF MOKUMANAMANA, KAMOKUMANAMANA, HĀ‘ENA, WHAT HE TERMED NECKER ISLAND (BENIZET 1786 IN FITZPATRICK WITH MOFFATT 1986:30).....	93
FIGURE 9. BENIZET’S 1786 MAP OF LALO, KĀNEMILOHA‘I, MOKUPĀPAPA, WHAT HE TERMED THE FRENCH FRIGATE SHOALS (BENIZET 1786 IN FITZPATRICK WITH MOFFATT 1986:31).....	94
FIGURE 10. LISIANSKY’S 1814 MAP OF KAPOU, PAPA‘ĀPOHO, WHICH HE CALLED “LISIANSKY’S ISLAND” (LISANSKY 1814 IN FITZPATRICK WITH MOFFATT 1986:45).....	95
FIGURE 11. MEMBERS OF PRINCESS LILI‘UOKALANI’S ENTOURAGE OF OVER 200 PEOPLE, MOSTLY HAWAIIANS, PICTURED ON NIHOA ON JULY 22, 1885 (UNKNOWN PHOTOGRAPHER 1885 IN RAUZON 2001:11)	96
FIGURE 12. A HISTORICAL PHOTOGRAPH FROM THE HAWAIIAN KINGDOM GOVERNMENT’S 1894 ANNEXATION OF MOKUMANAMANA, KAMOKUMANAMANA, HĀ‘ENA (NECKER). CAPTAIN FREEMAN PILOTED THE STEAMBOAT <i>Iwalani</i> THAT CARRIED THE MINISTER OF THE INTERIOR CAPTAIN JAMES KING TO RAISE THE HAWAIIAN FLAG AND READ THE PROCLAMATION OF	

ANNEXATION, BOTH PICTURED IN THE ABOVE PHOTOGRAPH (NORTON 1894 IN RAUZON 2001:28).97

FIGURE 13. THE SKILLED ENGRAVERS SIMON PETER KALAMA AND KEPOHONI COLLABORATED ON THEIR DETAILED KA PALAPALA HONUA NO KA POEPOE (*MAP OF THE HEMISPHERES*) THAT APPEARS TO FEATURE ALL OF THE MOKUPUNI, HĀPAPA, AND PŌHAKU OF PAPAĀNAUMOKUĀKEA (KALAMA AND KEPOHONI IN FORBES 2012:140)..... 101

FIGURE 14. CLOSE-UP OF KALAMA AND KEPOHONI’S KA PALAPALA HONUA NO KA POEPOE (*MAP OF THE HEMISPHERES*) THAT APPEARS TO FEATURE ALL OF THE MOKUPUNI, HĀPAPA, AND PŌHAKU OF PAPAĀNAUMOKUĀKEA (KALAMA AND KEPOHONI IN FORBES 2012:140).....102

FIGURE 15. MAP OF THE HAWAIIAN ARCHIPELAGO INCLUDING NIHOA BY AN UNKNOWN ENGRAVER USED IN DIBBLE’S *HISTORY OF THE SANDWICH ISLANDS* PUBLISHED IN LAHAINALUNA IN 1843 (FORBES 2012:158,159)105

FIGURE 16. GEORGE KAPEU’S 1839 *NA MOKUPUNI O HAWAII* (MINIATURE MAP OF THE HAWAIIAN ISLANDS) ALSO INCLUDES NIHOA (FORBES 2012:151, 154).....107

FIGURE 17. FORBES (2012:158,159) ATTRIBUTES THE ENGRAVING OF ANOTHER 1844 MAP OF THE HAWAIIAN ISLANDS THAT INCLUDES NIHOA TO THE LAHAINALUNA SEMINARY APPRENTICE KEPOHONI109

List of Tables

TABLE 1. ISLAND NAMES FROM THE KAIAIKAWAHA GENEALOGY (KAIAIKAWAHA, 1835), AND LIST OF NAMES GIVEN BY THE HAWAIIAN LEXICON COMMITTEE (KIMURA 1973:27) WITH PROPOSED LOCATION CORRESPONDENCE AS DESCRIBED BY DR. KIKILOI (KIKILOI 2010:90-96, 98-99).....	80
TABLE 2. ‘ŌLELO NO‘EAU COMPILED ON THEMES AND PLACES IN PMNM (PUKUI 1983).....	87
TABLE 3. POST ‘AINOA ERA ACCESS TO NIHOA AND MOKUMANAMANA BY NATIVE HAWAIIANS (EMORY 1928 AND MANU 1899 IN MONAHAN ET AL. 2019)	98
TABLE 4. PAPA HĀNAUMOKUĀKEA CIA AND LA CONSULTATION PARTICIPANTS	120

‘Ōlelo Hawai‘i Glossary

‘**Āina** - “Land, earth,” (Pukui and Elbert 1986: 11)

‘**Āina Akua** - (Kepakailiula 1865)

‘**Āina Maui Ola** - Natural resources and ecosystems and changes over time, as well as understanding traditional management practices and kānāwai (Nohopapa translation)

Hōlanikū, Mokupāpapa - Kure Atoll. According to Fujii (2023):

Holaniku, meaning “bringing forth heaven,” is a single name that stands alone, corresponding to the location of Kure Atoll at the very end of the island chain. is name is used in many different contexts to describe the homeland of gods such as Kane and Kanaloa, Namakaokaha‘i, and Wainu‘u. Mokupapapa literally means “ at island,” which was ascribed to Kure Atoll by Hawaiian Kingdom officials in the 19 century, when King David Kalakaua sent an envoy to the atoll to take “formal possession” of it. [Fujii 2023]

‘**Ike** - “To see, know, feel, greet, recognize, perceive, experience, be aware, understand...” (Pukui and Elbert 1986: 96)

Inoa ‘Āina - Place names (Nohopapa translation)

Iwi Kūpuna - Native Hawaiian ancestral remains (Edward Halealoha Ayau)

Lalo, Kānemiloha‘i, Mokupāpapa - French Frigate Shoals (Fujii 2023).

Limu - “A general name for all kinds of plants living under water, both fresh and salt, also algae growing in any damp place in the air, as on the ground, on rocks, and on other plants; also mosses, liverworts, lichens.” (Pukui and Elbert 1986: 207) “1. Sea moss or seagrass; a general name of every kind of eatable herb that grows in the sea; the Hawaiians also class the limu among fish. 2. To turn; to change; to have various appearances. Synonymous with ouli,” (Andrews 1865:343).

Loina Kūpuna - Customary practices, resources, and uses (Nohopapa translation)

Ka‘ao - “Legend, tale, novel, romance, usually fanciful; fiction” (Pukui and Elbert 1986: 11).

Kamokuokamohoali‘i, Ko‘anako‘a, Nalukākala - Maro Reef. According to Fujii (2023):

Kamokuokamohoali‘i means “the island of Kamohoali‘i,” referring to Pele’s brother Kamohoali‘i, the shark deity. The name signifies the extremely high number of sharks prevalent at Maro Reef, more than any other location in the Monument. Ko‘anako‘a literally means “the settlement of coral,” referring to Maro’s expansive coral reefs. Nalukakala describes surf that arrives in swells, such as the surf that froths over shallow reefs. [Fujii 2023]

Kamole, Kauō - Laysan Island. According to Fujii (2023):

Kamole means “ancestral root, foundation, source or cause,” such as a root that runs through the earth and traces one’s ancestry back to the source. Kamole also describes the location of Laysan Island, the first major landfall following French Frigate Shoals moving toward the northwest. Kauo, meaning “egg,” describes both the island’s shape and the abundance of seabirds that nest here. [Fujii 2023]

Kānaka 'Ōiwi - Native Hawaiians (Nohopapa translation).

Kānāwai - “Law, code, rule, statute, act, regulation, ordinance, decree, edict...” (Pukui and Elbert 1986:127).

Kai - “Sea, sea water...” (Pukui and Elbert 1986: 114)

Kai lalo - “[L]ower sea, western sea, where the sun sets...” (Pukui and Elbert 1986: 114).

Kai lipo – Deep blue-black sea, deep water in the sea (Nohopapa translation).

Kapou, Papa‘āpoho - Lisianski Island. According to Fujii (2023):

Kapou, meaning “post, pillar, pole” may refer to the unusual rainbow formations seen here that resemble “pillars going straight into the clouds.” Papa‘apoho describes a flat area with a hollow or depression, which is exactly how this raised atoll is shaped.

Kuaihelani, Pihemanu - Midway Atoll. According to Fujii (2023):

Kuaihelani, meaning “the backbone of heaven,” describes a mythical floating island in the sky, which could derive from the fact that large lagoons, such as that at Midway, often reflect their image into the sky. Pihemanu means “loud din of birds” and refers to the loud chatter of the millions of birds that come to this atoll each year. [Fujii 2023]

Kūpuna Islands - The United Nations Educational, Scientific, and Cultural Organizations (UNESCO) World Heritage inscription for the PMNM explains the definition and concept of the Kūpuna Islands:

In Native Hawaiian culture, kūpuna (elders, or ancestors) are accorded reverence and respect, and are looked to as teachers by right of their greater experience. Native Hawaiians consider the islands of Papahānaumokuākea (also called the Kūpuna Islands in recent times) to be their kūpuna. Each island is a teacher, and each island has its own unique story and message. As the younger generation, humans are tasked to mālama (care for) the kūpuna. It is also humankind’s kuleana (responsibility) to take the time to listen to their wisdom. [PMNM 2023c]

Lalo, Kānemiloha‘i, Mokupāpapa - French Frigate Shoals. According to Fujii (2023):

The word lalo means “down, downward, low, lower, under, below, depth, west or leeward.” Lalo is closely associated with the direction of po (darkness) or ancestral lands “where dwelt the souls of gods.” The name Lalo depicts low-lying islands partially submerged below the surface, which aptly describes the atoll. Recorded in chants, the name Mokupapapa refers to an island, or islands, northwest of Ni‘ihau. The nearest shoal-like place is French Frigate Shoals, an atoll of reefs, low sand islets, and the 120-foot-high La Pérouse Pinnacle. Moku (islet) combined with papapa (low, at, expansive reef) means “islets with low-lying reefs.” It is said that on this low, at sand island, Pele (the volcano goddess) let one of her brothers, Kanemiloha‘i, as a guardian during her first journey to Hawai‘i from Tahiti. [Fujii 2023]

Makani - Wind, breeze (Pukui and Elbert 1986:227).

Mana‘o - “Thought, idea, belief, opinion, theory, thesis, intention, meaning, suggestion...” (Pukui and Elbert 1986:236).

Manawai, Holoikauaua - Pearl and Hermes Atoll. According to Fujii (2023):

Manawai, which means “warped, depressed or bent in,” provides the imagery of the spiritual process of bending inward to reveal the unchanging nature of one’s true undying spirit. It can also be defined as “branching water.” Wai can also refer to “wailua” or “spirit.” This interpretation focuses on the transitional nature of water as a natural element. The name Holoikauaua celebrates the Hawaiian monk seals that haul out and rest here. Holoikauaua directly relates to the word ‘ilioholoikauaua, which literally translates to “the quadruped running in the rough seas.” [Fujii 2023]

Mea kapu - Sacred objects (Edward Halealoha Ayau).

Mele - Song, anthem, or chant of any kind...(Pukui and Elbert 1986: 245).

Moana nui - The pelagic ocean (Nohopapa translation).

Moepū - Native Hawaiian funerary possessions (Edward Halealoha Ayau).

Mokumanamana, Kamokumanamana, Hā‘ena - Necker Island. According to Fujii (2023):

Mokumanamana is often translated as “branched” or “pinnacled,” which is a suitable description of the island. But many people who have studied its religious and cultural sites suggest that the repetition of the word mana (spiritual power) after the word moku (island) relates to the spiritual significance of the island, given the 33 shrines along its kua (spine) and the Hawaiian axes of life and death that cross directly over it. The name Ha‘ena, defined as “red-hot burning heat,” possibly refers to the intensity of a specific kapu (restriction) or sacredness of the island. Hanakeaumoe, meaning “late night bay,” refers to Shark’s Bay. Hana means “bay” while au refers to a type of movement from one period of time and space to another, and moe implies “to put to rest” or pass on to the afterlife. Together they reference Ke Ala Polohiwa a Kane or “The Dark Shining Path of Kane,” often used as a metaphor for the path to the afterlife. [Fujii 2023]

Mokupuni - Island (Pukui and Elbert 1986: 252).

Mo‘okū‘auhau - Genealogical succession, pedigree (Pukui and Elbert 1986: 254).

Mo‘okū‘auhau ‘Āina - The genealogy of the land/ocean (Nohopapa translation).

Mo‘olelo - “Story, tale, myth, history, tradition, literature, legend, journal, log, yarn, fable, essay, chronicle, record, article...” (Pukui and Elbert 1986: 254).

Nihoa, Nihoa-Kuhikukipu‘uone, Moku Manu - Nihoa Island. According to Fujii (2023):

In Hawaiian, Nihoa means “jagged” or “toothed,” likely referring to the island’s many craggy cliffs causing a profile that resembles a tooth. Kuhikuhipu‘uone was sometimes added in chants, referring to the priests who specialized in the construction planning of heiau. Moku Manu, meaning “bird island,” refers to its having one of the largest populations of petrels and noddies in the Hawaiian Islands. The name Hanaka‘ie‘ie means “bay (with) rise and fall (of sea),” and refers to Adams Bay, the only major bay in the Northwestern Hawaiian Islands whose waves wrap around the island and come together to intensify each rise and fall within the bay.

Nūpepa - Newspaper (Pukui and Elbert 1986: 273).

‘Ohana - “Family, relative, kin group,” (Pukui and Elbert 1986: 276).

Ola ko uka, ola ko kai - Mauka-makai relations and transitions between wao/kula zones (Nohopapa translation).

‘Ōlelo No‘eau - “Proverb, wise saying, traditional saying,” (Pukui and Elbert 1986: 284).

Oli - “Chant that was not danced to, especially with prolonged phrases chanted in one breath, often with a trill (*i‘i*) at the end of each phrase; to chant thus,” (Pukui and Elbert 1986: 285).

‘Onūnui, ‘Onūiki, Pūhāhonu - Gardner Pinnacles. According to Fujii (2023):

‘Onunui means “large protuberance” and is a variant of the name Ununui, which refers to a large altar. ‘Onuiki means a “small protuberance.” Both names correspond to the large and small rock protuberances that make up Gardner Pinnacles and, with the reference to

altars, may also allude to their role in bringing forth the northwest rains. Puhahonu means “surfacing of a sea turtle for air/breath” and describes these two isolated islands that seem to appear unexpectedly out of the sea, like a turtle coming up for air, its back and head emerging above the surface.

Pae ‘āina - Literally, island chain, archipelago. Used here to refer to the Main Hawaiian Islands.

Palapala ‘Āina - “Map,” literally translated as “land document” (Pukui and Elbert 1986: 309).

Palena - Boundaries (Pukui and Elbert 1986: 311).

Panina - End, closing portion (Pukui and Elbert 1986: 314).

Papahānaumoku - Literally, the “goddess who gives birth to the islands” (PMNM 2023).

Papahānaumokuākea - The name of the Papahānaumokuākea Marine National Monument (PMNM 2023).

The name Papahānaumokuākea (pronounced Pa-pa-hah-now-mo-koo-ah-keh-ah) comes from an ancient Hawaiian tradition concerning the genealogy and formation of the Hawaiian Islands, and a deep honoring of the dualisms of life. Papahānaumoku is a mother figure personified by the earth and Wākea is a father figure personified in the expansive sky; the two are honored and highly recognized ancestors of Native Hawaiian people. Their union resulted in the creation, or birthing, of the entire Hawaiian archipelago—thus the naming of the monument is to honor and preserve these names, to strengthen Hawaii’s cultural foundation and to ground Hawaiians to an important part of their history.

Taken apart, “Papa” (earth mother), “hānau” (birth), “moku” (small island or large land division), and “ākea” (wide) bespeak a fertile woman giving birth to a wide stretch of islands beneath a benevolent sky. Taken as one long name, Papahānaumokuākea can be seen as a symbol of hope and regeneration for the Kūpuna Islands and the main Hawaiian Islands. And through the mana (spiritual power) of Papahānaumokuākea’s name, one that encourages abundance and the procreative forces of earth, sea, and sky, the Native



Hawaiian people hope that the cultural, spiritual and physical health of their people will grow as well. [PMNM 2023]

Pilina - “Association, relationship, union, connection...” (Pukui and Elbert 1986:330).

Pō - “Night, darkness, obscurity; the realm of the gods; pertaining to or of the gods, chaos, or hell; dark, obscure, benighted; formerly the period of 24 hours beginning with nightfall (the Hawaiian “day” began at nightfall, (Pukui and Elbert 1986:333).

Ua - “Rain,” (Pukui and Elbert 1986:361).

Wahi Kūpuna - Ancestral spaces and places where we maintain relationships to the past and foster our identity and well-being in the present (Pukui and Elbert 1986: 186, 376; Kali‘uokapa‘akai Collective 2021:4).

Wahi Kūpuna Stewardship - Culturally appropriate approaches to the short and long-term protection, preservation, and restorative reuse of wahi kūpuna. A resource stewardship framework encouraging increased opportunities and abilities of Native Hawaiians to re-vitalize relationships with wahi kūpuna through direct management of policy, resources, and practices (Kali‘uokapa‘akai Collective 2023).

Wahi Pana - “Legendary place,” (Pukui and Elbert 1986:377).

Wākea - Sky father, the “...mythical ancestor of all Hawaiians,” (Pukui and Elbert 1986:381).

Wao - “A general term for inland region usually forested but not precipitous and often uninhabited,” (Pukui and Elbert 1986:382).

He Leo Mahalo

In honor and continued memory of the kūpuna who shared and persist in the transmittal of their ‘ike and the various pilina they maintained and continue to have with Papahānaumokuākea – the Kūpuna Islands, an ‘āina akua, and realm of Pō. They range from maka‘āinana to ali‘i, and include lineal descendants, members of Hawaiian Kingdom expeditions, skilled Hawaiian students and apprentices at Lahainaluna Seminary, as well as kūpuna who recently held and continue to hold space for Papahānaumokuākea’s pono stewardship and protection, and many others. Their ‘ike kūpuna and pilina endure across centuries and generations to the present from the southeastern extension of the Hawaiian archipelago to the shoals, atolls, and islands of Papahānaumokuākea at its northwestern reaches. The 25 individuals who engaged in consultation for this CIA and LA, including new generations of ‘ohana and haumāna, evince their lasting impact and legacy. Mahalo piha for the time, patience, and generously-shared mana‘o and ‘ike provided by: 11 anonymous individuals, Akoni Palacat-Nelson, Kealoha Pisciotta, Brad Ka‘aleleo Wong, Catherine Fuller, Chadd Paishon, Hōkū Pihana, Isaac “Paka” Harp, Kēhaunani Springer, Kepā and Onaona Maly, Mike Nakachi, Kaikea Nakachi, Nai‘a Lewis, and Pelika Andrade. Mahalo nui e Lei Wann for sharing the treasured mo‘olelo of your ‘ohana. We humbly hope these studies are a worthy platform, vehicle, and testament to enduring Hawaiian pilina with Papahānaumokuākea.

Mahalo to the National Marine Sanctuary Foundation (NMSF), Division of Aquatic Resources, Department of Land and Natural Resources (DAR-DLNR), and the National Oceanic and Atmospheric Administration (NOAA) for this opportunity to platform Hawaiian voices, perspectives, and cultural resources in the sanctuary nomination process. Nohopapa Hawai‘i also wishes to mahalo and honor the expertise of the incredible legal hui we were privileged to partner with - Malia Akutagawa, Esq., and Amanda Lerma, J.D.



Sun setting towards the northwest Hawaiian Islands behind Ni'ihau (Nohopapa Hawai'i)


Executive Summary

Nohopapa Hawai‘i, LLC (Nohopapa), completed this Cultural Impact Assessment (CIA) as Part 1 and Legal Analysis (LA) as Part 2, inclusive of but not limited to a Ka Pa‘akai Analysis, on behalf of the National Marine Sanctuary Foundation (NMSF), and in partnership with the State of Hawai‘i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR). The studies assess the cultural impacts of the proposed designation of the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary, in order to inform a joint federal/state Environmental Impact Statement and satisfy State environmental compliance review requirements.

A breadth and depth of Hawaiian oral traditions, cultural resources (practices and features), and knowledge streams associated with Papahānaumokuākea were revealed during background research and community consultation for the CIA and LA. Both yielded a multitude of evidence for:

- The Kūpuna Islands as an ecological, physical, spiritual, and cultural continuation of the pae ‘āina (*southeastern islands of the Hawaiian archipelago*) and incubator of sea life, cultural practices, resources, and traditions;
- Papahānaumokuākea as the realm of Pō (*realm of the gods*) and a wao akua (*realm of the gods*), specifically but not exclusively Kanaloa;
- Traditional, continued, and ever-evolving awareness of and pilina (*relationships*) to Papahānaumokuākea.

CIA and LA consultation also resulted in complex, nuanced, and detailed ‘ike (*knowledge, information*) and mana‘o (*perspectives and insights*) regarding an array of potential impacts to cultural resources (see detailed discussion in the CIA and LA segments of this report) and desired mitigations and recommendations for pono (*righteous, just, proper*) stewardship of Papahānaumokuākea. To this, Nohopapa Hawai‘i has added supplementary considerations from



our experience in wahi kūpuna (*ancestral spaces and places*)¹ stewardship and the more narrow and silo-d purviews of historic preservation compliance/cultural resource management.

¹ Wahi kūpuna are ancestral spaces and places where Kānaka ‘Ōiwi maintain relationships to the past and foster their identity and well-being in the present (The Kali‘uokapa‘akai Collective 2021:4).

Project Summary


On behalf of the National Marine Sanctuary Foundation (NMSF), and in partnership with the State of Hawai‘i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR), Nohopapa Hawai‘i, LLC, conducted a Cultural Impact Assessment (CIA) (Part 1) and Legal Analysis, inclusive of but not limited to a Ka Pa‘akai Analysis (Part 2) from September 2022 through May 2023. The studies are part of a joint federal/state Environmental Impact Statement (EIS), parallel to the National Historic Preservation Act (NHPA) Section 106 consultation process, to designate the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary. DLNR-DAR and the National Oceanic and Atmospheric Administration-Office of National Marine Sanctuaries (NOAA-ONMS) are leading this effort.

The proposed project is purely an administrative action, no developments are proposed. The goal of the project is to designate the marine portions of PMNM as a National Marine Sanctuary to enhance protection of the Papahānaumokuākea kūpuna islands and oceanscape. These protections include:

- Increased resource protection and regulatory compliance (under the National Marine Sanctuaries Act 16 U.S.C. 1431 *et seq.*),
- Ensured enforceability of protections, the provision of natural resource damage assessment authorities, and,
- Facilitation of interagency consultation.

The oceanscape is the primary focus, even though oceanscapes, landscapes, and skyscapes are all interconnected. The establishment of a national marine sanctuary would ensure strong and lasting protection for the marine waters of the monument, but would not technically include any terrestrial areas; Nohopapa Hawai‘i recognizes the interconnected nature of the kūpuna islands’ oceanscapes, landscapes, and skyscapes and invited mana‘o and ‘ike on all of them in order to complete the CIA and Legal Analysis.

The project area is the 582,578 square mile biocultural oceanscapes, landscapes, and skyscapes that currently constitute the PMNM. It is jointly administered by four co-trustees – the



Department of Commerce, the Department of the Interior, the State of Hawai‘i, and the Office of Hawaiian Affairs (OHA) - via a seven-member management board. The day-to-day management of the Monument is overseen by two sub-agencies of each co-trustee (NOAA-ONMS and National Marine Fisheries Service, U.S. Fish and Wildlife Service [USFWS] – Ecological Services and Refuges, DLNR-DAR and DLNR-Division of Forestry and Wildlife), and OHA. Coordinated administration of all the Federal and State lands and waters within the boundaries of the Monument is facilitated by a 2006 Memorandum of Agreement.

The CIA study and Legal Analysis are triggered by requirements set forth in the Hawai‘i Environmental Policy Act (HEPA), Hawai‘i Revised Statutes (HRS) §343, the corresponding Hawai‘i Administrative Rules (HAR) §11-200.1, and the Environmental Council’s 1997 Guidelines for Assessing Cultural Impacts.

Project Summary Table

Reference	E Ho‘i i ke Au a Kanaloa, Return to the Cycles of Kanaloa. A Cultural Impact Assessment (Part 1) and Legal and Ka Pa‘akai Analysis for the Nomination of the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary (Nohopapa Hawai‘i, LLC 2023)
Date	May 2023
Project Proponent	State of Hawai‘i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR), in partnership with the National Oceanic and Atmospheric Administration-Office of National Marine Sanctuaries (NOAA-ONMS)
Project Area	The project area is the marine portions of the 582,578 square miles of interconnected biocultural oceanscapes, landscapes, and skylscapes that currently constitute the Papahānaumokuākea Marine National Monument (PMNM). Nohopapa Hawai‘i recognizes the interconnected nature of the kūpuna islands’ oceanscapes, landscapes, and skylscapes and invited mana‘o and ‘ike on all of them in order to complete the CIA and Legal Analysis.
Project Acreage	372,849,920 acres (582,578 square miles)
Project Description	<p>The DLNR-DAR in partnership with NOAA-ONMS are working to designate the marine portions of PMNM as a National Marine Sanctuary to enhance protection of the Papahānaumokuākea kūpuna islands and oceanscape through an additional layer of protections with the goal of increasing the security of the regulatory environment. These include:</p> <ul style="list-style-type: none"> ○ Increased resource protection and regulatory compliance (under the National Marine Sanctuaries Act 16 U.S.C. 1431 <i>et seq.</i>), ○ Ensured enforceability of protections, the provision of natural resource damage assessment authorities, and, ○ Facilitation of interagency consultation. <p>The proposed project is purely an administrative action, no developments are proposed. The oceanscape is the primary focus, even though oceanscapes, landscapes, and skylscapes are all interconnected. The establishment of a national marine sanctuary would ensure strong and lasting protection for the marine waters of the monument, but would not technically include any terrestrial areas; Nohopapa Hawai‘i recognizes the interconnected nature of the Kūpuna Islands’ oceanscapes, landscapes, and skylscapes and invited mana‘o and ‘ike on all of them in order to complete the CIA and Legal Analysis.</p>
Jurisdiction and Management	The PMNM is jointly administered by four co-trustees – the Department of Commerce, the Department of the Interior, the State of Hawai‘i, and the Office of Hawaiian Affairs (OHA) - via a seven-member management board. The day-to-day management of the Monument is overseen by two sub-agencies of each co-trustee (NOAA-

	<p>ONMS and National Marine Fisheries Service, U.S. Fish and Wildlife Service [USFWS] – Ecological Services and Refuges, DLNR-DAR and DLNR-Division of Forestry and Wildlife), and OHA. Coordinated administration of all the Federal and State lands and waters within the boundaries of the Monument is facilitated by a 2006 Memorandum of Agreement.</p>
<p>Regulatory Context and Study Purposes</p>	<p>The CIA study and Legal Analysis are triggered by requirements set forth in the Hawai‘i Environmental Policy Act (HEPA), Hawai‘i Revised Statutes (HRS) §343, the corresponding Hawai‘i Administrative Rules (HAR) §11-200.1, and the Environmental Council’s 1997 Guidelines for Assessing Cultural Impacts.</p> <p>Cultural Impact Assessment The CIA portion of this study assesses the potential impacts (positive and/or negative) of the proposed project on cultural resources, defined as cultural practices and features, within PMNM.</p> <p>Legal Analysis The Legal Analysis constructs a comprehensive legal review framework and applies the framework in the analysis of the impacts of sanctuary designation to the cultural resources of the area in order to effectuate the State’s obligation to protect Native Hawaiian traditional and customary practices. The Ka Pa‘akai Analysis segment of the Legal Analysis independently assesses the impacts of the proposed project on religious, traditional, and customary practices of Native Hawaiians, assesses whether the DAR, with the proposed project, will adequately meet their duties to preserve and protect traditional and customary Native Hawaiian rights, and identifies corrective feasible actions, inclusive of the following factors:</p> <ol style="list-style-type: none"> 1. The identity and scope of 'valued cultural historical, or natural resources' in the petition area, including the extent to which traditional customary Native Hawaiian rights are exercised in the petition area; 2. The extent to which those resources-including traditional and customary Native Hawaiian rights- will be affected or impaired by the proposed action; and, 3. The feasible action, if any, to be taken by government entities to reasonably protect native Hawaiian rights if they are found to exist (Ka Pa‘akai, 94 Haw. at 47, 7 P.3d at 1084). <p>The goal of both studies is to enable the NMSF, DAR, and NOAA-ONMS and other project partners, to understand impacts proposed to cultural resources and practices by the potential sanctuary designation, engage in more culturally-informed planning regarding the regulation, management, stewardship and protection of Papahānaumokuākea and will also provide next-steps recommendations promoting its community-driven stewardship.</p>

<p>Methods and Approaches</p>	<p>Both studies utilized a combination of targeted background research and consultation to identify and assess cultural impacts and provide recommendations and considerations.</p> <p>Cultural Impact Assessment (Part 1) CIA background research focused on gathering information used to provide foundational context drawn from in-person and online archives, repositories, and databases including but not limited to: oral traditions, historical accounts, land documents and maps, ‘Ōlelo Hawai‘i sources, newspaper articles, historic preservation reports, ethnographic and historical studies, and historical maps and photos as well as previous cultural impact assessments, management plans, etc., relevant to PMNM, previous cultural research conducted in the Monument (including scholarly articles), relevant published and unpublished resources (e.g. field notes, survey notes, oral histories, etc.) relevant to PMNM, audio and video recordings (including interviews and transcripts), law and legal documents from the historical through modern eras. Background research was used to inform contextual synthesis of:</p> <ul style="list-style-type: none"> ○ Natural landscapes, oceanscapes, and resources (environmental zones, soils, geology, plants, waterways, coastlines, fisheries), ○ Native Hawaiian oral traditions and accounts (ka‘ao, mo‘olelo, inoa ‘āina, mele, oli, ‘ōlelo no‘eau, nūpepa, wahi pana), ○ Cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina, ○ Post-European contact historical accounts (early visitor accounts, Plantation Era, historical maps, English newspapers), ○ Kingdom of Hawai‘i land use and resource management practices (Māhele information –Boundary Commission Testimonies, Land Commission Awards, Native & Foreign Testimonies and Registers, Government Land Grants, Crown lands), ○ Archaeological information pertaining to cultural and historic sites within the study area to reconstruct traditional land use activities and to identify and describe cultural resources and practices in the area <p>CIA consultation inclusive of questionnaire distribution, email exchanges, presentations, and individual and group interviews, with individuals knowledgeable of/with cultural connections to Papahānaumokuākea was performed. Consultation efforts focused on identifying and discussing:</p> <ul style="list-style-type: none"> ○ Cultural resources, defined as practices and features, within the project area; ○ Potential impacts posed to cultural resources by the proposed project; desired mitigation commitments and alternative recommendations; ○ Short and long-term stewardship recommendations for Papahānaumokuākea; ○ Desired policies for the appropriate cultural management and stewardship of Papahānaumokuākea; and,
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	<ul style="list-style-type: none"> ○ Any additional mana‘o consultees wished to share. <p>An assessment of cultural impacts was performed using a thematic synthesis and discussion of information, mana‘o, and perspectives that emerged from background research and consultation efforts, including:</p> <ul style="list-style-type: none"> ○ Cultural resources, defined as practices and features, within the project area; ○ Potential impacts posed to cultural resources by the proposed project; ○ Desired mitigation commitments and alternative recommendations; ○ Short and long-term stewardship recommendations for Papahānaumokuākea; ○ Desired policies for the appropriate cultural management and stewardship of Papahānaumokuākea; and, ○ Any additional mana‘o consultees wished to share. <p>The CIA concludes with best management practices considerations for Wahi Kūpuna Stewardship (WKS) at PMNM inclusive of proposed and recommended mitigation and management/stewardship policies; WKS approaches to management; restoring cultural practices and knowledge, and growing a presence for stewardship.</p> <p>Nohopapa Hawai‘i’s CIA approach and study built upon accurate relevant previous work (Maly and Maly 2003, 2003a, and 2003b; OHA 2021). Also per NMSF and DAR, Nohopapa Hawai‘i performed consultation in collaboration with NOAA as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the National Historic Preservation Act (NHPA) Section 106 consultation process.</p> <p>Legal Analysis (Part 2)</p> <p>The legal team’s approach to the legal analysis focused on gathering background information used to provide foundational context drawn from the Hawai‘i Constitution, statutory laws, case law, law review articles, previous cultural impact assessments, Papahānaumokuākea management plans, including the <i>Mai Ka Pō Mai</i> plan jointly authored by Office of Hawaiian Affairs, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and State of Hawai‘i, relevant published and unpublished resources (Master’s thesis articles, law articles, and essays), and legal documents. Background research was used to inform:</p> <ul style="list-style-type: none"> ○ The current management structure of Papahānaumokuākea, ○ Past and present Native Hawaiian practices, beliefs, and resources occurring within the monument, ○ Native Hawaiian origin stories and significance of Papahānaumokuākea to Native Hawaiian identity and culture, ○ Land use and resource management practices,
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	<ul style="list-style-type: none"> ○ Legal protections of Native Hawaiian traditional, customary, and religious beliefs and practices, including how the courts have interpreted such laws, ○ Development of a framework for providing an adequate foundation for proving customary practices in Papahānaumokuākea. <p>Nohopapa Hawai‘i’s legal analysis approach also included consultation in collaboration with NOAA as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the NHPA Section 106 consultation process. Through the consultation process the legal team will be able to complete the three-part Ka Pa‘akai Analysis.</p>
<p>Consultation</p>	<p>Consultation was integral to develop understandings of the kūpuna islands and ensuring the CIA and Legal Analysis met the established purposes, goals, and legal requirements for each of the studies. Consultation was performed in collaboration with the NMSF, DAR, and NOAA-ONMS as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the NHPA Section 106 consultation process.</p> <p>Both studies also utilized consultation in order to: 1) identify impacts the proposed project will have on any identified Papahānaumokuākea cultural resources and practices, and 2) identify appropriate mitigation commitments and recommendations for best practices. Consultation efforts focused on engagement with individuals, ‘ohana, and organizations who have connection to and knowledge of the cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina. In particular, Nohopapa focused consultation on gathering information related to:</p> <ul style="list-style-type: none"> ○ Mo‘okū‘auhau, Mo‘okū‘auhau ‘Āina, ‘Ohana, Wahi Kūpuna (Family History and Ties, Genealogy of the Land/Ocean, Cultural Landscapes, Resources, Uses, and Practices) ○ ‘Āina Maui Ola, Loina Kūpuna (Natural Landscapes, Customary Practices, Resources, and Uses) ○ Mo‘olelo, Inoa ‘Āina, Mele, Oli, ‘Ōlelo No‘eau, Hula (Legends, Place Names, Songs, Chants, Proverbs, Hula) ○ Pāpahānaumokuākea including the relationships and significances to people and places throughout the pae ‘āina ○ Preservation and management concerns and recommendations ○ Any other mana‘o consultees wished to share <p>Joint CIA and LA consultation inclusive of questionnaire distribution, email exchanges, presentations, and individual and group interviews, with knowledgeable individuals with lineal/cultural connections to Papahānaumokuākea was performed. Nohopapa Hawai‘i also delivered invitations to consultation via a remote meeting with the Cultural Working Group (CWG) on 12/22/2022, and the NOAA</p>

	<p>Section 106 consulting parties group on 1/24/2023. An invitation to consultation and informational sheet regarding Nohopapa’s purposes, goals, and intentions for the CIA and Legal Analysis was provided to 154 potential consultees and organizations on 01/05/23. In total, 34 individuals including two (2) representing the office of Hawaiian affairs, confirmed their interest to participate in CIA and Legal Analysis consultation. Of the respondents, 25 individuals completed the consultation process. 20 consultees elected to provide their mana‘o by completing either a Google document questionnaire or Word document questionnaire. One consultee participated in an individual interview on 2/07/2023. Mike and Kaikea Nakachi were interviewed on 02/01/23. One group interview with Kealoha Pisciotta and Akoni Palacat-Nelsen occurred on 02/02/23. Of the 25 of individuals consulted, 11 wished to remain anonymous. Information with the potential to compromise anonymity was edited from the responses of individuals who wished to remain anonymous. Hawaiian language punctuation was inserted into ‘ike and mana‘o provided during verbal interviews and group talk story sessions. Out of respect for their voice, perspectives, and preferences, Hawaiian language punctuation was not inserted into ‘ike and mana‘o consultees provided in writing.</p>
<p>Cultural Resources, Practices, Beliefs, and Features Associated with the Project Area and Vicinity</p>	<p>Background research yielded an abundance of Hawaiian oral traditions, including knowledge generated scientifically through centuries and generations of close observation and information transmission, that evince Papahānaumokuākea as a Hawaiian place and cultural, physical, spiritual, and ecological extension of the pae ‘āina (Kaiaikawaha 1835, <i>Ka Nupepa Kuokoa</i> 1861-1927, Kaulainamoku 1865, Manu 1899, Poepoe 1906, 1908). Background research also revealed an array of cultural resources associated with Papahānaumokuākea - see pp. 33 to 79 for a discussion.</p> <p>During community consultation for this study, interviewees identified an array of layered, intertwined, living, and dynamic Hawaiian cultural resources within or associated with Papahānaumokuākea, including explanations of their nature and significance. The Hawaiian cultural practices, beliefs, and features mentioned by those interviewed are featured in pp. 95 to 113.</p>
<p>Identified Cultural Impacts</p>	<p>Many consultees associated an array of adverse impacts to cultural practices and resources stemming from efforts to declare Papahānaumokuākea a National Marine Sanctuary; this discussion is featured on pp. 158 to 168.</p>
<p>Recommendations and Additional Mana‘o</p>	<p>Consultees shared a variety of detailed, contextualized, and nuanced recommendations regarding National Marine Sanctuary designation for Papahānaumokuākea (see pp. 168 to 179). This included ‘ike and mana‘o regarding the following Nohopapa-designated consultation sub-categories:</p> <ul style="list-style-type: none"> ● <i>How can cultural practices be integrated into resource management and/or restoration today?</i> ● <i>Short or Long-term Concerns Regarding the Project</i>

	<ul style="list-style-type: none"> ● <i>Role(s) Envisioned to Mālama Papahānaumokuākea and the Proposed National Marine Sanctuary designation</i> ● <i>Traditional or Local Strategies Recommended for the Resource Management of Papahānaumokuākea and the Proposed National Marine Sanctuary Designation</i> ● <i>‘Ike Kūpuna</i> ● <i>Continued Access and Stewardship</i> ● <i>Continued Protection and Outreach</i> ● <i>Elevating Indigenous Science as its Own Research Category</i> ● <i>Removing Western Frameworks and Motivations</i> <p>Consultations offered additional mana‘o regarding the following:</p> <ul style="list-style-type: none"> ● <i>Regarding Bringing Back Any Type of Resources from Papahānaumokuākea to the Pae ‘Āina</i> ● <i>Proposed Regulations for Fishing Within PMNM</i> ● <i>Sanctuary Designation and Hawaiian Land and Decision-making Authority</i> ● <i>Sanctuary Designation and Foundational Hawaiian Wahi Kūpuna Stewardship Approaches</i> ● <i>Regarding Additional Recommended Protections</i> ● <i>Impact of Native Hawaiian Visitation and Research</i> ● <i>Recognizing Previous Efforts</i>
<p>Considerations</p>	<p>Background research and consultation attest to the perseverance of traditional and living Hawaiian cultural resources affiliated with Papahānaumokuākea, and to the PMNM as a contiguous cultural land, sky, and seascape. In order to ensure the cultural, spiritual, and ecological health and well-being of Hawaiian cultural resources at PMNM, these best management considerations have been compiled and synthesized from consultation and research:</p> <ul style="list-style-type: none"> ● Adopting management policies and structures in the PMNM that integrate Native Hawaiian traditional and cultural values for wahi kūpuna stewardship (WKS) approaches: <ul style="list-style-type: none"> ○ Supporting consistent, continued, repeat Hawaiian access to and stewardship of the PMNM ○ Adopt Hawaiian approaches to resource stewardship that center Hawaiian agency, authority and ‘ike kūpuna while prioritizing what’s best for the integrated cultural, spiritual, and ecological health of Papahānaumokuākea over extractive research and industry. This should include: <ul style="list-style-type: none"> ■ Monitoring and enforcing research permit standards ■ Mandating researchers avoid harm to living things (e.g. hooking or ripping the mouths of shark pups unnecessarily) and physical places ■ Mandate research programs and researchers give to Papahānaumokuākea more than they take from Papahānaumokuākea

	<ul style="list-style-type: none"> <ul style="list-style-type: none"> <ul style="list-style-type: none"> ■ Recognize that in Hawaiian spaces and places, Western scientific research is not a first priority or a necessity ○ Restoring cultural practices and knowledge by committing to growing a presence for Hawaiian stewardship and stewards that includes a streamlined cultural use permitting process and supports enhanced Hawaiian visitation and the cultivation of relationships ● In support of the mana‘o shared by Kealoha Pisciotta during consultation, it is highly recommended DAR-DLNR and all PMNM management agency partners recognize, endorse and uphold the <i>Paoakalani Declaration</i> regarding Hawaiian cultural intellectual property (‘Āina Momona 2023) <ul style="list-style-type: none"> ○ Respect and protect Hawaiian cultural intellectual property according to the values and processes identified in the <i>Paoakalani Declaration</i> ● In support of the mana‘o shared by Kealoha Pisciotta during consultation, it is highly recommended DAR-DLNR and all PMNM management agency partners recognize, endorse and uphold the United Nations Declaration on the Rights of Indigenous People, and especially the component stating that traditional lands that include both seascapes and landscapes (United Nations 2023). ● Providing enhanced recognition that may correlate to enhanced protection of the Hawaiian cultural importance of the PMNM by designating Papahānaumokuākea as a Traditional Cultural Property (TCP) and cultural land, sea, and sky scape on the Hawai‘i and National Registers of Historic Places (HRHP and NRHP, respectively). Consultees identified this as desirable, but were unclear on the benefits. From Nohopapa Hawai‘i’s perspective as cultural practitioners, WKS, and historic preservation specialists, benefits to listing Papahānaumokuākea include: <ul style="list-style-type: none"> ○ TCP is an underused designation within historic preservation and environmental compliance and is currently the most culturally appropriate label for the reality of contiguous, expansive, dynamic Hawaiian cultural land, sea, and skylscapes ○ State and federal recognition that could correlate to enhanced awareness and protection ○ Establishment of Papahānaumokuākea’s Hawaii Register of Historic Places (HRHP) and National Register of Historic Places (NRHP) listing eligibility should mean any future change to or proposed actions within the PMNM must take its eligibility into consideration
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	<p>The CIA concludes with wahi kūpuna stewardships considerations (pp. 179 to 181) provided by Nohopapa Hawai‘i that will enable DAR, in conjunction with NOAA-ONMS and other managing partners, to engage in more culturally-informed planning regarding the regulation, management, stewardship and protection of Papahānaumokuākea and will identify next-steps recommendations promoting its community-driven stewardship.</p>
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Introduction and Methods

Study Regulatory Contexts

The CIA study and Legal Analysis are triggered by requirements set forth in the Hawai‘i Environmental Policy Act (HEPA), Hawai‘i Revised Statutes (HRS) §343, the corresponding Hawai‘i Administrative Rules (HAR) §11-200.1, and the Environmental Council’s 1997 Guidelines for Assessing Cultural Impacts.

Study Purposes


The CIA and Legal Analysis purposes and goals, in the context of the sanctuary designation effort, are interrelated. Consultation for the CIA and Legal Analysis are also integrated, to the extent possible, with NOAA-ONMS’ in-progress Section 106 of the NHPA consultation efforts. The goal of both studies is to enable the NMSF, DAR, and NOAA-ONMS and other project partners, to understand impacts proposed to cultural resources and practices by the potential sanctuary designation, engage in more culturally-informed planning regarding the regulation, management, stewardship and protection of Papahānaumokuākea and will also provide next-steps recommendations promoting its community-driven stewardship.

Cultural Impact Assessment (Part I)

The CIA portion of this study assesses the potential impacts (positive and/or negative) of the proposed project on cultural resources, defined as cultural practices and features, within PMNM.

Legal Analysis (Part II)

The Legal Analysis constructs a comprehensive legal review framework and applies the framework in the analysis of the impacts of sanctuary designation to the cultural resources of the area in order to effectuate the State’s obligation to protect Native Hawaiian traditional and



customary practices. The Ka Pa‘akai Analysis segment of the Legal Analysis independently assesses the impacts of the proposed project on religious, traditional, and customary practices of Native Hawaiians, assesses whether the DAR, with the proposed project, will adequately meet their duties to preserve and protect traditional and customary Native Hawaiian rights, and identifies corrective feasible actions, inclusive of the following factors:


1. The identity and scope of ‘valued cultural historical, or natural resources’ in the petition area, including the extent to which traditional customary Native Hawaiian rights are exercised in the petition area;
2. The extent to which those resources -including traditional and customary Native Hawaiian rights- will be affected or impaired by the proposed action; and,
3. The feasible action, if any, to be taken by government entities to reasonably protect native Hawaiian rights if they are found to exist (Ka Pa‘akai, 94 Haw. at 47, 7 P.3d at 1084).

Methods and Approaches

CIA and LA Background Research

The CIA and Legal Analysis share a reliance on foundational background research and consultation. Both studies utilize a combination of targeted background research and consultation in order to identify/inventory as well as assess impacts to cultural resources and practices within Papahānaumokuākea, and provide management and stewardship recommendations and considerations.

Ethnographic, oral historical information associated with people, ‘āina, and moana nui provided the foundation and background for understanding the cultural landscapes and oceanscapes, resources, and customary practices associated with Papahānaumokuākea. Background research focused on identifying and synthesizing existing understandings of the Papahānaumokuākea kūpuna islands, oceanscape, and their relationship and significance to people and places throughout the pae ‘āina. Information used to provide foundational context was drawn from in-person and online archives, repositories, and databases including but not limited to: oral traditions, historical accounts, land documents and maps, ‘Ōlelo Hawai‘i sources, newspaper



articles, historic preservation reports, ethnographic and historical studies, and historical maps and photos as well as previous cultural impact assessments, management plans, etc., relevant to PMNM, previous cultural research conducted in the Monument (including scholarly articles), relevant published and unpublished resources (e.g. field notes, survey notes, oral histories, etc.) relevant to PMNM, audio and video recordings (including interviews and transcripts), law and legal documents from the historical through modern eras. Background research was used to inform contextual synthesis of:

- Natural landscapes, oceanscapes, and resources (environmental zones, soils, geology, plants, waterways, coastlines, fisheries),
- Native Hawaiian oral traditions and accounts (ka‘ao, mo‘olelo, inoa ‘āina, mele, oli, ‘ōlelo no‘eau, nūpepa, wahi pana),
- Cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina,
- Post-European contact historical accounts (early visitor accounts, Plantation Era, historical maps, English newspapers),
- Kingdom of Hawai‘i land use and resource management practices (Māhele information –Boundary Commission Testimonies, Land Commission Awards, Native & Foreign Testimonies and Registers, Government Land Grants, Crown lands),
- Archaeological information pertaining to cultural and historic sites within the study area to reconstruct traditional land use activities and to identify and describe cultural resources and practices in the area

Our background research methods and approaches uphold Kikiloi’s (2010:78) definition of Hawaiian oral traditions as “verbal testimonies or reported statements concerning the past,” and “‘ike kūpuna” (ancestral knowledge). Both studies heavily utilize the two types of Hawaiian oral traditions identified by Kikiloi (2010:79) - oli (chants), mele (songs), and ‘ōlelo no‘eau (proverbs) that are short, reproduced through strict protocol, and often “part of sacred learning or tradition,” and mo‘olelo (narratives) and ka‘ao (histories), which are more flexible in structure, version, and meaning.

CIA and LA Consultation

Consultation was integral to CIA and Legal Analysis understandings developed and the established purposes, goals, and legal requirements for each of the studies. Consultation was performed in collaboration with the NMSF, DAR, and NOAA-ONMS as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the NHPA Section 106 consultation process.

Both studies also utilized consultation in order to: 1) identify impacts the proposed project will have on any identified Papahānaumokuākea cultural resources and practices, and 2) identify appropriate mitigation commitments and recommendations for best practices. Consultation efforts focused on engagement with individuals, ‘ohana, and organizations who have connection to and knowledge of the cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina. Pre-formulated consultation questions (Appendix B) were generated and utilized. Nohopapa Hawai‘i employed a multi-pronged consultation approach. We identified and consulted with individuals and organizations with knowledge of Pāpahānaumokuākea and expertise concerning the types of cultural resources, practices, and beliefs found within the broad geographical area of the Papahānaumokuākea kūpuna islands, oceanscape, landscape, and skylscapes, and their relationship and significance to people and places throughout the pae ‘āina.

Joint CIA and LA consultation efforts focused on gathering mana‘o regarding cultural resources, defined as practices and features, within the project area, including:

- **Mo‘okū‘auhau**
 - Consultees’ identities and personal, professional, and other kinds of connections to Papahānaumokuākea
 - The access kuleana (e.g. Marine resource management, Lawai‘a, Ceremony, Education, Resource Gathering, Special Use, Research, etc.) consultees have within PMNM
 - Consultees’ historical or genealogical relationship to Papahānaumokuākea
 - Travels to to Papahānaumokuakea, including cultural practice(s) consultees, their ‘ohana, and/or kūpuna have done or do in Papahānaumokuākea

- **Cultural Resources, Practices, Beliefs, and Connections**

- Whether consultees consider Papahānaumokuākea and the main Hawaiian Islands connected
 - If consultees believe the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands
 - If consultees believe Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands
 - Cultural resources, practices, and/or beliefs consultees associated with Papahānaumokuākea and the surrounding vicinity
 - Details regarding cultural resources, practices, and/or beliefs that need to be included (*e.g. location, seasonality, lifespan, etc.*) in the CIA report so the project proponents and management team can mitigate or avoid impacts and make pono decisions regarding management
 - Cultural resources, practices, features, and/or beliefs that will be lost or obliterated if the project proceeds
 - Areas critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities
- **Oral Traditions Associated with Papahānaumokuākea**
 - Akua affiliated with Papahānaumokuākea
 - Mele, mo‘olelo, oli, ka‘ao, and/or significant inoa ‘āina (place names) about Papahānaumokuākea that are key to cultural understandings and interactions with the ‘āina and/or the relationship to the pae ‘āina?
- **Preservation and Management Concerns and Recommendations**
 - How can cultural practices be integrated into resource management and/or restoration today?
 - Adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary recognized by consultees
 - Whether consultees support, oppose, or have concerns about the proposed National Marine Sanctuary designation
 - If consultees have any preferred alternatives to the proposed action - sanctuary designation for Papahānaumokuakea

- Which of the proposed sanctuary boundaries consultees support or if they have suggestions for other sanctuary boundaries
 - Any preferred or desired mitigation measures relative to the impacts proposed by the sanctuary designation
 - Short or long-term concerns regarding the project
 - Role(s) envisioned to mālama Papahānaumokuākea and the proposed National Marine Sanctuary designation
 - Traditional or local strategies recommended for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation
- **Any Additional Mana‘o Consultees Wish to Share**

Cultural Impact Assessment

Cultural Impact Assessment Framework and Approach

Following background research and consultation, a cultural impact assessment was performed. Within the CIA study, cultural impacts were assessed through a thematic synthesis and discussion of:

- **Cultural resources, defined as practices, beliefs, and features, within or associated with the project area**
 - Including their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance to the project site.
- **The nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project;**

An assessment of impacts posed by the proposed project to cultural resources – defined as practices and resources – within the project area was then performed. Included are considerations and discussions of:

- **Potential impacts posed to cultural resources by the proposed sanctuary designation, including:**
 - The potential effect of any proposed physical alteration on cultural resources, practices or beliefs;
 - The potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and,
 - The potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.

The CIA concludes with a discussion of:

- Recommended mitigation commitments and alternative recommendations
- Short and long-term stewardship Wahi Kūpuna Stewardship recommendations for Papahānaumokuākea
- Best management practices considerations for Wahi Kūpuna Stewardship at PMNM
- Desired policies for the appropriate cultural management and stewardship of Papahānaumokuākea; and,
- Preservation and Management Concerns and Recommendations
- Any additional mana‘o consultees wished to share


Legal Analysis

Legal Review Framework

Nohopapa Hawai‘i’s legal professionals developed a comprehensive legal review framework, inclusive of a Ka Pa‘akai Analysis, and deployed the framework to analyze the impacts of a proposed sanctuary designation to the cultural resources of the area in order to effectuate the State’s obligation to protect Native Hawaiian traditional and customary practices.

Methods

The Nohopapa Hawai‘i legal professionals’ approach to the legal analysis focused on gathering background information used to provide foundational context drawn from the relevant constitutional and statutory provisions, common law developed from Hawai‘i Supreme Court




decisions on Native Hawaiian rights, law review articles, previous cultural impact assessments, Papahānaumokuākea management plans, including the *Mai Ka Pō Mai* management plan jointly authored by Office of Hawaiian Affairs, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and State of Hawai‘i, relevant published and unpublished resources (Masters and PhD thesis, journal articles and essays), cultural permit applications, and other legal documents. Background research was used to inform:

- The current management structure of Papahānaumokuākea,
- Past and present Native Hawaiian practices, beliefs, and resources occurring within the monument,
- Native Hawaiian origin stories and significance of Papahānaumokuākea to Native Hawaiian identity and culture,
- Land use and resource management practices,
- Legal protections of Native Hawaiian traditional, customary, and religious beliefs and practices, including how the courts have interpreted such laws,
- A framework for providing an adequate foundation for proving customary practices in Papahānaumokuākea.

Nohopapa Hawai‘i’s legal analysis also included consultation in collaboration with NOAA as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the NHPA Section 106 consultation process. Nohopapa Hawai‘i collaborated closely with the Section 106 consultation process in efforts to avoid duplication and to maximize opportunities for public and consulting party involvement. Through the consultation process the legal team will be able to complete the comprehensive legal review framework, inclusive of the Ka Pa‘akai Analysis.

Limitations

This Cultural Impact Assessment, by nature, cannot be a comprehensive history of Papahānaumokuākea, the islands within its bounds, or the seas around it. This study does however compile primary source Hawaiian language documents that expand on the origins of Hawaiians as a people and in Hawai‘i as relevant to the North West Hawaiian Islands. This study seeks to set a Hawaiian context for Papahānaumokuākea.



We openly state these limitations and also propose a wish list of topics for future scholars and researchers who turn their eyes to the northwest. There is much novel research that, in the future, would contribute more to the depth of understanding of the Hawaiian cultural history of Papahānaumokuākea, its islets, seas, and skies. Future studies that would contribute heavily to future assessments and studies like this one include:


- A deep survey of more un-translated Hawaiian literature available in nūpepa, manuscripts, and archival forms.
- Consider the wahi kūpuna, the resources significant to ancestors and culture, that make up the seas and skies around Papahānaumokuākea. This could be done through the compilation of inventories of species and resources present and a comparative analysis with species that are part of Hawaiian Traditional Customary Practices:
 - Limu (seaweeds)
 - Fish
 - Corals
 - Geologic resources
 - Guano
 - Fresh water
 - Mammals
 - Birds
 - Migrations times and patterns of species
 - Vertebrates and invertebrates
 - Deeper synthesis of rains and rainfall in on and between islands
 - Storm mapping and patterns overtime
 - Cloud types, patterns, cycles, kilo
- There have been discussions that Hawaiians were part of both historic expeditions of foreign vessels and the whaling trade, a better understanding of their role and lives in the NWHIs.
- Continue to reach out to Hawaiian families across the pae ‘āina who have as yet un-shared and less-known stories and connections to the NWHI, whether through practices, travel, or family. Request the sharing of these ‘ohana mo‘olelo to the public history of Papahānaumokuākea.

- Further, examine primary resources and cultural values and concepts towards best management strategies and practices.

Lastly, our team believes that lawai‘a, the practice and value of catching and stewarding fisheries and ocean resources, is a critical Native Hawaiian traditional cultural practice that should be incorporated into any management practices for the proposed sanctuary designation of the marine portion of the existing monument.

During background research, the theme and practice of traditional Hawaiian fishing arose with interviewees, but it was often ancillary, owing in part to the decline in Hawaiian interactions with Papahānaumokuākea during the historic era and/or a lack of documentation of those interactions in current historical scholarship. Of the historical materials consulted in this study, the theme of fishing was rarely mentioned, and the main cultural practice described across most, if not all, accounts was voyaging and mo‘okū‘auhau (genealogy) of people, land, and akua. Kepa and Onaona Maly compiled an extensive two-volume ethnographic and ethnohistoric study of Hawaiian lawai‘a (loosely translated as *fishing*) where Native Hawaiian practitioners shared accounts of lawai‘a from across Hawai‘i. Some of the kūpuna (elders) and younger participants interviewed had traveled to and worked in PMNM (Maly and Maly 2003a and 2003b). This two-volume set is over 2,000 pages and should be deeply consulted for any management plan that looks at *traditional* fishing practices in Hawai‘i. The Nohopapa team encourages further management planning to consider an ethnohistorical research and interview study to understand how traditional Hawaiian reciprocal values around lawai‘a, and eco-system management (Winter et al. 2020; Kikiloī 2003).

Using the English word “fishing” or “fisherman” interchangeably with the Hawaiian word lawai‘a, allows us to misinterpret language, which implies a take, a taking of fish, in modern linguistic capacity. Resource stewardship for abundance is a value interwoven with all Hawaiian resource interactions. For example, loko i‘a “fish ponds” are unique to Hawai‘i, especially loko kuapā, and no true translation into English exists for what loko i‘a are. Although we translate loko i‘a as “fishpond,” it is not merely that, there is a language disconnect, in English a fish pond might conjure images of fishing in a pond, such as in America, where it is common to seed fish in ponds to fish. However, it is essential to create some context for the Hawaiian word for fishing or fisherperson, lawai‘a, to acknowledge what fishing represents in an American worldview compared to what lawai‘a represents in a Hawaiian worldview. A local scholar



specializing in traditional resource abundance around Hawaiian traditional agricultural and aquaculture systems once said “[f]ishing” does not equal “lawai‘a,” and “lawai‘a” does not equal “fishing;” furthermore, he explained that “Lawai‘a is a reciprocal practice that involves give before take; ensuring abundance and then taking part in that abundance that you've helped to create” (Anonymous).

A study of lawai‘a, not fishing, would be critical to inform management, to understand better the continued Hawaiian presence in Papahānaumokuākea from the historic era to the present, and to clearly understand what the Hawaiian value of lawai‘a is. Again, such an in-depth topical analysis was not part of this Assessment of the proposed PMNM sanctuary designation of the marine portion of the existing monument. However, management of the proposed PMNM sanctuary designation of the marine portion of the existing monument would require an in-depth understanding of lawai‘a as a practice.

Natural Landscape and Resources


Numerous reports, management plans, and agency/organization websites detail the integrated sea, land, and skylines that comprise the Papahānaumokuākea Marine National Monument (PMNM; Papahānaumokuākea) (Figure 1). Papahānaumokuākea’s dossier for United Nations Educational, Scientific, and Cultural Organization World Heritage Listing describes the location and vast extents of the PMNM:

The Papahānaumokuākea Marine National Monument (PMNM) is a vast and isolated linear cluster of small low-lying islands and atolls that with their surrounding ocean, extends approximately 1200 miles (1931 kilometers) and approximately 115 miles (185 kilometers) wide with a total area of 582, 578 square miles (1,508,870 square kilometers) to the north west of the Main Hawaiian Archipelago in the north-central Pacific.

The State of Hawai‘i Division of Aquatic Resources (DAR-DLNR 2023) further describes Papahānaumokuākea as “dotted with small islands, islets, reefs, shoals, submerged banks, and atolls that extend from subtropical latitudes to near the northern limit of coral reef development.” From southeast to northwest, the ten named islets and atolls of the PMNM are: Nihoa, Mokumanamana (Hā‘ena/Necker), Lalo (French Frigate Shoals), ‘Ōnūnui and ‘Ōnuiki (Gardner Pinnacles), Kamokuokamohoali‘i (Maro Reef), Kamole (Laysan Island), Kapou (Lisianski Island), Manawai (Pearl & Hermes Atoll), Kuaihelani (Midway), and Hōlanikū (Kure Atoll).

Papahānaumokuākea’s islands, islets, reefs, shoals, banks and atolls are the northwesternmost extension of the continuous arc of geographically, culturally, spiritually, and ecologically connected islands that comprise the Hawaiian Archipelago. Kikiloi (2012) describes the characteristics of the archipelago:

The uniformity and sequencing of different life stages of the Hawaiian Islands moving east to west generally represent the broad range of environmental diversity and habitats amongst remote Oceanic Islands. Large high islands that are located to the east are geologically diverse and rich in resources for



settlement. This main Hawaiian group has important windward/leeward distinctions in rainfall, deep valleys with alluvial soils, fringing reefs or barrier reefs offshore. The smaller low islands and atolls are located to the west and are less diverse and relatively impoverished with regards to terrestrial resources. These islands are near sea level, with coral reefs and short of good soil and water. Some of them have extreme habitats that of atolls where the reef encloses a lagoon without a central island. Along it are islets and sand rarely more than a few meters above sea level, but some people have lived successfully on these island for 2000 years or more (Irwin 1992: 194). These islands occur alone or in groups, and the more distant and isolated they became with diminishing size and elevation, then the natural flora and fauna became impoverished, but the marine food has remained abundant where there are reefs. These environmental and geographic variables affect the circumstances for ocean voyaging regarding climate, the length of ocean passages, the relative accessibility of islands as targets in the ocean, degrees of island centrality or isolation (Irwin 2000). [Kikiloi 2012:123, 124]

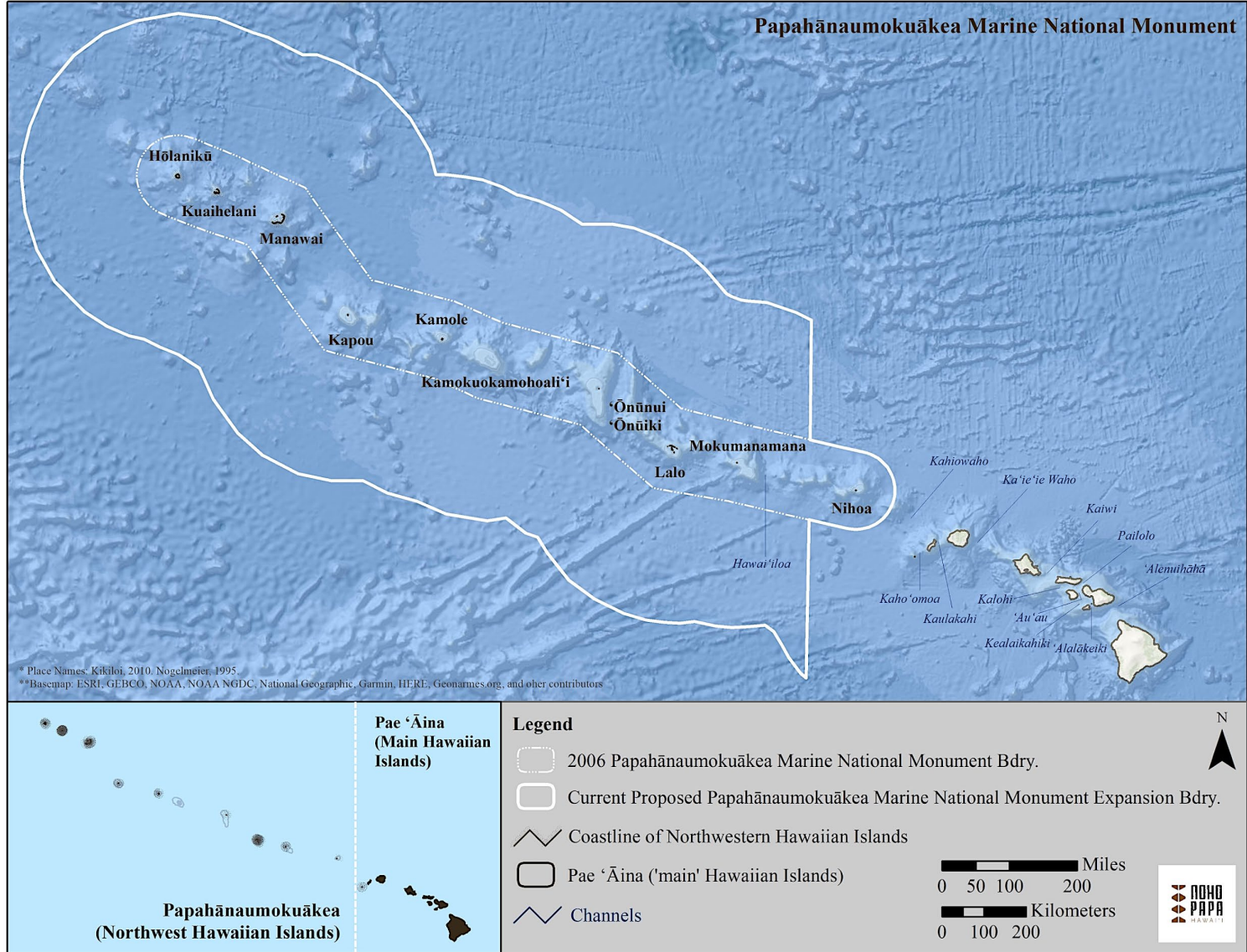




Figure 1. Map of the current proposed PMNM sanctuary designation of the marine portion of the existing monument (study project area).

Naturally and culturally rich, varied ocean environments characterize the Northwestern Hawaiian Islands and oceans within the boundaries of the PMNM. Kikiloi et al. (2017) writes:

Despite terrestrial ecosystems having been the primary focus, there has been increasing attention paid to both the natural and cultural heritage value of remote ocean areas, resulting in a movement towards increased protection for these regions (Freestone et al. 2013; Wilhelm et al. 2014). Much of Papahānaumokuākea is made up of pelagic and deepwater habitats (Figure 2), with notable features such as seamounts and submerged banks, extensive coral reefs, lagoons and 14 km² emergent lands distributed between a number of eroded high islands, pinnacles, atoll islands and cays. [Kikiloi et al 2017:437]

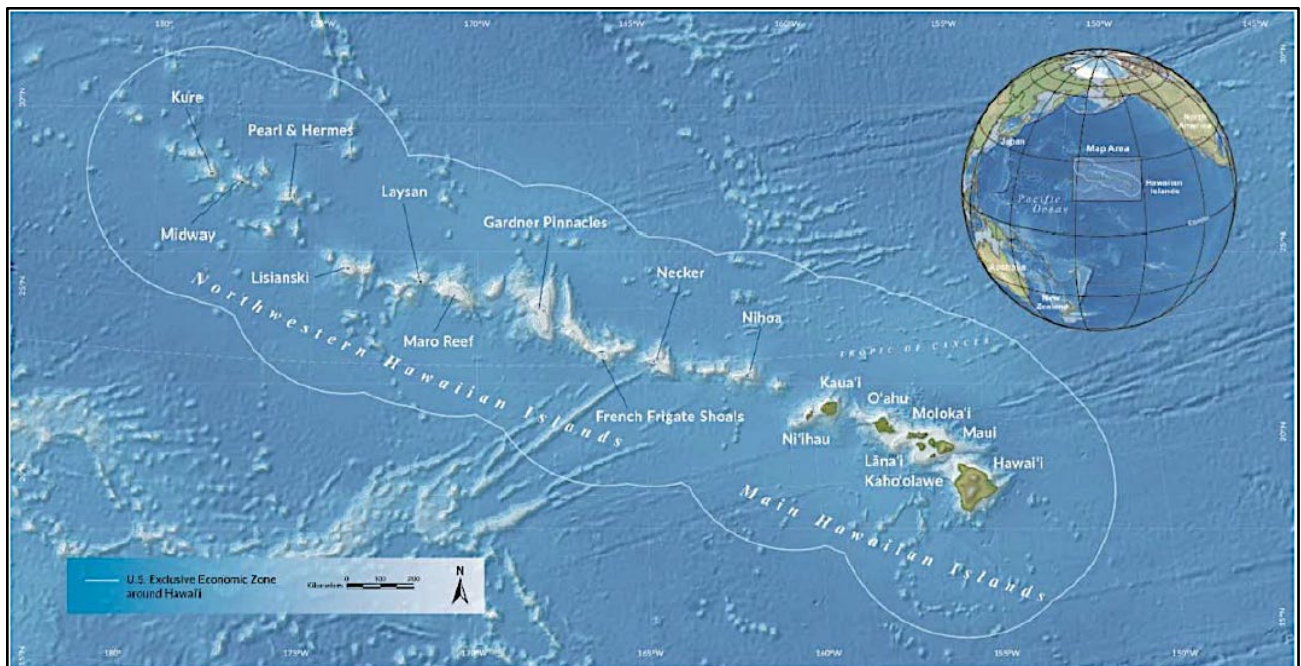



Figure 2. The Hawaiian Archipelago and associated bathymetry (Kikiloi et al. 2017:438).

Excerpts from the PMNM 2008 Management Plan Environmental Impact Statement (PMNM 2008) describe the abundance of life that flourishes within Papahānaumokuākea. They read:

Deepwater precious coral beds have been identified at depths of 1,200 to 1,330 feet (365 to 406 meters); these include ancient gold corals whose growth rate is now estimated to be only a few centimeters every hundred years and whose ages may exceed 2,500 years (Roark et al. 2006). At depths below 1,640 feet (500




meters), a diverse addition, the sheer mass of apex predators in the marine system is simply not seen in areas subject to higher levels of human impact (DeMartini and Friedlander 2004). [PMNM 2008: Appendix A, 5]

The deep waters support an offshore mesopelagic boundary community (Benoit-Bird et al. 2002), a thick layer of pelagic organisms that rests in the deep ocean (1,300 to 2,300 feet, or 400 to 700 meters) during the day, then migrates up to shallower depths (from near zero to 1,300 feet or 400 meters) at night, providing a critical source of nutrition for open-ocean fish species, seabirds, and marine mammals. Overall, the fauna of the Monument's waters below standard SCUBA diving depths remains poorly surveyed and documented, representing an enormous opportunity for future scientific research in a system largely undisturbed by recent trawling or other forms of resource extraction. [PMNM 2008:5]

Scientists using deep-diving submersibles have recorded the presence of deep-water precious coral beds within the Monument at depths of 1,200-1,330 feet (365-406 m); these include ancient golf corals whose growth rate is not estimated to be only a few centimeters every hundred years and whose maximum ages may exceed 2,500 years (Roark et al., 2006). Even deeper yet, the abyssal depths of the Monument harbor low densities of organisms, and yet the total biomass of the abyssal community is quite large because of the greater area of this habitat type within the Monument. Occupying this habitat are odd and poorly documented fishes and invertebrates, many with remarkable adaptations to this extreme environment. [PMNM 2008: Appendix A, 5]

Kikiloi et al. (2017) summarize one of the PMNM's many significances regarding its unique biota and relatively pristine ocean environments. They write: "Remote ocean areas such as the area surrounding PMNM are some of the last vestiges of what functioning ecosystems look like and thus provide baselines for comparisons with more exploited locations (Knowlton and Jackson 2008)," (Kikiloi et al. 2017:437). Its combined isolation and protection mean marine endemism in the PMNM is exceptionally high (Kane, Kosaki, and Wagner 2014:1). Kikiloi et al. (2017:1) further state that the PMNM:



...is one of the world's largest marine protected areas and was designated the first mixed conservation site in the United States due to its natural and cultural importance. It is also the world's first cultural seascape, being recognized for its continuing connections to indigenous people. As the westernmost place in the Hawaiian universe, many believe these islands and seas are the pathway that Native Hawaiians travel after death, returning to pō (night; realm of the gods).

Kikiloi discusses the importance of ethnohistorical knowledge and the organization of the broader environment:

In Hawaiian traditions island landscapes and seascapes (in relation to sky) play a critical role in myth and ritual interconnecting the cosmological universe as a whole from one end of the archipelago to the other. Many of the patterns and divisions expressed in cosmogonic chants were based on early exploration and observations of these islands across spatial sequences, geological stages, and ecological systems that extend across this continuum from east to west. [Kikiloi 2012:40,41]

Traditional and current Hawaiian cultural practices and knowledge streams recognize, uphold, and transmit knowledge regarding the inter-related nature of land, sea, and skyscapes and environments (Oliveira 58, 59, 64; Kikiloi et al. 2017). Kikiloi et al. (2017:438) write:

The ocean played a key role for Native Hawaiians not only for the resources it provided, but also for physical and spiritual sustenance in their everyday lives (Andrade 2008; Oliveira 2014; Handy and Pukui 1958). The ocean as a cultural seascape is vital to Native Hawaiians' identity and being, and is an essential dimension to their cognitive understanding of the world (Lewis 1972; Kyselka 1987). It is imbued with cultural meaning that continues to connect the Hawaiian people in a genealogical web of ecological kinship (Oliveira 2014).


As further noted by Kikiloi et al. (2017:437): "These cultural connections are invaluable in fully understanding the resources and essential components in shaping effective management."

Cultural Historical Overview

Introduction

For many years, a historical falsehood has been perpetuated: that the islands comprising the northwestern extent of the Hawaiian archipelago are not a Hawaiian place. This incorrect understanding grew after the overthrow of the Hawaiian Kingdom (1893), and persisted in written English history until recently. Melody Kapilialoha MacKenzie, a renowned professor who tenured at the UH Manoa Richardson School of law, cited a “1990 Fishing Rights Report” where she noted that this “Bernice Pauahi Bishop Museum Study failed to definitively place Native Hawaiians on the more distant NWHI prior to European contact” (MacKenzie and Kaiama 2003:i). Throughout this section we will present you with a wealth of diverse Hawaiian language documents and some recent ethnographic accounts that clearly and definitively place Native Hawaiians in the seas and on the islands northwest of the main Hawaiian Islands prior to, and well after, European Contact.

Many of the accounts of people and akua (gods) traveling mythologically and historically across the Northwestern Hawaiian Islands (NWHI), and to or from the Pae ‘Āina (archipelago, Southeastern Hawaiian Islands) are more recent discoveries of older texts (Kaiāikawaha 1835, *Ka Nupepa Kuokoa* 1861-1927, Kaulainamoku 1865, Manu 1899, Poepoe 1906, 1908). These and other such archives have only begun to be included into English language histories of Papahānaumokuākea, starting in the 1990s and picking up in the 2000s; as an emerging generation of Hawaiian language scholars delves into the wealth of ‘ōlelo Hawai‘i archives (MacKenzie et al 2003, Kikiloi 2010, 2012, Kikiloi et al 2017). Scholarly articles and legal research into the history of the Northwestern Hawaiian Islands has gained funding and interest from State and Federal agencies after the founding of PMNM in 2006, increasing with the Environmental Assessment preceding the expansion of the Papahānaumokuākea Marine National Monument (Papahānaumokuākea Marine National Monument 2008), and the subsequent nomination of PMNM to the World Heritage list in 2009 (State of Hawai‘i et al 2009), Cultural Overview Study (Monahan et al 2009), the first PMNM expansion (Obama 2016), Protocol Access Guide (Merrin et al 2020).



The common thread of NWHI scholarship in the 2000s is the introduction of Hawaiian archival and legal documents. This scholarship clearly establishes that the NWHI is not a peopleless landscape. Hawaiians mythologically trace their mo‘okū‘auhau (genealogies) to this place. It is a place the gods created and traveled through, to and back and forth between.

Papahānaumokuākea, its islands and its waters embody the kinolau of many akua in the Hawaiian pantheon, and have been visited by those akua. Voyaging across and between islands and islets in Papahānaumokuākea, the Main Hawaiian Islands, and across the Pacific is well documented in Hawaiian language literature. This section of this report, as constrained by both time and the sheer magnitude of archives available to sift through, has compiled some of the oli, mele, and mo‘olelo, both ancient and historical, that bears testament to a strong Hawaiian presence and relationship with the NWHI. In addition, this section provides a general overview of the cultural landscape, history, and significance of the Papahānaumokuākea Marine National Monument (PMNM). The narrative includes discussions on origins, primary and associated historical figures such as akua (“gods,” deified ancestors, personified elemental processes), migration and settlement, practices, and unique physical setting. A main objective of this study is to further reinforce understandings of interconnectivity of terrestrial and marine landscapes from a cultural perspective to further inform effective protection, management, policy, and regulation via historical accounts and cultural practice.

This study also acknowledges that there are multiple accounts and versions of the traditions in records of historical figures, events, or places. The research process considers all available sources and attempts to synthesize an analysis that is thorough, thoughtful and appropriate while acknowledging that it is not comprehensive. We remind our readers that “One can learn from many sources,” as Mary Kawena Pukui interprets the often-quoted ‘Ōlelo Noe‘au “A‘ohe pau ka ‘ike i ka hālau ho‘okāhi (*all knowledge is not taught in the same school*),” nor is it found in one document or report (Pukui 1983:24 no.203).

Kumulipo, Cosmogonic Origins, and Setting

The Kumulipo is a Hawaiian cosmogonic genealogy that traced the lineage of the chief Ka-‘Ī-i-mamao, or Lonoikamakahiki at the time of his birth during the 17th century to the very beginning of creation. There are two main time periods described in the Kumulipo, pō, primordial darkness and realm of the gods (Beckwith 1951; Handy and Pukui 1972: 131; Pukui

and Elbert 1986, 307), and ao, the secular realm of man and the history of social political development of early Hawaiian society (Lili‘uokalani 1878; Poepoe 1908; Kikilo 2012). The first life-forms that are born into creation are marine invertebrates and species which infers that the ocean itself is sacred and its deepest, darkest depths are the divine setting for the primordial origin of life. Although the concepts of pō and ao are binary, the organization of space and time in relation to them are multidimensional.

Hawaiian understanding of space was developed by following and tracking the course of the sun and other celestial bodies such as the stars (Malo 1951) and recorded in “chants based on early exploration and observations of the islands across spatial sequences, geological stages, and ecological systems on the continuum from east to west” (Kikilo 2012:41). The east to west orientation of the Main Hawaiian Islands is also a re-occurring theme in Hawaiian poetic metaphor for the human lifespan; such as with this ‘Ōlelo No‘eau, Native Hawaiian proverb:

Mai ka hikina a ka lā i Kumukahi a ka welona a ka lā i Lehua

From the sunrise at Kumukahi to the fading sunlight at Lehua.

“From sunrise to sunset... This saying also refers to a life span—from birth to death.”

(Pukui 1983:223-4, no.2058)

The islands beyond the main Hawaiian archipelago, in PMNM, are held by Hawaiian traditions to be within the realm of Pō, a spiritual region facilitating the journey spirits took upon death and the process of deification in the afterlife” (Kikilo 2012:23). Ke Alanui Polohiwa a Kāne, or the Tropic of Cancer was considered the border between pō and ao with Mokumanamana in a unique position on the tropic, acting as an axis point between these two worlds (PMNM 2008:Appendix A:20). Voyaging pathways between these two realms across the island continuum as well as migrations from beyond Hawai‘i across the moana (ocean) extending the reach of the cultural seascape across the Pacific Ocean.

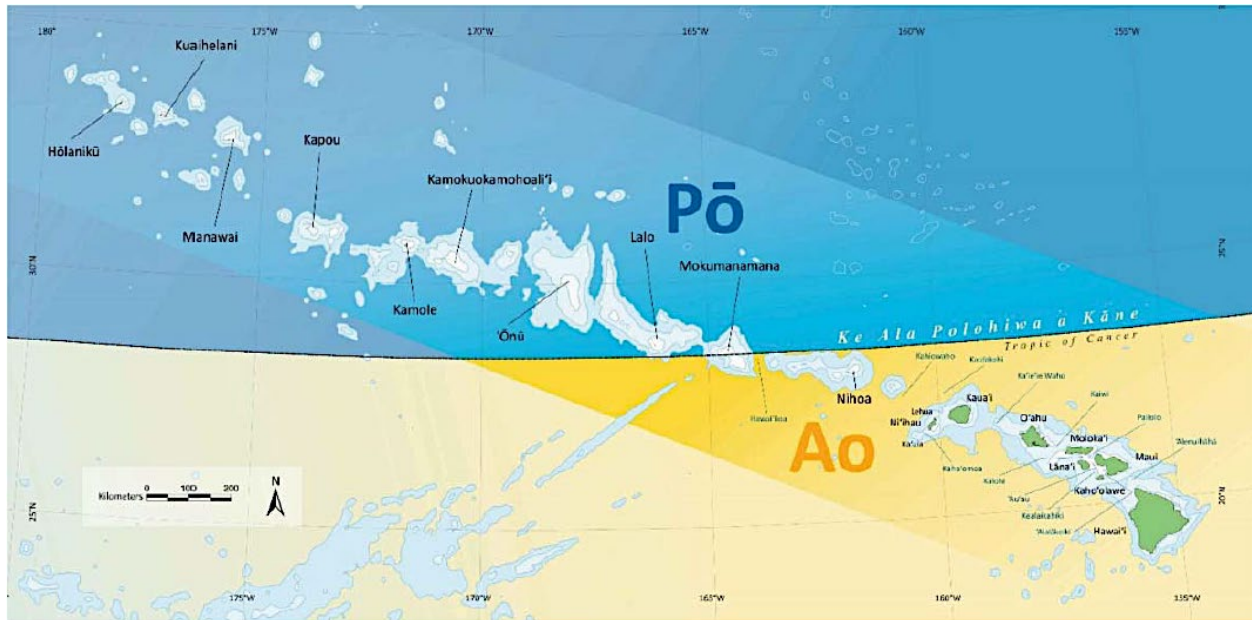



Figure 3. Ke Ala Polohiwa a Kāne border between pō and ao (Kikiloi 2010, 2012)

Papahānaumoku and Wākea Traditions

Another prominent genealogical account of Hawaiian history and the creation of the islands in the genre of birthing is the tradition of Papahānaumoku (earth mother) and Wākea (sky father). This narrative marks a great social, political, and religious shift for Hawaiian society towards the end of the cosmological era with the triumph over the chief Kāneiākumuhonua of the Kumuhonua lineage and the unified rule over the archipelago that was established with the victory of Papa and Wākea (Fornander [Thrum, trans.] 1916: 2,3; Kamakau 1964: 2,3; Malo 1898:315). The union of Papa and Wākea, and subsequently Wākea and Ho‘ohōkūkalani is an example of moe pi‘o or incest mating that raises the genealogy of a child above those of their respective parents, giving them a divine status (Kamakau 1870; Kepelino, in Beckwith 1932). The following five chants and their analysis draw from Kekuēwa Kikiloi’s extensive research about PMNM and the cultural historical traditions of the islands and their overall significance. The accounts record the sequence of the birth of the islands progressing from east to west with varying degrees of mention of the islands of Ni‘ihau, Ka‘ula, Lehua, and the first island in the monument, Nihoa.

Mele a Paku‘i



Mele a Paku‘i, “The Song of Pakui” is part of the tradition of Wakea, found in Abraham Fornander’s *Hawaiian Antiquities and Folklore* and translated by Thomas Thrum (1916:12-15). Paku‘i was a kahuna of Kamehameha I whose composition categorizes the Papa and Wākea tradition in the genre of birthing. Prior to the birth of the islands, the mele begins by identifying Wākea and Papa as the main progenitors who are credited with the creation of the world by listing various strata of the various scapes and land divisions such as Tahiti-ku, Tahiti-moe, are listed and discussed in detail in Malo’s *Hawaiian Antiquities, Mo‘olelo Hawai‘i* (1951) and illustrated in the Office of Hawaiian Affairs (OHA) document *Mai Ka Pō Mai: A Native Hawaiian Guidance Document for Papahānaumokuākea Marine National Monument* (OHA) 2021:22). Ke‘āpapanui (Ke‘āpapanu‘u) and Ke‘āpapalani are identified in this study as terrestrial and atmospheric strata.

O Wakea Kahiko Luamea,
O Papa, o Papahanaumoku ka wahine,
Hanau Tahiti-ku, Tahiti-moe,
Hanau Keapapanui,
Hanau Keapapalani,
Hanau Hawaii;
Ka moku makahiapo,

*Wakea Kahiko Luamea
Papa, Papahanaumoku is the wife
Tahiti-ku is born, Kahiki-moe
The broad strata is born,
The strata of the heavens are born,
Hawaii is born;
The first born island,*

(Fornander 1916:12-13)

Following the introduction of the mythical setting, the islands in order from east to west are born with the mention of lands beyond the main Hawaiian Islands.

Hanau Kamawaeluanimoku,
He ewewe Niihau;
He palena o Lehua,
He panina Kaula
O ka Mokupapapa
Na papa kahakuakea o Lono

*Kamawaeluanimoku (Kaua 'i) is born,
Ni 'ihau is an afterbirth;
Lehua is a border,
Ka 'ula is the closing one,
Mokupāpapa
The low white-marked flats of Lono*

(Fornander 1916:14-15)

This genealogical account ends with Hakau, older brother of 'Umi who was an ancestor of Kamehameha. The tradition of Papa and Wākea through this composition connects the genealogy of the prominent chief of the time to the origins of all people, rooting the social political structure of society to the akua and to the land and sea.

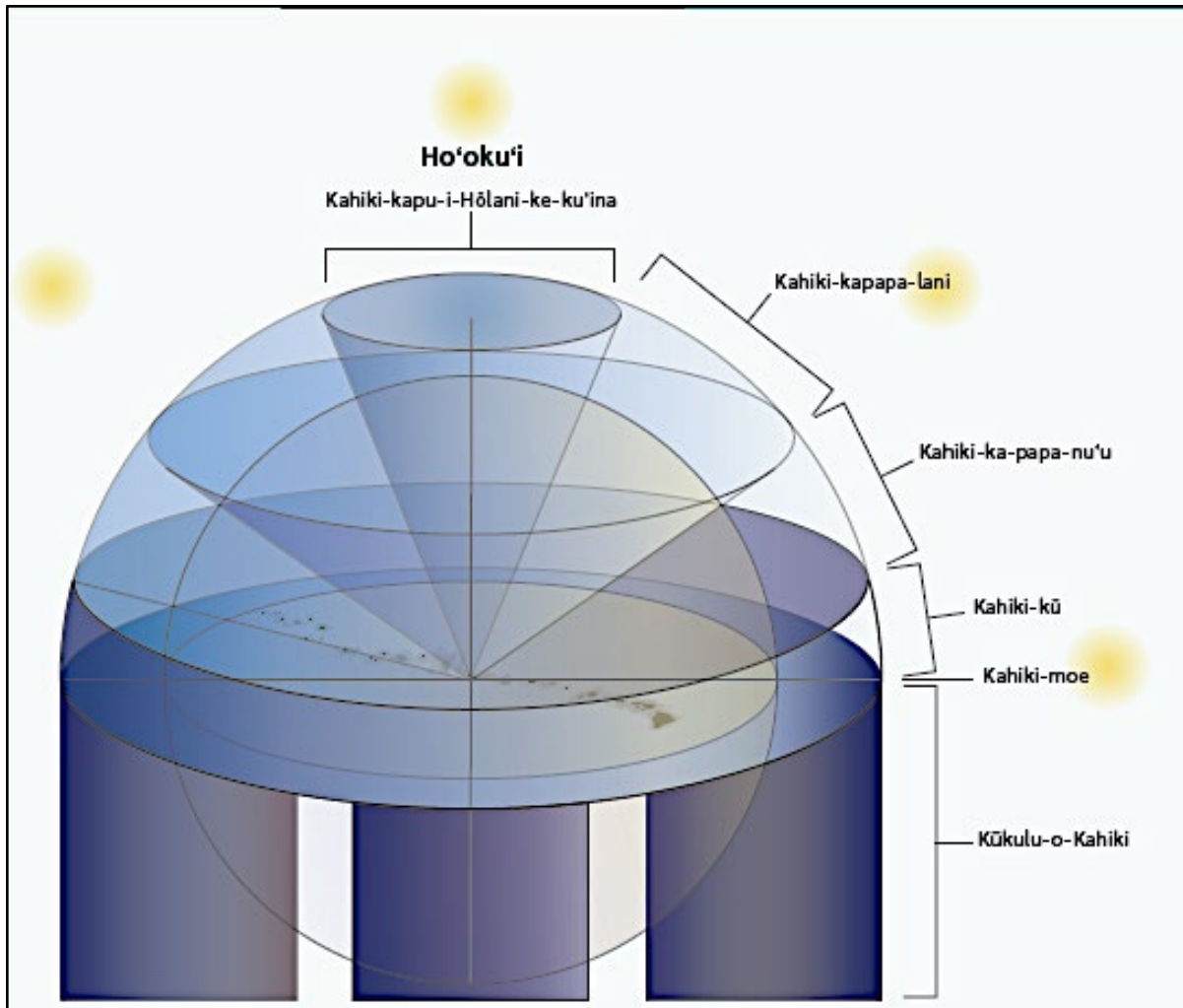


Figure 4. Illustration of various strata born to Papa and Wākea prior to the birth of the archipelago (OHA et al. 2021:22)

Ua Hānau ka Moku

Ua Hanau ka Moku is a portion of a verse of a birthing chant for Kauikeaouli (Kamehameha III) titled, *He Kanaenae no ka hanau ana o Kauikeaouli* (Poepoe 1906) which reconnects this chiefly lineage to the time of mythical creation.

Ua hanau ka moku	<i>The island was born—</i>
A kupu a lau, a loa, a ao, a muo	<i>It sprouted, grew, dawned, budded</i>
Ka moku iluna o Hawaii	<i>Upon the lands of Hawai‘i</i>
O Hawaii nei no ka moku	<i>Hawai‘i is the land</i>
He pulewa ka aina, he naka Hawaii	<i>The land was unstable</i>
E lewa wale ana no i ka lani,	<i>Waving freely in the air</i>
Lewa honua	<i>Waved the earth</i>
Mai i Akea ua pahono ia	<i>From Ākea it was fastened together</i>
Malie i ke aa o ka moku—	<i>Settled by the roots was the island—</i>
me ka honua	<i>And the land</i>
Paa ia ka lewa ealani i ka lima akau o	<i>It was fast in the air by the right hand of</i>
Akea	<i>Ākea</i>
Paa Hawaii la a laa	<i>Fast was Hawai‘i, by itself Hawai‘i</i>
Hawaii la ikea he moku	<i>appeared as an island</i>

(Poepoe 1906)

The birth of the islands is a prominent genre of Hawaiian creation, but in this chant, the theme of creation and molding of the islands by the *hands* of Wākea (Malo 1951:21). Cultural historian David Malo describes this alternate tradition of creation

Ma ka mookuauhau o Wakea, ua olelo ia mai na Papa i hanau mai keia pae moku, o kekahi lohe mai, aole i hanau ia mai keia pae moku, aka i hana maoli ia e ko Wakea mau lima keia pae moku. (Malo 1951:22)

In the genealogy of Wākea, it is said that Papa is the one that gave birth to this archipelago, another account states that this archipelago was not birthed, but made by the hands of Wākea.

In Joseph Poepoe’s “Ka Moolelo Hawaii Kahiko,” published in the Hawaiian newspaper, *Ka Na‘i Aupuni* (1906), Wākea and Haumea (Papa) are washed out to sea in the north west following an intense battle between Haumea and the forces of Kāneiākumuhonua in the Ko‘olau regions of O‘ahu. Wākea saw the despair in their followers and consulted the ancestral gods and his kahuna Komoawa to save them. Komoawa instructs Wākea to form his fingers and palm in a cuplike fashion to create a representational heiau (Poepoe 1906; Kikiloī 2010:83). A sacrifice is retrieved by Komoawa, placed on the heiau and the first ‘aha ceremony is conducted to gain the power and authority from the gods. Once the ceremony was successfully completed, Wākea, Haumea, and their entourage return to O‘ahu and lead a successful campaign against Kāneiākumuhonua changing the political structure of Hawai‘i by uniting all islands under their rule.

Kai‘aikawaha

In 1835, a Lahainaluna student by the name of Kai‘aikawaha provided an expanded account of the birth of the islands in a manuscript entitled *Moolelo no na kanaka kahiko mai ka po mai, a me ka pae moku i hanau mai ai* (*Kaiakawaha 1835, excerpted and translated by Kekuewa Kikiloī, in NOAA et al 2008:145*). This manuscript includes a series of names beyond the twelve islands of the main Hawaiian islands, likely ancient names of the islands and islets within the long waters of Papahānaumokuākea.

O Papahanau moku ka wahine o ka Hanau

Eia na aina i hanau mai ai maloko mai o ke kanaka i puka mai ai. O Papahanau moku ka wahine o ka Hanau - Akea ke kane, moe laua, ko ka laua keiki, a hanau mai ka laua hiapo he pohaku o Kahikiku, oia ka mua, hanau mai kona hope o Kahikimoe, o kona hope o Kahikiikeapaapanuu, o kona hope o Kahikiikeapaapalani, o kona hope o Puula, o kona hope o Puukanukanu, o kona hope o Waiiauau, o kona hope o Waiakaka, o kona hope o Waialea, o kona hope o Aleauli, o kona hope o Aleakea, o kona hope o Kahaula, o kona hope o Kapili, o kona hope o Kamuku, o kona hope o Kamukuikahahane, o kona hope o Ulunui, o kona hope o Melemele, o kona hope o Hakulauai, o kona hope o Polapola, o kona hope o Hawaiiku, o kona hope o Hawaiiimoe, o kona hope o Hawaiiiala, o kona hope o Hawaiikapakukehoa, o kona hope o Hawaiiiliikanaka, o kona hope o

Hawaii, o kona hope o Maui, o kona hope o Kanaloa, o kona hope o Nanai, o kona hope o Molokai, o kona hope o Oahu, o kona hope o Kauai, o kona hope o Niihau, o kona hope o Kaula, o kona hope o Mokupapapa, o kona hope o Nihoa, o kona hope o Haena, o kona hope o Haenaku, o kona hope o Hanamoe, o kona hope o Haenaala, o kona hope o Haenaae, o kona hope o Haenamauhoalalalahiki, o kona hope o Laloiho, o kona hope o Laloae, o kona hope o Lalohele, o kona hope o Lalokona, o kona hope o Lalohoaniani, o kona hope o Kamole, o kona hope o Kapou, o kona hope o Kapouheeu, o kona hope o Kapouheelani, o kona hope o Manawainui, o kona hope o Manawailani, o kona hope o Manawaihiki, o kona hope o Kuaihelani, o kona hope o Holaniku. Oia na keiki moku i hanau mai ai. Aole i pau.

*Here are the lands that were born from which the people emerged.
Papahānaumoku the mother of birthing - Wākea the husband, they mated, and their children were begotten, and born was their first child a rock name Kahikikū, he was the first, born next was Kahikimoe, born next was Kahikiike'āpaapanu'u, born next was Kahikiike'āpaapalani, born next was Pu'ulā, born next was Pu'ukanukanu, born next was Wai'au'au, born next was Waiakāka, born next was Waiale'a, born next was Ale'auli, born next was Ale'akea, born next was Kaha'ula, born next was Kapili, born next was Kamuku, born next was Kamukuikahahane, born next was Ulunui, born next was Melemele, born next was Hakulauai, born next was Polapola, born next was Hawai'ikū, born next was Hawai'imoe, born next was Hawai'iala, born next was Hawai'ikapakūkehoa, born next was Hawai'ili'ili'akānaka, born next was Hawai'i, born next was Maui, born next was Kanaloa, born next was Nāna'i, born next was Moloka'i, born next was O'ahu, born next was Kaua'i, born next was Ni'ihau, born next was Ka'ula, born next was Mokupapapa, born next was Nihoa, born next was Hā'ena, born next was Hā'enakū, born next was Hā(e)namoe born next was Hā'enaala, born next was Hā'ena'e, born next was Hā'enamauhoalālāiahiki, born next was Laloiho, born next was Laloa'e, born next was Lalohele, born next was Lalokona, born next was Laloho'aniani, born next was Kamole, born next was Kapou, born next was Kapouhe'eua, born next was Kapouhe'elani, born next was Manawainui, born next was Manawailani, born next was Manawaihiki, born next was Kuaihelani, born next was*

Hōlanikū. These are the islands that were born. To be continued. (Kaiakawaha in NOAA et al 2008:144)

Scholars today have noted how the additional sequential set of traditional names are aligned with the general arrangement of space, structure and relative order of the islands from East to West (Kikiloi 2012, Kikiloi et al 2017, Nogelmeier 1995). In the figure below, Kekuewa Kikiloi organizes names compiled this “cosmogonic pedigree” which,

...reflects a composite genealogy drawn from the various Papahānaumokuakea and Wakea “birthing of the islands” accounts. It illustrates ancestral lineages and ties between pathways, islands, chiefs, and people.

(Kikiloi 2010:112, Appendix A)



Figure 5. Genealogical chart of Papahānaumoku and Wākea, a “cosmogenic pedigree” compiled by Kekuewa Kikiloī (2010:112, Appendix A).

Kuaihelani, Kahiki, and other Ancestral Place Names

The following accounts explore a series of ancestral place names recorded within stories of migrations of gods and chiefs originating in places correlated with PMNM (Fornander 1916:32-108; Kaunamanō 1862; Beckwith 1971:78). The main areas of focus are Kahiki, Kuaihelani, Nu‘umealani, Kānehūnāmoku and Hōlani. Each of these places are described as containing high ranking islands, located in the heavens, associated with deification and the afterlife, and a domain of gods, spirits, deified ancestors and their families. Kekuewa Kikiloī explains the connection between these place names of Papahānaumokuākea,

Across the larger Polynesia such famous names have been retained in traditions referring to ancient homelands that were once occupied by our seafaring ancestors in the remote past. Numerous names of ancestral homelands have been recounted in the stories of voyaging exploits of legendary navigators who sailed back and forth between distant lands. Some of the lands mentioned that are familiar to us from other parts of Polynesia are names such as Hawai‘i (or Hawaiki in Aotearoa, Avaiki in Cook Islands, Savai‘i in Sāmoa, Wāwa‘u/Vāva‘u, Polapola (or Borabora, Po‘apo‘a), Upolu (also Upo‘u), and so forth. These names show up in multiple places throughout Oceania, as they were appropriated affectionately in honor of the first homeland and place of origin. [2012:51 footnote 31]

This Cultural Impact study adopts Kikiloī’s research, which locates this ancestral region to the west of the Hawaiian archipelago within PMNM. These kūpuna islets and their surrounding seas and sky are the province of spiritual and physical voyaging pathways for a series of historical figures. These accounts demonstrate broader cultural connections between Hawaii, via Papahānaumokuākea, to other Pacific regions through migration, settlement, and exploration of the open ocean, Moananuiākea. The narrative highlights themes of origins beyond Hawai‘i,

migrations from these places to PMNM and the rest of the Hawaiian archipelago via voyaging under sky- and across sea- scapes.

The accounts discussed within this document are limited in relation to the body of literary works that describe and reinforce the immense cultural significance of PMNM to the broader cultural context of Hawai‘i. All resources could not be accessed and explored in their entirety and are presented within a specific focus on the relationship to ancestral places, particularly Kahiki and Kuaihelani on the basis of correlation with the island name associated with a place in PMNM as well as record in the cosmogonic genealogies identified within the sequencing of the origins of the archipelago in the previous accounts. There is a need for additional research into these connections to explore each account in their entirety to accurately trace the voyages of these historical figures.

Kepaka‘ili‘ula

The story of *Kepakaililula* was published in the newspaper, “Ka Nupepa Kuokoa” in 1865 by an author named Kaulainamoku. This article describes Kuaihelani as a dwelling for ‘uhane, spirits or otherworldly beings, and akua. In this tradition, Kamo‘oinānea’s residence in Kuaihelani is in alignment with the story of ‘Aukelenuiaiku. This is an account of the travel of a chief from the Main Hawaiian Islands to the region of PMNM.

In this mo‘olelo, Kuaihelani is referred to as “na moku o Kuaihelani” a region or series of islands. The account of this journey there begins with the arrival of a chief Kepaka‘ili‘ula at Waimea, Kaua‘i. Unfortunately, he could not land at Waimea because the entire archipelago was under kapu that night and landing on shore would result in his death. To avoid this, Kepaka‘ili‘ula travels to Ni‘ihau and after a short stay sails to Ka‘ula and Lehua and makes a departure where “the lands of Hawai‘i disappear”, while on the voyage, Kepaka‘ili‘ula falls asleep. The currents take him up to the Northwest where he finds he has landed at the legendary land of Kuaihelani. (Kikiloi 2012: 56) After waking, Kepaka‘ili‘ula meets Kamo‘oinānea, a mo‘o goddess and matriarch of all mo‘o lineages, who hosts him at a house along with other godly spirits that dwell there. The account also identifies Kuaihelani as an “‘āina akua” or land of gods as referenced in other traditions, but divine chiefs of Hawai‘i are also found there.

Keanini‘ulaokalani

Published in the Hawaiian newspaper “Ka Nupepa Kuokoa” in 1882, *He Moolelo Kaa no Keaniniulaokalani*” is an account is set in the ancestral place of Kuaihelani with mentions of and travels between other mythical places such as Nu‘umealani, Ke‘alohilani, Honualewa, and Kalewanu‘u, Kalewalani, Kapa‘ailuna, and Kapa‘ailalo. There is also evidence of mutual genealogical connections between the two realms of the archipelago as well as the formation of new genealogical connections via the mating of Keanini‘ulaokalani and Ha‘inakolo , a chiefess that lives in Waipi‘o whose parents, are Kū and Hina (older sister of Hi‘ilei). Two genres of voyaging are identified in this tradition: the first being a series of travel in the ancestral realm between mythical places, and the second being the voyages between Hawai‘i and Kuaihelani.

The father of Keanini‘ulaokalani is an akua named Kūailo from Kalewanu‘u who has no parents. Hi‘ilei is his mother, her parents are Nakulauka and Nakulakai. The beginning of the story is set in Kuaihelani, Hi‘ilei becomes pregnant with and births Keanini‘ulaokalani, who is raised by his uncles Keaumiki and Keaukā under strict kapu at a heiau in Kuaihelani. After seeking out and killing his father in Kalewanu‘u, Keanini‘ulaokalani falls into a deep sleep and his spirit travels across the archipelago meeting Ha‘inakolo in Waipi‘o Valley on the island of Hawai‘i. Keaumiki and Keaukā are sent to retrieve her and after returning, Keanini‘ulaokalani sails to Waipi‘o on a wa‘a ‘ula (completely red canoe, signifying the divine rank of Keanini‘ulaokalani) to live with her. Keanini‘ulaokalani returns to Kuaihelani for a time to dwell with his family. Meanwhile, Ha‘inakolo passed away while in Kuaihelani. In a later portion of the story, Keanini‘ulaokalani’s grandchild, Lonokaiolohia voyages to Kuaihelani to find him.

This partial overview of Keanini‘ulaokalani is an oversimplification, but it does demonstrate the genealogical and voyaging connections between the mythical landscape as well as fixed geographical places in the main archipelago. Like other accounts, this tradition should be studied in its entirety to provide further details into the nuanced connections between these places.

Ha‘inakolo

A story of Ha‘inakolo is found in the newspaper *Ke Aloha Aina* published in 1900. This account identifies her as the main character with certain differences with the mo‘olelo of Keanini‘ulaokalani but the main consistency is that Kuaihelani is still named as his homeland. In addition, a broad population of akua are mentioned in this account.

In this version, Ha‘inakolo travels from Hawai‘i to Kuaihelani to reside with Keanini‘ulaokalani and they have a child. Keaumiki and Keaukā are also mentioned as enemies of Ha‘inakolo as opposed to her uncles sent as messengers and guardians to retrieve her. This union and her presence in those lands is thought to compromise the kapu and status of society in Kuaihelani which angers the gods Kāne, Kanaloa, Kūwahailo, and the multitude of akua living there. The gods seek to punish Ha‘inakolo and their child; and succeed, resulting in their deaths.

Kūhaimoana

This story of Kūhaimoana was given to J.S. Emerson by W.M. Kinney of Waimea Kaua‘i in 1907. The original text written in Hawaiian Language is housed in the Hawaiian Ethnographic Notes collection at the Bernice Pauahi Bishop Museum (Emerson 1907, HEN II:94-108). This account includes information about genealogies, akua (gods) and their kinolau, sharks, fish, and voyaging in between the Main Hawaiian Islands, particularly from Ka‘ula to Kuihelani. Translated excerpts and synopsis were translated by Kepa Maly (Maly and Maly 2003a:256). The genealogy not only records familial connections but also provides context for place names:

...Kāne-huli-moku was the man, he lived with Kuihealani the woman, and for her, the land of Kuihealani is named. The name Kāne-huli-moku, is also the name given to all of the islands of Hawai‘i, those from Nihoa to Hawai‘i. From these two were born three children, Kūhaimoana, a boy, Pele, a girl, and Kamo‘oali‘i, also a boy. These were the three children of them. These children were born with different body forms. Kūhaimoana was born with a human form, that of a god, and that of a shark. He could travel upon the land like a man. He could travel like a god. And he could also travel in the ocean like all the different forms of fish...

[Maly and Maly 2003a:256]

Kūhaimoana is the eldest of the divine children and is born with the ability to take the form of a human, a god, and a shark with the ability to traverse the various landscapes with these different


forms. The latter half of the excerpt establishes that there are various forms associated with Kūhaimoana and a particular characteristic role of traveling within the hosting environments. A subsequent portion of the narrative connects more places such as the island of Lehua and further integrates the concept of inter-island voyaging.

...Kūhaimoana departed from the land of Kuihelani, and traveled with his people to the island of Ka‘ula, and there he lived until he and his people took a sight-seeing journey around the islands from Kaua‘i to Hawai‘i. As he was returning to Ka‘ula, Kūhaimoana met with Kaluaikaikona (a woman), she was a maimed shark, she had no tail, though she had the head and body of a shark. She lived on the island of Lehua. (Emerson 1907, in Maly and Maly 2003a:156)

The particular nature of Kaluaikona and associated geographical and geological near-shore settings between Kaua‘i and Lehua are shaped for the reader. Kaluaikona’s travels describe the topography of the sea, an atoll, even a coral head very near the base of the western facing cliff, Ho‘olulu at Kalalau. Returning to the broader narrative, Kūhaimoana and Kaluaikona have three boys, Kūpiapia, Kūlālākea, and Kūkai‘aiki. Kūhaimoana stretched his body with his tail at Kuihelani and his head at Ka‘ula Rock. He then poses a challenge to his sons, to see if any of them had inherited his powers, by instructing them to swim up one side of his body to Kuihelani and back down the other side. (Emerson 1907, in Maly and Maly 2003a:156-7).

Kūpiapia and Kūlālākea reach the first and second dorsal fins respectively. Kūkai‘aiki succeeds in the challenge by changing his body form to various fish such as the ‘ulua at Kūhaimoana’s third dorsal fin and returning from the tail as a mahimahi, the third fin as a kāhala, the second fin as a lai fish and reaching the first fin, a mā‘ula‘ula (Emerson 1907, in Maly and Maly 2003a:157).

The success of the voyaging challenge and various forms taken by Kūkai‘aiki in relation to certain points along his father’s body could be interpreted as mapped environments within the ocean as well as a general inventory of marine species that populate those areas. After completing the challenge, Kūkai‘aiki embarks on a journey to each of the main Hawaiian islands from Ka‘ula to Ni‘ihau, Kaua‘i, O‘ahu, Maui, and down to the most southern tip of the island of Hawai‘i. In the final portion of the narrative shared with Emerson by Kinney, other shark akua such as Ka‘ahupahau (chiefess of Pu‘uloa on O‘ahu) embark on voyages up to Ka‘ula to seek



political and divine power, guidance, and alliance with Kūhaimoana and his descendants.
(Emerson 1907, in Maly 2003,40)




Mele a Kamahualele

This chant comes from the historical account of the migration of Moikeha, a chief of Moa‘ulanuiākea, Kahiki/Tahiti. After a romance with his lover Lu‘ukia ended, Moikeha directed his foster-son Kamahualele to prepare a double-hulled canoe for their voyage to Hawai‘i. After departing from Kahiki and arriving in Hawai‘i, Kamahualele uttered this chant to celebrate their arrival in Hawai‘i (Fornander 1916:16-21):

Eia Hawaii, he moku he kanaka,
 He Kanaka Hawaii-e
 He Kanaka Hawaii
 He Kama na Tahiti
 He Pua Alii mai Kapaahu Mai
 Moaulanuiakea Kanaloa,
 He Moopuna na Kahiko laua o
 Kapulanakehau.
 Na Papa i hanau,
 Na ke kama-wahine a Kukalaniehu laua me
 Kahakauakoko
 Na pulapula aina i paekahi
 I nonoho like i ka hikina, komohana
 Pae like ka moku i lalani
 I hui aku, hui mai me Holani
 Puni ka moku o Kaialea ke kilo
 Naha Nuuhiwa, Lele i Polapola
 O Kahiko ke kumu aina
 Nana i mahele kaawale na moku
 Moku ke aho lawaia a Kaha'i
 I okia e Ku-Kanaloa
 Pauku na aina, na moku
 Moku i ka ohe kapu a Kanaloa
 O Haumea Manukahikele
 O Moikea ka lani nana e noho
 Noho Kuulani ia Hawaii a
 Ola! Ola o Kalana ola!
 Ola ke alii, ke kahuna;
 Ola ke kilo ke kauwa;
 Noho ia Hawaii a lulana;
 A kani moopuna i Kauai
 O Kauai ka moku-a--
 O Moikeha ke alii

Behold Hawai'i, an island, a man
A man is Hawai'i
A man is Hawai'i
A child of Kahiki
A royal bud from Kapa'ahu
From Moa'ulanuiākeakea Kanaloa
A descendant of Kahiko and
Kapulanakehau
Born of Papa,
The daughter of Kūkalani'ehu and
Kahakauakoko
Sprouts of land in a line
Placed alike to the East, to the West
Arranged evenly in a line
Joined to, joined from Hōlani
Kaialea circumnavigated the islands
Left Nukuhiwa behind; landed on Borabora
Kahiko is the source of land
He divided and separated the islands
Severed the fish-line of Kaha'i
Cut by Kū-Kanaloa
Divided up was the lands, the islands
Cut by the sacred bamboo knife of Kanaloa
Of Haumea Manukahikele
Mo'ikeha is the chief who will live there
My chief shall dwell in Hawai'i
Life! Life! Set life free!
Long live the chief, the priest,
Long live the seer, the servant,
They shall dwell quietly in Hawai'i
Grandchildren will be gotten on Kaua'i
Kaua'i is the island
Mo'ikeha is the chief

(Fornander 1916:20-21)



The opening line of the chant identifies Hawai‘i as both a place and a people, clarifying that, from a Hawaiian perspective, there is an implicit cultural correlation between ‘āina and kanaka . The genealogy of Papa and Wākea is presented, as is specific mention of Papa’s birthing of the island(s). Another important theme to note within the chant is the relationship of Kahiki to Hawai‘i. In this account, Kahiki is not a variation of Tahiti, it is a description of a place beyond the horizon. Lastly this chant is an early record of other lands in the Pacific such as Hōlani.

Mele o Kahakuikamoana

Kahakuikamoana was a famed kākā'ōlelo or orator from the class of kahuna. (Fornander 1916: 2-23) His composition records the appearance of Hawai'inuiākea from pō in the genealogy of the creation of the islands. The second half of this first stanza (below) introduces Nu'umea, an archipelago in Kahiki.

Ea mai Hawaiiinuiakea,
Ea mai loko, mail loko mai o ka po.
Puka mai ka moku, ka aina,
Ka lalani aina o Nuumea,
Ka pae aina o i kukulu o Tahiti

*Then arose Hawaiiinuiakea,
Arose from inside, from the inner darkness.
Then appeared the island, the land,
The row of islands of Nuumea,
The group of islands on the borders of
Tahiti*

(Fornander 1916:2-3)

The composition suggests that the earliest settlers of Hawai'i may have originated in Tahiti and although birthing of the islands is present, a notable difference is that the islands rise from pō and have slightly different parentage as opposed to other Papa and Wākea traditions.


Hawai'inuiākea as a cognate of other ancestral place names in the Pacific supports the theming of origins and subsequent migrations to the Hawaiian islands. Our discussions will examine migrations from Kahiki in upcoming accounts.

In a later stanza, Ni'ihau, Ka'ula and Nihoa are siblings from the same parent pair of Wanalia and Hanala'a (Fornander 1916:4-11)

O Hanalaa ka wahine,
Hanau Niihau he aina, he moku,
Ekolu lakou keiki
I hanau i ka la kahi.
O Niihau, o Kaula, o Nihoa pau mai,
Pa ka makuawahine,
Oili moku ole mai mahope.

*And Hanalaa was the woman;
Of them was born Niihau, a land, an island,
There were three children of them
Born in the same day;
Niihau, Kaula, ending with Nihoa.
The mother then conceived no more
No other island appeared afterwards*

(Fornander 1916:10-11)



The end of this stanza identifies Nihoa as the final island in the birthing sequence of this account. Fornander(1916:4, footnotes) suggests that the composition might be referencing the lineage of Kamehameha I as some of his ancestors and deeds are recorded in the mele. However, the account is incomplete and no definitive conclusion can be made at this time.

Pelekeahialoa

Moke Manu, a revered and respected Hawaiian Historian and author from Hāna, Maui published *He Moolelo Kaa No Ke Kaua Nui Weliweli Mawaena O Pele-Keahialoa Me Waka-Keakaikawai. He Mau Kupua Wahine Ka 'e 'a 'e 'a*, in the Hawaiian language newspaper “Ka Loea Kālai‘āina” in 1899.²

The narrative identifies an ala moana (ocean pathway) that akua, ali‘i, and the family of Pele traveled on to reach Hawai‘i.

O na makua kane akua a me kekahi mau kaikunane alii nui kapukapu, ua hele mai lakou ma na ao kaalewalewa a ua Pele nei me na kaikaina ame kekahi mau kaikunane, he ala moana ko lakou ma ke kai mai.

There were the divine fathers and some brothers of noble high chiefs who traveled on drifting clouds of Pele with the younger sisters and some brothers. They came by sea on an ocean passage.

(Manu Moke 1899)

Before leaving their homeland, Haumea, the mother of Pele Honuamea and her siblings, exhibits her powers and various elemental forms associated with volcanic activities and processes of creation through volcanism. After this exhibition is completed, Haumea bequeaths these powers to Pele. After a prayer is offered by her brother Kānemilohai, Pele and her siblings embark on their journey, encountering rough seas before their arrival in Hawai‘i.

The author notes that the prayer that is included in the upcoming portion of the account comes from the mo‘olelo of Hi‘iakaikapoliopole and is one of a series of chants classified as Huluhia, a set that is specifically about Pele. (Pukui and Elbert 1972)

² This study accessed a transcribed and translated version by the Kia‘i Kai Project at Kamakākūokalani Center for Hawaiian Studies, UH Mānoa, Honolulu.

Aia ma ia pule e maopopo ai iaoe e ka mea heluhelu kahi i hiki mua mai ai ka Pele
ma maluna o kekahi mokupuni uuku i noho oleia e na kanaka ma ka Helu
Umikumamalua o na mokupuni o ka Pae aina o Hawaii nei, oia hoi o Nihoa...

*It is through the prayer that you, the reader, will understand where Pele and
her family first arrived on top of a small uninhabited island on the 12th island of
the archipelago of Hawai'i nei, Nihoa.*

The chant *He Mele Pule Huluhia*, by Moke Manu (1899b), describes the initial setting in Tahiti, where volcanic phenomena occurred in other ancestral places such as Hoenamae (possibly Haenamoe or Haenamae) and Borabora. As Pele Honuamea is the goddess associated with volcanic activity across the Pacific, this portion of the chant could be listing geological and migrational patterns predating arrival in Hawai'i.

Hulihia[a] kulia mai ka moku - Tahiti	<i>The island is overturned, Tahiti</i>
I na no Tahiti la i Kalakahi	<i>If Tahiti is indeed soothed by Kalāhiki</i>
Ho-ali aku i Hoenamae [Haneamoe]	<i>Stirring in Hoenamae</i>
O-lapa mai ka Uwila, o mai ke ahi	<i>Lightning flashes, fire rises</i>
Kee-keehi wale la i ka lani	<i>Treading across the skies</i>
Haule, U-i'na i Borabora	<i>Tumbling down, crackling in Borabora</i>

(Moke Manu 1899b)

After tracing the migration of Pele and her activity in other regions of the world, the divine family arrives in Hawai'i, first landing on Nihoa then migrating to the south east all the way down to Hawai'i.

Ea mai ana ma Nihoa	<i>(Arriving) there at Nihoa</i>
Ma ka mole mai o Lehua	<i>At the bottom of Lehua</i>
Mai Kauai-nui Oahu	<i>From Kaua'i-nui, O'ahu</i>
Molokai-Lanai-Kanaloa	<i>Moloka'i-Lāna'i-Kanaloa</i>
Mai Maui-Hawai'i-	<i>From Maui-Hawai'i</i>
ka wahine o Pele	<i>The woman named Pele</i>

(Moke Manu 1899b)

The final stanza tracks Pele's migration and therefore the geological age of the islands from Nihoa to Hawai'i. The language of this portion of the chant could also be interpreted as the transition of Pele from a foreign goddess to one that is a resident of this newly settled

archipelago. The narrative continues in agreement with other accounts of the Pele tradition as she moves down the island chain, digging on each island to find a permanent dwelling. While they make their way down the island chain, certain siblings of Pele settle on different islands under different circumstances, whether by choice or at the will of an elder sibling. Keaolele a brother of Pele whose form is that of a shark desires to stay at Nihoa. This request is granted:

Eia nae, ua makemake kekahi kaikunane oia o Keaolele e noho ma ia aina mehameha kanaka ole; a ua ae aku oia i kana noi, he kino mano ko keia kaikunane. Ua olelo ia ma keia moolelo, oia [aia] kekahi lua hohonuloa a ua Pele nei i eli ai ma kahi aoao o Nihoa e pili ana i ke kai wale no, e huli ana i ke Komohana-Akau

However, one of the brothers, Keaolele, wanted to live on this uninhabited island; she approved this request; this brother also has a shark form. It is said in this story, there is a very deep pit that Pele dug on one side of Nihoa that is near the sea, facing the northwest. [Moke Manu 1899b]

In the above mo‘olelo, Keaolele, a brother of Pele whose physical form was a shark, wanted to reside on Nihoa. A deep cavern is also identified as a feature on Nihoa. After departing from Nihoa, the voyagers make their way to Ka‘ula islet which becomes the dwelling of Pele’s brother Kūhaimoana ka Laeako‘ako‘a.

Pele and Hi‘iaka

Nathaniel Emerson’s *Pele and Hi‘iaka: A Myth from Hawai‘i* (1915:IX-XII) also contains a version of Pele’s migration to Hawai‘i that slightly differs from Manu’s 1899 publication. When Pele and her family land in Hawai‘i, the setting of their arrival point is given and an initial settlement at Mokupāpapa is recorded. Mokupāpapa is also a place named within PMNM and the archipelago. Kānemilohai is the brother of Pele and in other accounts accompanies her and their siblings to Hawai‘i from Kahiki.

The sailing course taken by Pele’s company brought them to some point northwest of Hawaii, along the line of islets, reefs and shoals which tail off from Hawaii and the train of a comet from its nucleus. At Moku-papapa

Pele located her brother Kane-milo-hai, as if to hold the place for her or to build it up into fitness for human residence, for it was little more than a reef.

(Emerson 1915:X)

A chant entitled, “Ke Kaa o Pele i Haawi ia Ka-Moho-Alii i ka Haalele ana ia Kahiki: Pele’s Account to Kamohoalii of the Departure from Kahiki” (1915:X-XIV) records the account of the voyage to Hawai‘i under the skillful guidance of Pele’s brother, Kamohoali‘i.

Ku makou e hele me kuu mau pokii aloha,
Ka aina a makou i ike ole ai malalo aku nei,
Ae makou me kuu pokii, kau i ka waa;
Noiau ka hoe a Ka-moho-alii;
Aeae, kau i ka nalu-

He nalu haki kakala,

He nalu e imi ana i ka aina e hiki aku ai.
O Nihoa ka aina a makou i pae mua aku ai:
Lele ae nei makou, kau i uka o Nihoa.
O ka hana no a kou pokii, a Kane-apua,
O ka hooili i ka ihu o ka waa a nou i ke kai:
Waiho anei o Ka-moho-alii ia
Kane-apua i uka o Nihoa
Noiau ka hoe a Ka-moho-alii
A pae i ka aina i kapa ia o Lehua

*We stood to sail with my kindred beloved
To an unknown land below the horizon;
We boarded- my kinsmen and I- our craft,
Our pilot well skilled, Ka-moho-alii.
Our craft o’ermounted and mastered the
waves;
The sea was rough and choppy, but the
waves
Bore us surely on to our destined shore-
The rock Nihoa, the first land we touched;
Gladly we landed and climbed up its cliffs.
Fault of the youngster, Kane-apua,
He loaded the bow till it ducked in the waves;
Ka-moho-alii marooned the lad,
Left the boy on the islet of Nihoa
And, Pilot well skilled, he sailed away
Till we found the land we christened Lehua.*

(Emerson 1915:XI)

Nihoa is identified as the first island where the family of gods landed. In this account, the family lands on Nihoa, their younger sibling Kane-apua is left to reside on Nihoa while the other siblings make their way to Lehua. While the voyage was enroute to Ni‘ihau, Pele took pity upon their younger brother at which time Kamohoali‘i turned the canoe back in the direction of Nihoa where they landed. After a successful retrieval the family continues their journey down the island chain in their search for a permanent home.

Hui (a) iho nei ka waa a Ka-moho-alii
E kii ana i ko lakou pokii, ia Kane-apua, i Nihoa.
Pili aku nei ka wa'a o Ka-moho-alii i uka nei
o Nihoa,
Kahea aku nei i ko lakou pokii, ia Kane-apua,
E kau aku ma ka pola o ka waa.
Hui iho nei ka ihu o ka waa o Ka-moho-alii
He waa e holo ana i Niihau,
Kau aku nei o Ka-moho-alii i ka laau, he paoa, (b)
E imi ana i ko lakou aina e noho ai, o Kauai:
Aole nae i loa.
Kau mai la o Ka-moho-alii i ka laau, he paoa;

O Ahu (c) ka aina.
Ia ka ana iho nei o lakou i Alia-paakai,

Aole na'e he aina.

*Ka-moho-alii turned his canoe
To rescue lad Kane from Nihoa.
Anon the craft lies off Nihoa's coast;
They shout to the lad, to Kane-apua,
Come aboard, rest with us on the pola.
(d)
Ka-moho-alii turns now his prow,
He will steer for the fertile Niihau.
He sets out the wizard staff Paoa,
To test if Kauai's to be their home;
But they found it not there.
Once more the captain sails on with the
rod,
To try if Oahu's the wished for land:
They thrust in the staff at Salt Lake
Crater,
But they proved not the land of their
promise.*

(Emerson 1915:XI-XII)

Another detail that is observed in the latter half of the chant is that Kamohoali'i is the one that is thrusting the digging stick (the legendary staff, Paoa) but without success. This account provides further evidence of the migration of akua from the northwestern region of PMNM into the Main Hawaiian Islands.

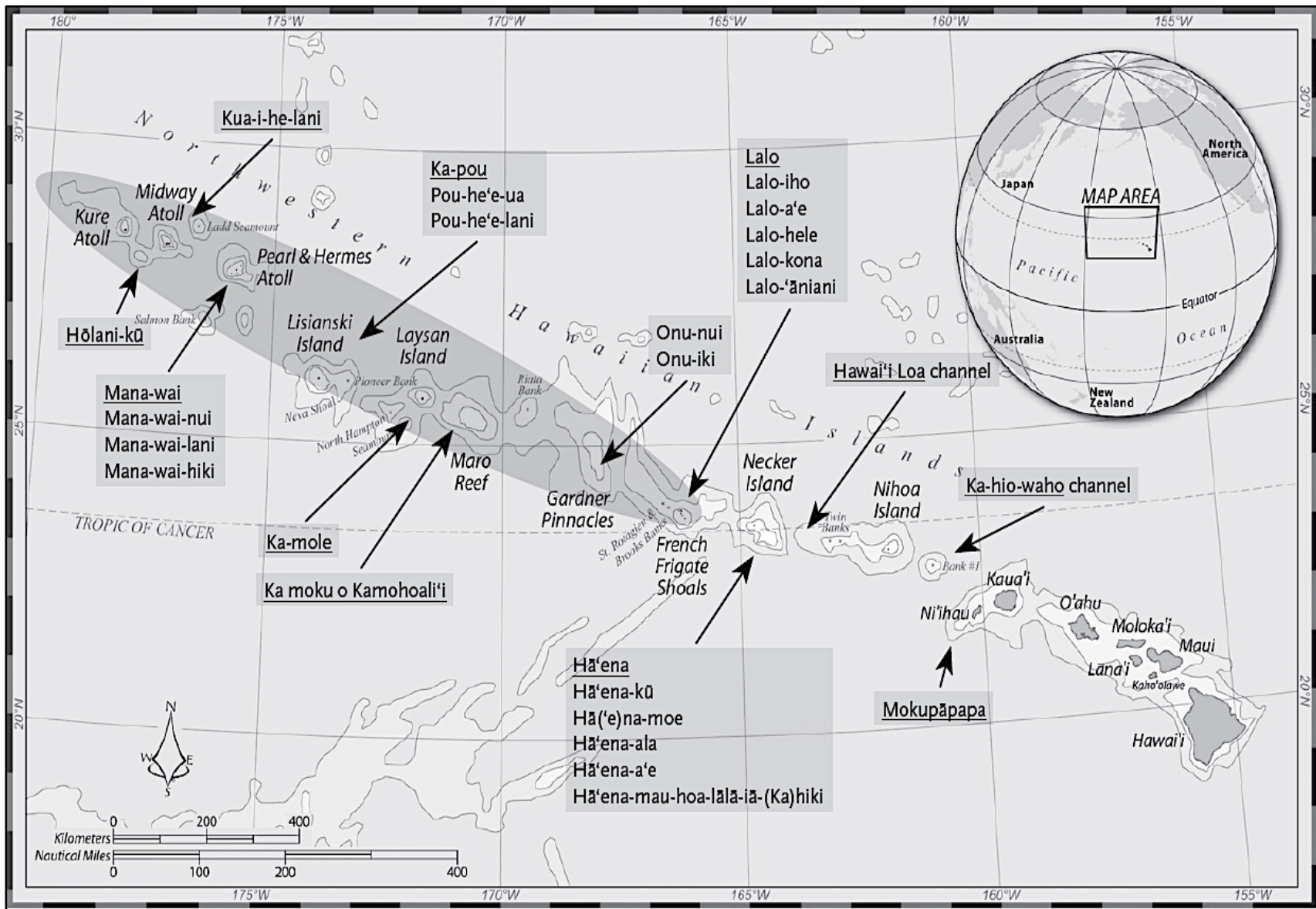
Inoa ‘Āina (Place Names)

Place names are the most reflective part of aloha ‘āina, it reinforces love for the land, relationship to the land, also family ties to place, and in many ways are a vital link to the glorious past.

(Elbert 1976:121)

As is made clear in the previous section, for Native Hawaiians, place names are an important way to preserve information about an area’s landscape, its history, and any natural and supernatural phenomenon specific to it, a cultural testament to a place's relationships with gods and humans. As people’s relationship to a place changes over time, because of displacement, changes to the landscape, distance or even closeness, so too may its name. Historically, Native Hawaiians referred to the Northwestern Hawaiian Islands as Nā Moku Manamana (Branching Islands), Nā Moku Papapa (Flat Islands) and nā papa kahakuakea o Lono (the low white-marked isles of Lono (one of the four principal Hawaiian gods) (Fornander 1918). In recent times, Native Hawaiians have called the isles of this region the Kūpuna (Revered Elder) Islands. The name Papahānaumokuākea was given to the region by a group of Native Hawaiian cultural practitioners and kūpuna, known today as the PMNM Cultural Working Group (CWG) when the area was designated as a national marine monument. The name specifically relates to one of the stories contained within the Kumulipo: the mo‘olelo that tells the story of Papahānaumoku (a mother figure who is personified in the earth) and Wākea (a father figure who is personified in the expansive sky). These two figures, either together or separately, are responsible for creating or birthing the entire archipelago, and they are the most recognized ancestors of the Native Hawaiian people (Beckwith 1951, Malo 1951, Fornander 1918). The name Papahānaumokuākea is reflective of the region’s natural and cultural heritage and its future as a vast, sacred, protected, and procreative place. The preservation of these names, together, as Papahānaumokuākea, strengthens the pilina (relationship(s)) across seas and connects Hawaiians to an important part of their historical past. Taken apart, “Papa” (earth mother), “hānau” (birth), “moku” (small island or land division), and “ākea” (wide) bespeak a fertile woman giving birth to a wide stretch of islands beneath a benevolent sky, the dramatic imagery of which is on full display in the region.

The earliest inventory of names for the Northwestern Hawaiian Islands was published in 1835 by a Lahainaluna student named Kaiakawaha (Figure 7).







Figure 6. Map of the Hawaiian Archipelago with proposed correlations of ancient island names and place names with contemporary North Western Hawaiian Island locations (Kikiloi 2010:77).

TABLE 1 Kai'aikawaha (1835) genealogy of island names for the Northwestern Hawaiian Islands	
Island Names	Dictionary Definitions
Nihoa	Nihoa. pas/imp of niho. n. Toothed, serrated, notched, jagged, sharp; firmly imbedded and interlocked (Pukui & Elbert, 1986, p. 266).
Hā'ena	Hā'ena. nvs. Red-hot, burning red. A common place name on Hawai'i, O'ahu, and Kaua'i (Pukui & Elbert, 1986, p. 46).
Hā'ena-ku	Hā'ena-kū. East (or standing) Hā'ena
Hā(ē)na-moe	Hā'ena-moe. West (or prostrating) Hā'ena
Hā'ena-ala	Hā'ena-ala. Rising Hā'ena
Hā'ena-a'ē	Hā'ena-a'ē. Upward (or nearby) Hā'ena
Hā'ena-mau-hoa-lālā-ia-(Ka)hiki	Hā'ena-mau-hoa-lālā-ia-(Ka)hiki. Hā'ena that secures the diverging branches to Kahiki
Lalo-iho	Lalo. n. Leeward, lee southernly (PPN: Raro) (Pukui & Elbert, 1986, p. 192); the direction of being westward, southernly (Handy, 1927, p. 70). Lalo-iho. Lower Lalo
Lalo-a'ē	Lalo-a'ē. Upper Lalo
Lalo-hele	Lalo-hele. Continuous Lalo
Lalo-kona	Lalo-kona. Leeward (or Southern) Lalo
Lalo-ho'āniani	Lalo-hō'āniani. Reflective Lalo
Ka-mole	Ka-mole. n. The taproot, main root; ancestral root, or foundation, source, or cause (Pukui & Elbert, 1986, p. 252).
Ka-pou	Ka-pou. n. The pillar, or post (PPN: Pou) (Pukui & Elbert, 1986, p. 343).
Pou-he'e-ua	Pou-he'e-ua. Rain washed Kapou
Pou-he'e-lani	Pou-he'e-lani. Heaven washed Kapou
Mana-wai-nui	Mana-wai. n. Branching water (Pukui & Elbert, 1986, p. 238); nvs. Warped, depressed, bent in (Pukui & Elbert, 1986, p. 237).
Mana-wai-lani	Mana-wai-nui. Greater Manawai
Mana-wai-hiki	Mana-wai-lani. Chiefly Manawai Mana-wai-hiki. Appearing Manawai
Kua-i-he-lani	Kua-i-he-lani. n. Backbone of heaven. It is said to be a mythical place (Pukui & Elbert, 1986, p. 169).
Hōlani-kū	Hōlani. Bring forth heaven. It is said to be a mythical place, also a star name (Pukui & Elbert, 1986, p. 77); Hōlani is a variant pronunciation of Helani (Johnson & Mahelona, 1975, p. 5). Hōlani-kū. East Hōlani

Figure 7. Kai'aikawaha genealogy of island names (1835) as compiled by Kekuewa Kikiloi (2010:88).



However, prior to the re-discovery of Kaiwaikawaha’s manuscript, the Hawaiian Lexicon Committee created names for the islands of PMNM in 1973. Kekuewa Kikiloi, in his work *Rebirth of an Archipelago: Sustaining a Hawaiian Cultural Identity for People and Homeland* (Kikiloi 2010), correlates geographic locations for the NWHI with Kaiwaikawaha’s inventory of names. This recovery of the ancient Hawaiian island names of Papahānaumokuākea (The Northwestern Hawaiian Islands) is laid out in Table 1. There are 23 islands in the pae ‘āina (11 main Hawaiian Islands, 10 in the Northwest, and two outlier islands).

Table 1. Island names from the Kaiaikawaha genealogy (Kaiaikawaha, 1835), and list of names given by the Hawaiian Lexicon Committee (Kimura 1973:27) with proposed location correspondence as described by Dr. Kikiloi (Kikiloi 2010:90-96, 98-99).

Island Name (Kaiaikawaha 1835)	Dictionary Definitions (Pukui & Elbert 1986 Pukui et al 1974)	Island Name (Hawaiian Lexicon Committee 1973)	Definition/ Mana‘o (Hawaiian Lexicon Committee 1973)	Proposed Location Correspondence (Kikiloi 2010)
Mokupapapa	n. Low-flat island, as a reef (Pukui & Elbert 1986:318; Pukui et al. 1974:156)			Five Fathom Pinnacle (submerged seamount less than 3 miles southwest of Ka‘ula)
Nihoa	pas/imp of niho. n. Toothed, serrated, notched, jagged, sharp; firmly imbedded and interlocked (Pukui & Elbert 1986:266).			Nihoa
Hā‘ena	nvs. Red-hot, burning red. A common place name on Hawai‘i, O‘ahu, and Kaua‘i (Pukui & Elbert 1986:46).	Mokumanama (noted as the original name)		Mokumanamana, Kamoku-manamana (Names prior to Necker), Necker
Lalo	n. Down, downward, low, lower, under, below, depth, west or leeward, lee southernly (PPN: Raro) (Pukui & Elbert 1986:192).	Mokupāpapa	"Islet with low-lying reefs." The nearest shoal-like place is the French Frigate Shoals	French Frigate Shoals
Ōnū-nui	n. Large protuberance (Pukui et al. 1974:171).	Pūhāhonu	"Surfacing of a turtle for air" - when approached at sea by voyagers, these two islands can appear like a turtle coming up for air, its back and head emerging above the surface.	Gardner Pinnacles
Ōnū-iki	n. Small protuberance (Pukui et al. 1974:171)			
Ka-moku-o-Kamohoali‘i	noun phrase. Island of Kamohoali‘i (B. K. H., 1862; Tava & Keale 1989:109)	Nalukakala	"Surf that arrives in combers." Name given because the atoll is generally covered by breakers.	Maro Reef

Island Name (Kaiaikawah a 1835)	Dictionary Definitions (Pukui & Elbert 1986 Pukui et al 1974)	Island Name (Hawaiian Lexicon Committee 1973)	Definition/ Mana‘o (Hawaiian Lexicon Committee 1973)	Proposed Location Correspondence (Kikiloī 2010)
Ka-mole	Ka-mole. n. The taproot, main root; ancestral root, or foundation, source, or cause (Pukui & Elbert 1986:252).	Kauō	"The yolk or egg white of an egg." The island resembles a bird's egg, and thousands of birds inhabit the island.	Laysan Island
Ka-pou	n. The pillar, or post (PPN: Pou) (Pukui & Elbert 1986:343).	Papa‘āpoho	"A flat (island) with a depression."	Lisianski Island
Mana-wai	n. Branching water (Pukui & Elbert, 1986:238); nvs. Warped, depressed, bent in (Pukui & Elbert 1986:237).	Holoikauaua	Named for the Hawaiian monk seal that frequents much of the NWHI.	Pearl and Hermes Reef
Kua-i-he-lani	Kua-i-he-lani. n. Backbone of heaven. It is said to be a mythical place (Pukui & Elbert 1986:169).	Pihemanu	"The loud din of birds." Along with many other islands in the NWHI, this one is a refuge for birds.	Midway Atoll
Hōlani-kū	Hōlani. Bring forth heaven. It is said to be a mythical place, also a star name (Pukui & Elbert 1986:77); Hōlani is a variant pronunciation of Helani (Johnson & Mahelona, 1975:5). Hōlani-kū. East Hōlani	Kānemiloha‘i	Named for the brother of Pele who, during the voyage to Hawai‘i from Kahiki, was left as a guard on what was thought to be the northwesternmost island in the Hawaiian archipelago.	Kure Atoll

Hawaiian Oral Traditions

Nā Mele a me nā Oli

Mele and oli or songs and chants are integral in chronicling Hawaiian events, history, geography, relationships, thoughts, feelings, memories, inspirations, and more. While specialty mele and oli have their own unique purposes, functions, and meanings, basic protocols and generalized chants allow all of the involved individuals/visitors to participate in the protocols that are used to request protection, request entry, give ho‘okupu, or to open meetings and discussions. Some mele have already been presented to you in the previous section outlining the cosmogenic origins of PMNM. Below are commonly used mele and oli with an explanation of their intent.

Mele no Papahānaumokuākea

Composed by Kainani Kahaunaele and Halealoha Ayau (2007)

Mele no Papahānaumokuākea is a name song that honors Papahānaumokuākea. This mele was composed by Kainani Kahaunaele and Halealoha Ayau who gifted it to Papahānaumokuākea Marine National Monument (PMNM) in November 2007. This mele celebrates the outstanding natural, historical, and cultural values of Papahānaumokuākea, and it exemplifies the ways in which the natural and cultural realms share an intertwined story and a common origin. The mele reflects upon the unique nature of the Northwestern Hawaiian Islands (NWHI) and the surrounding ocean region while using cultural references to bridge the ancient and contemporary traditions of Native Hawaiians. As an oral tradition, it is placed within the context of this document to provide a tone and intention.

Mālamalama ka lā nui a Kāne puka i Ha‘eha‘e
‘Apakau ke kukuna i ka ‘ili kai o nā kai ‘ewalu
He ‘ike makawalu ka‘u e ‘ano‘i nei
‘O nā au walu a Kanaloa Haunawela noho i ka moana nui
He hu‘akai ka makani o Lehua ‘au i ke kai
Kū‘ono‘ono ka lua o Kūhaimoana i ke kapa ‘ehukai o Ka‘ula

‘O Kū i ka loulou ulu a‘e ke aloha no Nihoa moku manu
Manuokū i ka ‘āhui, he alaka‘i na ka lāhui
‘O Hinapūko‘a
‘O Hinapūhalako‘a
‘O Hina Kupukupu
‘O Hinaikamalama
Hua ka ‘ōhua, lu‘u ke koholā
Aloha kahi limu kala, kia‘i ‘ia e ka ‘ākala noho i uka
Hānau ka pe‘a, puka ka pe‘ape‘a i kai
He ‘ina‘i ka ‘ina, ‘ono i ka huna o ka pa‘akai
Manomano ka ‘iek li‘u o ka houpō o Kanaloa
Ko‘iko‘i lua ho‘i no ka lehulehu, ‘o ku‘u luhi ia
Hanohano wale ka ‘āina kūpuna, ‘o nā moku lē ‘ia
No Papahānaumokuakea lā he inoa

*The sunrise of Kāne at Ha‘eha‘e shines bright
The rays of the sun spread throughout Hawai‘i
I yearn for the deep knowledge
The knowledge of Kanaloa who lives in the ocean
The Hu‘akai wind is of Lehua that swims in the sea
Rich is the pit of Kūhaimoana in the seaspray of Ka‘ula
Kū is of the loulou and our respect grows for Nihoa, isle of birds
Manuokū fly in a bunch and leads the nation
The multiple forms of Hina of coral and moon
The ‘ōhua spawns, the whale dives
Aloha for the limu kala, whose land counterpart is the ‘ākala
The pe‘a gives birth to the pe‘ape‘a in the sea
The the ‘ina is the seasoning, delicious with salt
The deep knowledge of our Kupuna lies in the depths
Extremely important for us to grasp, it is my passion
Honored are the lands of my ancestors, the abundant islands
A name song for Papahānaumokuākea*

(Kahaunaele and Ayau 2007)

Puka mai ka lā i Kumukahi

Composed by Keoni Kuoha (2010)

Kumukahi is the easternmost point in the Hawaiian chain and Lehua is a small islet off the coast of Ni‘ihau. In many mele (chants), these points are used to show the all-encompassing expanse of the Hawaiian Islands. Waialoha is the name of one the winds and rains of Nihoa, the Northwestern Hawaiian Island closest to Ni‘ihau, and is referenced as a welcoming, refreshing breeze or gentle rain on an island where such comforts can be scarce. Hawai‘iloa is the channel between Nihoa and Mokumanamana, the next island to the Northwest of Nihoa. It represents the connection that our kūpuna (ancestors) once had to Papahānaumokuākea and the desire to reawaken those alahula (frequented pathways). In the mo‘okū‘auhau that was preserved by Lahainaluna student, Kaiaikawaha, Hōlanikū (believed to be Kure Atoll) is the last of the islands, and thus the chant ends at Hōlanikū. Puka mai ka Lā i Kumukahi was composed by Keoni Kuoha, and it is used to open meetings and discussions or to begin any hana pertaining to Papahānaumokuākea. It is accompanied by a clap and is repeated three times.

Puka mai ka lā i Kumukahi lā ‘ea
A welo ana i Lehua lā ‘eā
He Waialoha ka makani lā ‘eā
‘O Hawai‘iloa ke alahula lā ‘eā
I Hōlani ke ku‘ina, i Hōlanikū

*The sun bursts forth at Kumukahi
And sets at Lehua
The wind is the Waialoha wind
Hawai‘iloa is the frequented pathway
Joining at Hōlani, at Hōlanikū*

(Kuoha 2010)

Kanaloanuiākea


This oli “honors the many forms of Kanaloa,” it is described as a chant that is appropriate anytime to honor Kanaloa (Kanahele et al 2017:25).

E Kanaloanuiākea	<i>Kanaloa of the vast expanse</i>
E Kanaloa Haunawela	<i>Kanaloa of the depths of intensity</i>
Kanaloa ke ala ma‘awe ‘ula a ka lā	<i>Kanaloa of the west sky, the rising sun</i>
Kāne ke ala ‘ula a ka lā	<i>Kāne of the east sky, the rising sun</i>
Kanaloa noho i ka moana	<i>Kanaloa residing in the great sea</i>
Moana iki, moana o‘o	<i>Small sea, mottled sea</i>
I ka i‘a nui, i ka i‘a iki	<i>In the big fish, in the small fish</i>
I ka manō, i ka niuhi	<i>In the shark, in the tiger shark</i>
I ke koholā, a hohonu	<i>In the whale, of the depths</i>
‘O ke kai hohonu a he‘e	<i>The depths and transcending</i>
‘O ke kai uli a palaoa	<i>The dark depths of the sperm whale</i>
‘O ke kai kea a honu	<i>White sea of turtles</i>
‘O ka hou ka‘i lōloa	<i>The wrasse parade in a long line</i>
Ola ke kino walewale o Haunawela	<i>The spawning cycle of the ocean is prolific</i>
‘O nā ‘au walū a Kanaloa	<i>The eight currents of Kanaloa</i>
I pa‘a i ka maka	<i>The source is stable</i>
I ka maka walū a Kanaloa, Ola!	<i>The numerous consciousnesses of Kanaloa, lives!</i>
Lana i ke kai, lana i ka honu	<i>It floats in the sea, it drifts upon the land</i>
Lana i ka houpo a Kanaloa	<i>It intermingles in the energy force of Kanaloa</i>
I ka Mokupāpapa	<i>Out to the low lying islands</i>
Ka papa kaha kua kea o Lono	<i>The low lying coral islands of Lono</i>
‘O Lono ka pao	<i>Lono is the bridge</i>
<i>Ola i ke au a Kanaloa</i>	<i>Life to the realm of Kanaloa</i>

(Kanahele et al. 2017:25-26)

‘Ōlelo No‘eau

Between 1910 and 1960, Mary Kawena Pukui collected many proverbs, and wise sayings, known commonly as ‘Ōlelo No‘eau (Pukui 1983). These ‘Ōlelo No‘eau, sayings, offer insights into important facets of Hawaiian values, people's everyday lives, and metaphors, as well as characteristics of specific ‘āina, the people that lived there, historical figures and events, wahi kūpuna, and the names and qualities of winds and rains. The ‘Ōlelo No‘eau (ON) collected here either pertains directly to PMNM, contain the names of specific places within PMNM, or indirectly reference aspects related to the akua Kāne and Kanaloa, kinolau associated with these akua, and voyaging or travel. In total, 22 ‘Ōlelo No‘eau have been collected. The ‘Ōlelo No‘eau



are organized by subject themes generally derived from the content and kaona (meaning, often layered) of each ‘Ōlelo No‘eau; such themes have been maintained for relevance to specific practices that may have been inferred by Pukui. Diacritical markings and the lack of diacritical markings are maintained as found in Pukui’s publication.

Table 2. ‘Ōlelo No‘eau compiled on themes and places in PMNM (Pukui 1983).

‘Ōlelo No‘eau Hawaiian English Translation	Mana‘o	Citation No., p	Subject
Kū pākū ka pali o Nihoa i ka makani. <i>The cliff of Nihoa stands as a resistance against the wind.</i>	Said of one who stands bravely in the face of misfortune.	No.1924, p206	Nihoa
Nihoa i ka moku manu. <i>Nihoa, island of birds.</i>	N/A	No.2311, 252	Nihoa, birds
Kai nu‘u a Kāne. <i>Kāne’s rising sea.</i>	The foamy sea that follows after a tumbling wave.	No.1409, p153	Kāne
Ka honua nui a Kāne i hō‘inana a‘ahu kīnohinohi. <i>The great earth animated and adorned by Kāne</i>	Kāne was the god of fresh water and life.	No.1316, p143	Kāne
Ke kai lipolipo polihua a Kāne. <i>The dark-blue ocean of Kāne.</i>	The deep sea out of sight of land.	No.1729, p186	Kāne, deep sea
‘U‘ina pōhaku a Kāne. <i>The stone of Kāne rolled with rumble.</i>	Said of thunder.	No.2861, p313	Kāne, thunder and storms
He pō Kāloa kēia, ua ‘e‘e pūpū. <i>This is the night of Kāloa, for the shellfish climbs.</i>	The nights of Kāloa, when the shellfish climb onto the wet stones, are good for shellfish hunting.	No.907, p97	Kanaloa, coasts
‘Au i ke kai loa. <i>Swims the distant seas.</i>	Said of one who travels afar.	No.236, p28	Seas, travel
‘Au i ke kai me he manu ala. <i>Cross the sea as a bird.</i>	To sail across the sea. Also applied to a hill that juts out into the sea or is seen from far out at sea.	No.237, p28	Seas, sailing
Ka‘upu hehi ‘ale o ka moana. <i>The Ka‘upu bird that steps on the ocean billows.</i>	A ship.	No.1637, p177	Ka‘upu, sailing
Ahē no ka manu o Ka‘ula, he lā ‘ino. <i>When the birds of Ka‘ula appear wild, it denotes a stormy day.</i>	Signs of trouble keep people away.	No.8, p3	Storm, Ka‘ula, bird behavior

‘Ōlelo No‘eau Hawaiian English Translation	Mana‘o	Citation No., p	Subject
Aia a pohā ka leo o ka ‘a‘o, kāpule ke momona o ka ‘uwa‘u i ka puapua. <i>When the ‘a‘o birds’ voices are distinctly heard, the ‘uwa‘u birds are fat even to the very tails.</i>	The ‘a‘o bird was not heard during the nesting season. When the fledglings emerged and their cries were heard, the season had come when young ‘uwa‘u were best for eating, and the people went to snare them.	No.32, p6	Birds, ‘A‘o & ‘Uwa‘u (sheerwater), bird hunting
Hele wale a lulu i na manu. <i>The birds are so numerous that they cast a shade.</i>	Said of a great crowd of people.	No.760, p84	Birds
He pali lele a koa‘e. <i>A cliff reached only by tropic birds.</i>	Said of a high chief or of a hill too steep to climb.	No.879, p95	Koa‘e, tropic bird, sea cliffs
Holo i‘a ka papa, kau ‘ia e ka manu. <i>When the shoals are full of fish, birds gather over them.</i>	Where there is food, people gather.	No.1052, p112	Birds, Fish, shoals
Ho‘olaukanaka i ka leo o na manu. <i>The voices of birds give the place a feeling of being inhabited.</i>	Used by those who live, work, or travel in lonely places- life is made happy by the voices of many birds. Common in songs.	No.1094, p117	Birds, Remote places, travel
Ka i‘a hei i ka uwahi. <i>The fish caught by smoke.</i>	Birds caught at night with a net after being attracted by a bonfire.	No.1334, p145	Birds, fish, lawai‘a
Ka i‘a ‘imi i ka moana, na ka manu e ha‘i mai. <i>The fish sought for in the ocean, whose presence is revealed by birds.</i>	A school of aku, whose presence is signaled by the gathering of noio at sea.	No.1344, p146	Birds, Fish-Aku
Maka‘ala ke kanaka kāhea manu. <i>A man who calls birds should always be alert.</i>	One who wishes to succeed should be alert to every opportunity, like one who catches birds by imitating their cries.	No.2087, p227	Birds, bird hunting
O ka manu maluna, ‘oia malalo. <i>The birds above, he below.</i>	Said in admiration of one who travels with great speed—he equals the birds that fly in the sky.	No.2425, p265	Birds, Travel

<p>‘Ōlelo No‘eau Hawaiian <i>English Translation</i></p>	<p>Mana‘o</p>	<p>Citation No., p</p>	<p>Subject</p>
<p>Pōhai ka manu maluna, he i‘a ko lalo. <i>When the birds circle above, there are fish below.</i></p>	<p>Strong words are a sign of wrath. Fishermen at sea watch where the noio birds gather, for that is a sign that the aku fish are near.</p>	<p>No.2667, p292</p>	<p>Birds, fish, lawai‘a, sailing</p>

Historical Papahānaumokuākea Awareness and Access

Historical resources provide an understanding of both Hawaiian and foreign awareness and access of Papahānaumokuākea during the historical era. Aware of its existence through oral historical traditions, Hawaiians accessed and annexed portions of Papahānaumokuākea in the nineteenth century. They also depicted the entire archipelago as well as select mokupuni as part of the pae ‘āina. Predominantly white and European explorers, settlers, merchants, and privateers traveled to Papahānaumokuākea beginning in the eighteenth century.

Persistence of Native Hawaiian Ocean Roads

As detailed in the previous section, many of the origins of both the Hawaiian islands and Hawaiian people are tied by ka‘ao (legend) and mo‘okū‘auhau (genealogy) to the islands northwest of the Main Hawaiian archipelago. It is interesting that there are many mele, oli, and mo‘olelo documenting the deep history of Hawaiians in PMNM, when its more recent past, from the 1700s to early 1800s is not as well recorded, from a Hawaiian perspective. Perhaps this is an omission in the historic record or one that awaits expanded Hawaiian language scholarship to reveal. It is clear that the record of the Hawaiian presence in PMNM, in the early historic period, is also a factor of the expansion of Europeans into the Hawaiian Pacific (circa 1776); which brought disease and a collapse of the Hawaiian population (Stannard 1989). This changing landscape of people in place was further compounded by the rise of the American Congregational missionaries in the 1820s (Osorio 2002:9) and the overthrow in 1893 which cemented a colonial legacy and ratified the theft of Hawaiian lands (Van Dyke 2008:188-199).

In this early historic time, we do know that Native Hawaiians and other Polynesians continued to use ocean roads, voyaging between and among islands, as with all ocean peoples who travel by water, via seaways, with canoe travel both inland and inter-island a common form of travel. However, this means of traditional travel would be upended by European influence by the mid 19th century, and along with pandemics was likely a factor of the decline of Hawaiian sailing--inter-island, to the northwestern Hawaiian Islands, and across the Pacific.

King Kamehameha I, utilized “foreign style sailing vessels” for inter-island travel and his conquest of the Hawaiian Islands (Kuykendall 1953:3). The Kingdom of Hawai‘i, the government itself sold its remnant fleet of foreign vessels, including those that had been in use by Kamehameha I, in 1846. Western sailing vessels had become so common by this time that by June 20, 1846, the Second Act of Kamehameha III, required government “coasting licenses” and registration for vessels under the Hawaiian flag (Kuykendall 1953:4). By mid-century, it was both warships, foreigners, and ali‘i who kept American and European sailing vessels; these ships had become a symbol of status as well as a critical artery of trade and transport between islands (Kuykendall 1953:3-10). Smaller traditional wa‘a (canoe) would still have been common for fishing and smaller coastline trips, as they were critical to the maka‘āinana, the people, of Hawai‘i for their seasonal or daily travel and sustenance. Yet, as the monarchy and the ali‘i shifted the labor and resources available to them into foreign sailing vessels, their investment into larger traditional voyaging craft, capable of longer inter-island and inter-ocean travel, would have declined.

As early as 1848 there was speculation for the profitability of steamships in Hawaii (Kuykendall 1953:11). It would be steamships on the heels of western ships that would cement the disappearance of larger scale Hawaiian sailing canoes, until Hōkūle‘a in 1976. Steamships were became so well established in Hawai‘i, that from 1853-1856, the Hawaiian Steam Navigation Company was awarded an exclusive charter for interisland trade and freight, to sail under the Hawaiian flag, with support in funds and resources from the Hawaiian Kingdom; the company would carry mail, goods, livestock and passengers (Kuykendall 1953:12,13).

A continuous Hawaiian presence in the NWHI during the historical era might have not been well recorded or remembered, but there has always been an awareness and a relationship with Hawaiians and Papahānaumokuākea. In the 1700s through the mid-1800s, the decline in the Hawaiian population paralleled the decline in larger traditional voyaging canoes creating physical and logistical barrier to people’s continued access to Papahānaumokuākea explaining the decline of the Hawaiian presence in Papahānaumokuākea in the historical era. Although not in body, there has always been an awareness and a relationship between Hawaiians and PMNM, its akua (gods), kinolau (natural manifestations of the gods), seas and islands, which are recorded in publications in Hawaiian newspapers (introduced in the previous section). Hawaiian knowledge of their relationship Papahānaumokuākea, like all knowledge and

relationships, ebbs and flows, it is arguable that the “ebb” which peaked in the historical era as in only now changing course.

Early European Arrivals in the Pacific and Papahānaumokuākea

Expanding the boundaries of their known world, predominantly white and European explorers, settlers, merchants, and privateers began arriving in the Pacific in the early sixteenth century. Their expansion into Moananuiākea was motivated by the goal of establishing expedient, profitable trade routes to “the spice islands” (Moluku, Indonesia), and desire to discover (for themselves) and stake claim to land and resources, much of which already belonged to indigenous people (Kjellgren 2004; Banner 2007).

European arrival in Papahānaumokuākea began in the eighteenth century. In 1786, Captain Jean Francois La Pérouse and crew mapped Mokumanamana, Kamokumanamana, Hā‘ena (*Necker Island*) and Lalo, Kānemiloha‘i, Mokupāpapa (*French Frigate Shoals*), where their ships the *Boussole* and *Astrolabe* encountered breakers and almost wrecked (Fitzpatrick with Moffatt 1986: 30; Figure 8 and Figure 9). On April 15, 1805, a Russian crew under Captain Lisiansky almost wrecked their ship the *Neva* on the hāpapa (shoals) of Kapou, Papa‘āpoho (*Lisiansky Island*). Avoiding disaster, Captian Lisianski proceeded to map and survey the mokuuni (Fitzpatrick with Moffatt 1986:45; Figure 10).

Historical Native Hawaiian Accesses of Papahānaumokuākea

Native Hawaiian ali‘i accessed Papahānaumokuākea during the historical era in order to explore, annex, visit, and some because they yet dwelled there. In September 1822, Ka‘ahumanu, Kuhina Nui, and Kaumuali‘i, Ali‘i of Kaua‘i, traveled in a small fleet of royal, Hawaiian-owned, schooners to Ni‘ihau and then to Nihoa in order to claim the island for the Kamehameha Monarchy (Kamakau 1868 [trans. unknown] in Mills 2023:26, 41). Nineteenth century Hawaiian scholar and historian Samuel M. Kamakau published an article about their journey in the February 1, 1868 edition of the Hawaiian language newspaper *Ka Nupepa Kuokoa*. A portion of it reads:

While Ka‘ahumanu and Mo‘i Liholiho were visiting Kaua‘i, she greatly desired to search for Nihoa. Nihoa was a land not known by her generation. But, Nihoa was heard of in stories and songs of the old people. Kaumuali‘i and Ka‘ahumanu sought out Nihoa by an expedition of 2-3 vessels under the leadership of Captain William Sumner. Nihoa was found in 1822, and added to Hawai‘i’s domain that year. [Kamakau 1868 (B.K. Kaiama, trans.) in MacKenzie and Kalama 2003:13, 14]

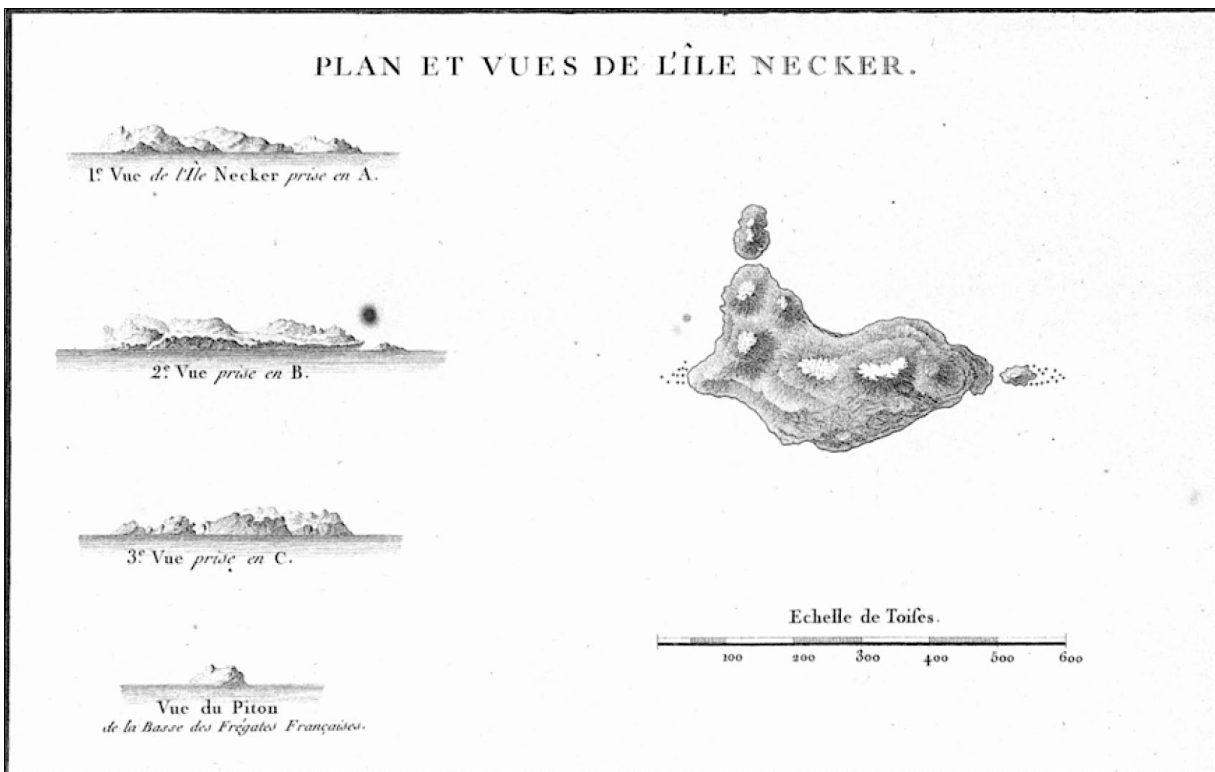


Figure 8. Benizet’s 1786 Map of Mokumanamana, Kamokumanamana, Hā‘ena, what he termed Necker Island (Benizet 1786 in Fitzpatrick with Moffatt 1986:30)

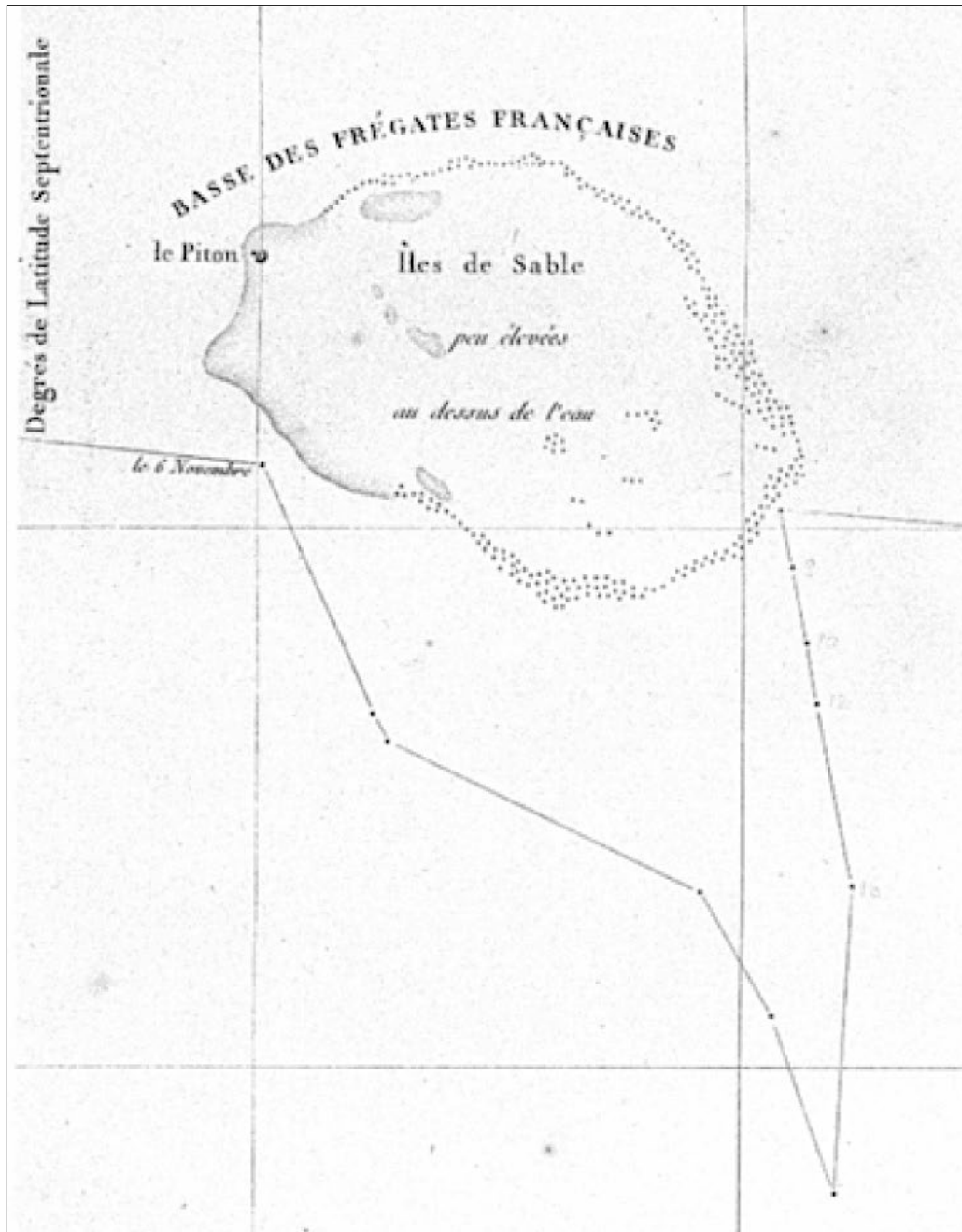


Figure 9. Benizet's 1786 Map of Lalo, Kānemiloha'i, Mokupāpapa, what he termed the French Frigate Shoals (Benizet 1786 in Fitzpatrick with Moffatt 1986:31)

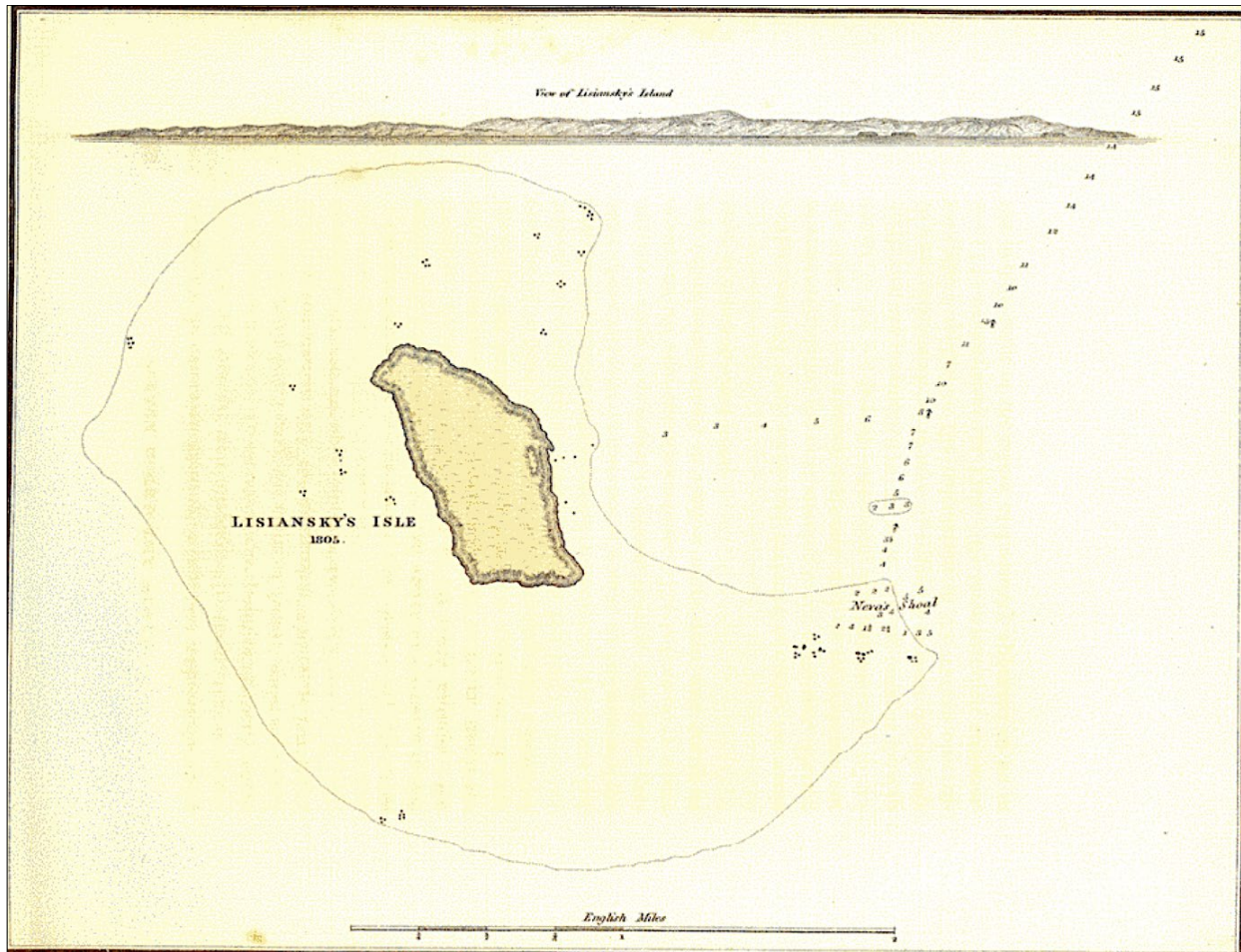


Figure 10. Lisiansky's 1814 map of Kapou, Papa'āpoho, which he called "Lisiansky's Island" (Lisiansky 1814 in Fitzpatrick with Moffatt 1986:45)

In 1857, Kamehameha IV (Alexander Liholiho) commissioned an expedition for Captain John Paty of the *Manuokawai* to annex Papahānaumokuākea for the Hawaiian Kingdom. During the voyage, Paty viewed but could not land on and therefore did not claim Mokumanamana, Kamokumanamana, Hā'ena (*Necker*). Paty annexed Kamole, Kauō (*Laysan Island*) for the Hawaiian Kingdom on May 1, 1857 (MacKenzie and Kaiama 2003:14). In April 1859 the Captain N.C. Brooks Hawaiian bark *Gambia* visits Mokumanamana, Kamokumanamana, Hā'ena (*Necker*); Lalo, Kānemiloa'i, Mokuapāpapa (*French Frigate Shoals*), and Manawai, Holoikauaua (*Pearl and Hermes Atoll*) (MacKenzie and Kaiama 2003:15, 16, 19). Princess Lili'uokalani and an entourage of over 200 people, mostly Hawaiians, visited Nihoa on July 22, 1885. The Princess' party harvested birds, skins, eggs, and feathers (Unknown Photographer 1885 in Rauzon 2001:11; Figure 11). The Kingdom of Hawai'i annexed Hōlanikū, Mokuapāpapa

(Kure Atoll) in 1886 during a rescue mission to retrieve a shipwrecked crew. MacKenzie and Kalama (2003) write:

King David Kalākaua sent an emissary to annex Kure Island in the mission to rescue the crew of the *Dunnottar Castle*. On September 20, 1886, Col. James H. Boyd, Special Commissioner appointed by Kalākaua, took formal possession of Ocean Island for the Kingdom of Hawai'i. The *Hawaiian Gazette* of October 5, 1886, reported that the Hawaiian flag was hoisted up on a flagpole that had been erected on the island by the shipwrecked crew of the *Donnottar Castle*.

[Mackenzie and Kalama 2003:21]



Figure 11. Members of Princess Lili'uokalani's entourage of over 200 people, mostly Hawaiians, pictured on Nihoa on July 22, 1885 (Unknown Photographer 1885 in Rauzon 2001:11)



Figure 12. A historical photograph from the Hawaiian Kingdom government's 1894 annexation of Mokumanamana, Kamokumanamana, Hā'ena (*Necker*). Captain Freeman piloted the steamboat *Iwalani* that carried the Minister of the Interior Captain James King to raise the Hawaiian flag and read the Proclamation of Annexation, both pictured in the above photograph (Norton 1894 in Rauzon 2001:28).

Table 3. Post ‘Ainoa Era Access to Nihoa and Mokumanamana by Native Hawaiians
(Emory 1928 and Manu 1899 in Monahan et al. 2019)

Access Date	Person(s)	Organization/ Affiliation	Island/ Islands Accessed	Use/Activities
While Kamehameha I and Ka‘ahumanu lived at Pākākā, Honolulu (though maybe this was the 1822 trip after Kamehameha passed away?)	Ka‘ahumanu		Nihoa	Planted the seed of Uli (Loulū); Attempted to measure the depth of the pit dug by Pele and found to be over 1,600 fathoms (the full length of the line used to measure that didn't touch the bottom of the pit)
1822	Ka‘ahumanu	Kuhina Nui	Nihoa	Re-located the island and claim the island as a territory for the Kamehameha monarchy; Shot a few seals; Left a bottle and an inscribed copper plate near the landing
	Kaumuali‘i	Ali‘i of Kaua‘i		
	William Sumner	Sea Captain		
1857 on the Hawaiian Schooner <i>Manuokawai</i>	Alexander Liholiho	King Kamehameha IV	Nihoa	Formally annexed the island to the Kingdom of Hawai‘i; Placed a bottle with notes and an inscribed coin at the landing area Shot a few seals
	Kekuanaoa	Governor		
	Mr. Young			
	John Paty	Sea Captain		
1885 on the steamer <i>Iwalani</i>	Lili‘uokalani	Princess of Hawai‘i	Nihoa	Surveyed island; Re-located birds for study; Accidentally set island on fire; Removed stone artifacts; Attempted removal of iwi by people without Hawaiian genealogical ties
	Sanford B. Dole	Ornithologist		
	Sereno Bishop	Topographic & Geologic surveyor		
	Mr. Jaeger	Botanist		
	Mrs. E.M. Beckley	Hawaiian Government Museum		


Access Date	Person(s)	Organization/ Affiliation	Island/ Islands Accessed	Use/Activities
	Over 200 others	Excursionists (mostly Hawaiians)		

Prompted by British intentions to claim Mokumanamana, Kamokumanamana, Hā‘ena (Necker), the Hawaiian government annexed the mokupuni in 1894. Captain Freeman piloted the steamboat Iwalani that carried the Minister of the Interior Captain James King, to raise the Hawaiian flag and read the Proclamation of Annexation (Norton 1894 in Rauzon 2001:28; Kuaihelani, Pihemanu (Midway Atoll) was never historically claimed by Hawaiians (personal communication, Kikiloi 2023).

Engravings of Papahānaumokuākea Produced at Lahainaluna Seminary

In the first half of the nineteenth century, Hawaiians engraved both all and some of the mokupuni (islands), hāpapa, and pōhaku of Papahānaumokuākea on maps of the world and Hawaiian archipelago created at Lahainaluna, Maui. Their engravings are evidence of continued Hawaiian cultural knowledge and remembrance of Papahānaumokuākea. The maps were created as illustrations and reference materials and published singularly or included in books printed at Lahainaluna such as various editions of *He Mau Palapala Aina* (1840, 1842) (Forbes 2012:152). The skilled engravers Simon Peter Kalama and Kepohoni collaborated on their detailed *Ka Palapala Honua No Ka Poepoe (Map of the Hemispheres)* that appears to feature all of the mokupuni, hāpapa, and pōhaku of Papahānaumokuākea (Forbes 2012:140,141; Figure 13 and Figure 14). Kalama and Kepohoni’s engraving, created by a haumāna (student) enrolled and local resident apprentice at Lahainaluna, respectively, is the first cartographic representation of the entirety of the pae ‘āina and kūpuna islands together as the unbroken chain they are (Fitzpatrick 1986:114; Forbes 2012: 140, 141).

Kepohoni the apprentice as well as Lahainaluna haumāna continued to include Nihoa in additional representations of the pae ‘āina. An unknown engraver included Nihoa in their map of the Hawaiian archipelago used in Dibble’s *History of the Sandwich Islands* published in Lahainaluna in 1843 (Forbes 2012:158,159). George Kapeu’s 1839 *Na Mokupuni O Hawaii* (Miniature Map of the Hawaiian Islands) includes Nihoa (Forbes 2012:151, 154; Figure 16).



Forbes (2012:158,159; Figure 17) attributes the engraving of another 1844 map of the Hawaiian Islands that includes Nihoa to Kepohoni.

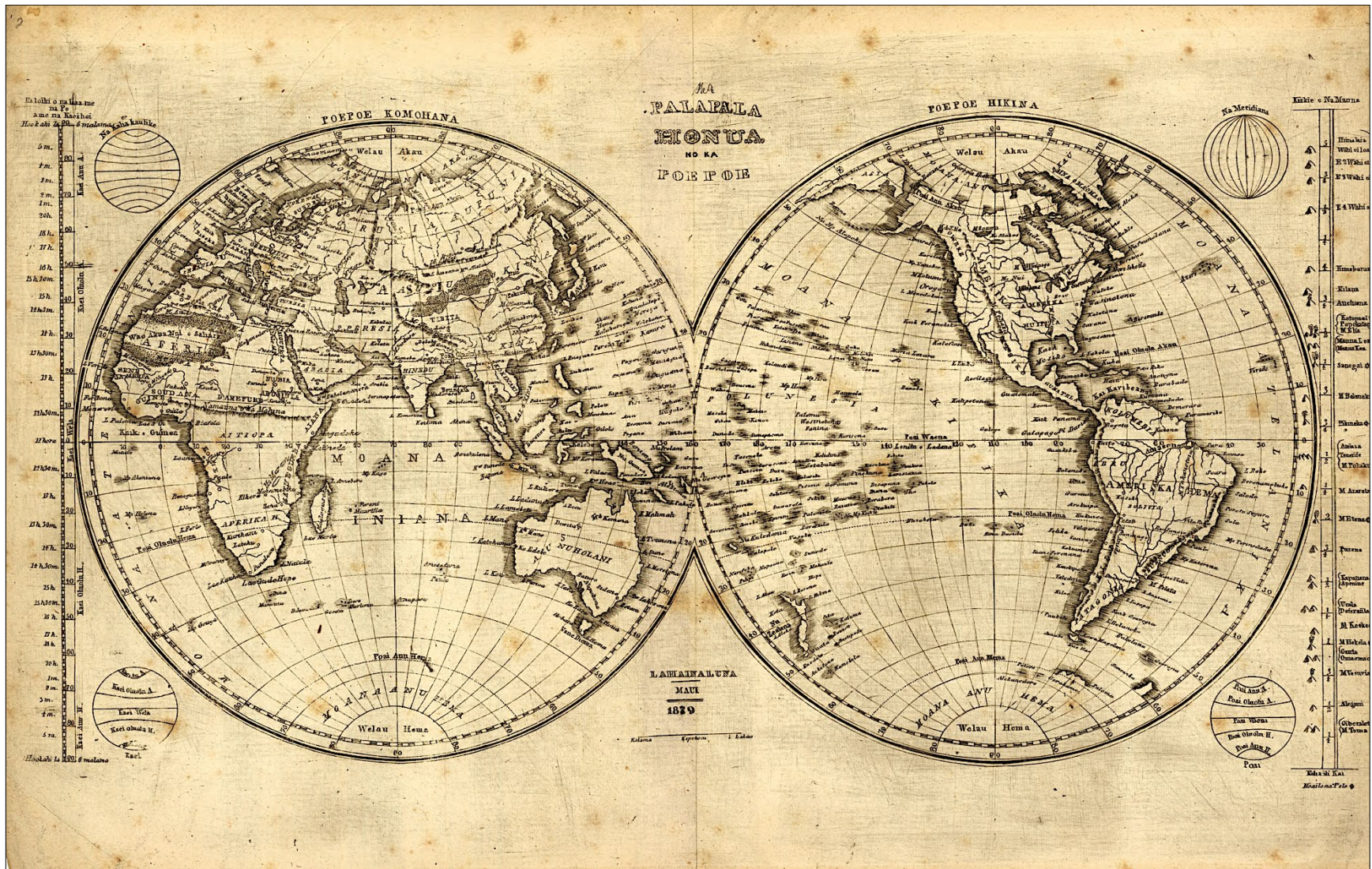


Figure 13. The skilled engravers Simon Peter Kalama and Kepohoni collaborated on their detailed Ka Palapala Honua No Ka Poepoe (*Map of the Hemispheres*) that appears to feature all of the mokupuni, hāpapa, and pōhaku of Papahānaumokuākea (Kalama and Kepohoni in Forbes 2012:140)



Figure 14. Close-up of Kalama and Kepohoni's *Ka Palapala Honua No Ka Poepoe* (*Map of the Hemispheres*) that appears to feature all of the moku puni, hāpapa, and pōhaku of Papahānaumokuākea (Kalama and Kepohoni in Forbes 2012:140)

Papahānaumokuākea and the Pacific Whaling Industry (1825-1870)

From 1825 through 1870, Papahānaumokuākea and Native Hawaiians played a pivotal role in the Pacific Whaling industry (LaCroix 2019:69). As the whaling industry expanded in the Pacific, Polynesians came to comprise sizable percentages of Pacific whaling fleet crews; at one point, Native Hawaiians constituted one-fifth of its manpower (Rosenthal 2018: 60-65; Lebo n.d.; PMNM 2023b). Whaling ships serviced, supplied, and manned in the growing port cities of Honolulu, Hilo, and Lahaina, traversed the waters of the monument (La Croix 2019:102-104; Rosenthal 2018:50, 62, 73, 74). The vessels were both en route to newly-discovered whaling grounds off Japan and in search of prospective new whaling grounds, specifically among the low-lying northwestern atolls of the monument (La Croix 2019:102-104; Rosenthal 2018:50; PMNM 2023a; PMNM 2023b). Historical records indicate at least ten whaling vessels were lost in Papahānaumokuākea, five of which have been confirmed and investigated to date (Casslerley 1998; PMNM 2023a; PMNM 2023b).

Other Historical Accesses of Papahānaumokuākea

Historical records indicate foreign vessels engaged in shark hunting off Kamole, Kauō (*Laysan Island*). Turtle and sea cucumber harvesting also occurred there (MacKenzie and Kalama 2003: 17). For over a decade, guano was also mined on Kamole, Kauō. Leases were granted for guano mining on Kapou, Papa‘āpoho (*Lisianski Island*) and Kuaihelani, Pihemanu (*Midway Atoll*) MacKenzie and Kalama (2003:18) write: “On March 29, 1890, the Hawaiian Kingdom leased Laysan to the North Pacific Phosphate and Fertilizer Co. for 20 years. Laysan was the only successful guano-mining island in the NWHI with a period of active guano digging from 1892 to 1894.”




Figure 15. Map of the Hawaiian archipelago including Nihoa by an unknown engraver used in Dibble's *History of the Sandwich Islands* published in Lahainaluna in 1843 (Forbes 2012:158,159)


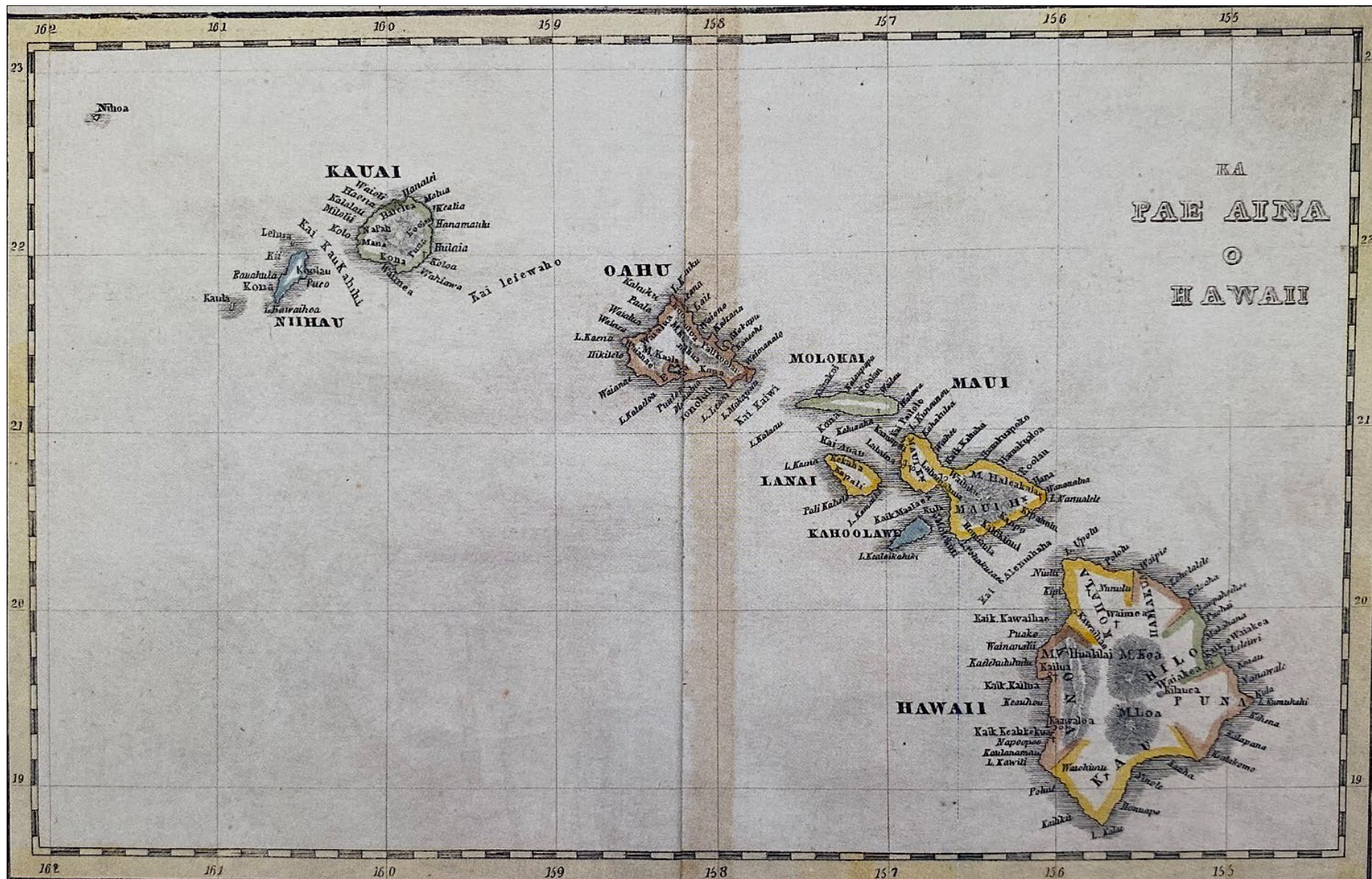


Figure 16. George Kapeu's 1839 *Na Mokupuni O Hawaii* (Miniature Map of the Hawaiian Islands) also includes Nihoa
(Forbes 2012:151, 154)






Figure 17. Forbes (2012:158,159) attributes the engraving of another 1844 map of the Hawaiian Islands that includes Nihoa to the Lahainaluna Seminary apprentice Kepohoni


Into more modern times

Following the illegal overthrow of the sovereign Kingdom of Hawai‘i by American businessmen with US naval support in January 1893, Queen Lili‘uokalani was forced into house arrest and a Provisional Government was formed; MacKenzie and Kalama (2003) synthesize the United States’ annexation of Papahānaumokuākea:

United States claims ownership and jurisdiction over the NHWI [sic] through the Joint Resolution of Annexation, July 7, 1898. In 1909, President Theodore Roosevelt, by Executive Order No. 1019, set aside the islands and reefs in the Northwestern Hawaiian Islands, as a bird refuge. In 1936, President Franklin D. Roosevelt placed Kure Atoll [Hōlanikū, Mokupāpapa] under the jurisdiction of the Secretary of the Navy pursuant to Executive Order No. 7299. President Truman, by Executive Order No. 10413, restored Kure Atoll [Hōlanikū, Mokupāpapa] to the jurisdiction of the Territory of Hawai‘i in 1952, with a reservation for a naval radar facility on the island.

Upon the admission of Hawai‘i as a state in 1959, Kure Atoll [Hōlanikū, Mokupāpapa] was included in the lands conveyed to the state under section 5 (b) of the Admission Act. All the other islands and atolls remained under the control of the United States pursuant to section 5(c) of the Admission Act. [MacKenzie and Kalama 2003: 6, 7]

Extractive commercial activities and resource harvesting continued in the PMNM through the twentieth century, greatly depleting and impacting natural resources throughout the monument. MacKenzie and Kalama (2003:20) detail depletion of a natural resource on Manawai, Holoikauaia (*Pearl and Hermes Atoll*): “During the early 20th century, the Common Pearl Oyster, indigenous to the atoll, was heavily exploited for the American pearl button industry, severely depleting this resource, although a few oysters exist today.” During the same time period, Japanese feather hunters poached birds in Papahānaumokuākea, prompting the creation of the Northwestern Hawaiian Islands Bird Refuge (Rauzon 2001: 136; MacKenzie and Kalama 2003:19).



After what is possibly almost a 100-year low through the 1900s, re-engagement of Native Hawaiians with the NWHI began increasing at the end of the 20th century and persists through the modern era.

In 1997, Hui Mālama I Nā Iwi Kūpuna O Hawai‘i Nei repatriated sets of human remains to Nihoa and Mokumanamana that were collected by archaeologists in the 1924-1925 Bishop Museum Tanager Expeditions (Ayau and Tengan 2002). In 2003, a cultural protocol group, Nā Kupu‘eu Paemoku, traveled to Nihoa on the voyaging canoe *Hōkūle‘a* to conduct traditional ceremonies. In 2004, *Hōkūle‘a* sailed over 1,200 miles (1,043 nautical miles, 1,931 kilometers) to the most distant end of the island chain to visit Kure Atoll as part of a statewide educational initiative called Navigating Change. In 2005, Nā Kupu‘eu Paemoku sailed to Mokumanamana to conduct protocol ceremonies on the longest day of the year, June 21, the summer solstice. Cultural practitioners from the Kamakūokalani Hawaiian Studies and the Edith Kanaka‘ole Foundation continued this in 2006 and 2007. [PMNM 2008:105, 106].

Dr. Kekuewa Kikiloī completed dissertation field work on Nihoa over three seasons from 2005-2008 and on Mokumanamana from 2008-2011, the results of which are documented in his Anthropological dissertation *Kūkulu Manamana: Ritual Power and Religious Expansion in Hawai‘i, The Ethno-Historical and Archaeological Study of Mokumanamana and Nihoa Islands* (Kikiloī 2012).

Continued Cultural Connections

Although little recorded in modern scholarship, the Hawaiian *maka‘āinana* (*common people*), who were far from common, continued to voyage, engage, and even dwell in the northwest Hawaiian Islands through the historic era, Nihoa, in particular, was the focus of Hawaiian visitation and engagement, although it occurred on other NWHI as well. Today, Nihoa and the NWHIs are often thought of as a people-less place, but as discussed above and continued below, there are many ways Hawaiians retained their *pilina* (*relationships and connections*) with the seas and islands of Papahānaumokuākea.

Native son of Nihoa

One ‘ohana consented to share the oral tradition of their family’s connection to Papahānaumokuākea, and the continuing connection between Hā‘ena Kaua‘i and Nihoa, undertaken during the late 1800s by their kupuna, Hailama.

On Saturday December 3rd, 2022 Lei Wann, a lineal descendant of Hā‘ena and the current director of Limahuli Natural Tropical Botanical Gardens (NTBG) was interviewed at the Limahuli Garden office, and showed Nohopapa Hawai‘i their family kuleana parcel ma kai (seaward) and across the street of NTBG, in Hā‘ena Moku, Kaua‘i Island. This ethnography is not connected to this study as an assessment of proposed project impacts, but as an ethnography, documenting continued voyaging between Hā‘ena, Kauai Island and Nihoa Island, through the story of her great-great-great-grandfather who was born and raised on Nihoa until its forced de-peopling. This story is about Hailama, shared by his granddaughter with her granddaughter Lei Wann, over the course of years. Lei Wann’s grand Uncle Charlie, who was raised by Hailama, also shared his memories with Lei Wann when he was in his 90s.

On the wall in the Limahuli office is a photo from the Bishop museum archives, it’s of a hale pili (thatched house), built in the late 1800s and taken in the early 1900s (latest 1912 or 1920s). Lei’s three times great-grandfather Hailama built this house, although his story began hundreds of miles away.

Hailama was always known to have come from Nihoa, at the age of nine with his older brother Pa‘a Maui (~11 years old). Lei Wann says it’s Hailama’s best guess of his age at the time, assuming he lived into his 90s, but he never knew exactly how old he was. Lei Wann also pointed out that there were two boys acknowledged in Liholiho’s 1857 journey to Nihoa, and while she had no idea if it was Hailama and his brother, it is certainly possible. Liholiho was on the 1857 Nihoa voyage made by the schooner *Manuokawai*, Captained by John Paty.

Tangentially, a much earlier 1822 trip was made by Ka‘ahumanu with Kaumuali‘i, Captained by William Sumner, that the boys could also have been a part of. Regardless of who picked the boys up, or exactly when, Lei Wann said Hailama and his younger brother were evicted from Nihoa by boat and dropped off on Ni‘ihau.

Lei Wann’s grandmother used to ask Hailama:

“Who are your parents? What were your parents’ names?” And he said, “On Nihoa there was such a small community that everybody raised everybody”... very few people had designated names. And so, he wasn’t sure who his real parents were and whether they were gone from the island already --this is also prime pandemic times and that first really big wave of depletion of Native Hawaiians.

Lei goes on to say that for whatever reason Hailama and his brother left or were taken from Nihoa:

...and so it’s just him and his older brother, nine and around 11, not sure how old they are, not sure of their parents, and they’re evicted to Ni‘ihau first; and no real names. So it’s not unusual that when he came here [Ni‘i hau, Kaua‘i], one of the names that he acquired was ‘Nihoa’. So, he [Hailama] lives on Ni‘ihau for a while and then makes his way to Kalalau, him and the brother. And they probably were like in their ‘ōpi‘o years or young years, you know, maybe teens or twenties. And then he meets my great-great,-great grandmother inside there [Kalalau Valley, Nāpali Moku, Kaua‘i Island]. Their marriage is recorded in Kalalau and then they move out of Kalalau and live on her family ‘āina here.

“Here,” is Land Commission Award (LCA) 9179, ‘āpana 1 of 1, awarded to Kaukapawa, in the ‘ili of Koia, ahupua‘a of Hā‘ena, Moku of Halele‘a, on the northern shore of Kaua‘i Island (Buke Mahele vol.4:45). The house depicted in LCA 9179 dates to 1851, and is in a slightly different location than the hale pili in the photograph from a few decades later.

Hailama made a place for himself in Hā‘ena, with his wife Huaka‘i, and he became renowned as an ‘uahi bearer. ‘Uahi bearers in Hā‘ena climbed the steep back side of the pu‘u Makana with long pāpala (20-30 foot bundles that Hailama dried his under his house). Lei Wann said there “they would call the winds and the winds would respond, one of the winds they would call is a Kēhau wind.” The ‘uahi bearers would then light fire to the dry and hollow pāpala brands, hurling them off the peak of Makana where the winds would catch pāpala; “it blows in the wind, sends the embers off the back and a trail of fire across the sky as it floats through the winds and could go all the way out to the ocean.”

The last ‘uahi ceremony at Makana was held in 1924 to honor Queen Emma’s ship that was passing off the coast of Hā‘ena, and it was watched by Lei Wann’s Great Uncle Charlie and her grandmother. At that time there were three ‘uahi bearers; Hailama, his apprentice La‘amaikahiki (whose mother was first cousin to Huaka‘i) and Kalei, a fisherman who lived in the area where the Hui Maka‘āinana o Makana is now.

What is very interesting and unknown, is if the Native Hawaiian traditional cultural practice of ‘uahi is from Nāpali, Hā‘ena, the NWHI or a combination thereof. According to Lei Wann:

...everyone that talked about or talks about Hailama expresses him as an “unusual man,” someone that could do things that were semi out of the ordinary and semi unusual. And so, I don’t know whether he learned the art of ‘uahi out on the Northwestern Hawaiian Islands. Or he learned the art of ‘uahi in Nāpali at Neki or Kamaile. But when he comes to Hā‘ena he becomes a profound ‘uahi bearer.

Hailama was also an experienced seafarer. He had a sailing canoe, a wa‘a, that he kept in a canoe hale (house) at the beach atop a standing sand dune, which is along the channel where Limahuli stream meets the sea. Lei Wann’s grand Uncle Charlie recalls this wa‘a sitting upside down on a rack in the hale wa‘a, and it was said it survived the 1946 tsunami but was buried by the 1957 tsunami where perhaps it sits buried still to this day. Although her grand Uncle Charlie never saw the wa‘a rigged with a sail, or even upright, Lei Wann’s family remembers that in Hailama’s earlier years in Hā‘ena he would leave with his wa‘a from the channel that Lei Wann’s ‘ohana calls Kionolua,

Hoea which is a name other people associate with the reef right there in front of the spring. The mouth is to the right. Hoea is the channel to the right. Kionolua is the channel he [Hailama] left from. He would fish all down Nāpali coast--our family used to fish all down Nāpali coast--come back up, and then he would go back to Nihoa. There’s accounts of him traveling back to Nihoa. ...he would leave

from there to Nāpali, and there's accounts he left and went back to Nihoa at one or two times, maybe more.³

Because of his origins on Nihoa, Hailama had skills and traditions, and perhaps “old ways” that Lei Wann had noted, marked him as ‘unusual.’ She shared one of those skills, which relates to the gathering of wai (fresh water) off the coast of islands, which would have been a critical skill for those who lived in the NWHIs. Lei Wann’s grandmother mentioned that Hailama:

... used to do this unusual thing when he was collecting water; like, if they went fishing in Nāpali, she said that he learned this while living on Nihoa. I guess there’s a way he knows when there’s underwater springs, like water bubbling-- water coming out of the spring and either around a cave area. And he would take an ipu [gourd] and turn it up and then bring it down with him, swim it down to the bottom. And in Nāpali he would turn it over underwater and fill it up with fresh water and cover it and swim it up like this [holding her hand flat over her fist], you flip it; the water doesn’t add salt. That’s how she said he used to collect water, as a kid, on Nihoa. That’s where he got that art from. So everybody is wondering, how they [Hawaiians in NWHI] got water, “they were drinking bird water,” but it wasn’t so. They were drinking pretty clean water because they were diving down and collecting fresh water in places.

Lastly, we’d like to retell Lei Wann’s story of Hailama’s ingenuity and ocean skills, immortalized in the mele *Hula O Makee*, by William S. Ellis (Elbert and Mahoe 2009:55).

‘Auhea iho nei la ‘o Makee
A ka Malulani la e huli hele nei
Aia aku nei kahi i Kapa‘a
Ka waiho kapakahi i ka ‘āpapa

*Where is the Makee?
The Malulani looks everywhere
There she is at Kapa ‘a
Keeled over on the reef*

‘O ke kani honehone a ke oeo
A e ha‘i mai ana la i ka lono

*Softly sounds the whistle
Telling the news to be heard*

³ When our interviewer asked if it was more than two times Hailama sailed to Nihoa and back to Hā‘ena, Lei Wann could confirm only two *known* times, but didn’t dismiss the possibility there could have been more.

‘O ka hola ‘umi ia o ke aumoe
Kā‘alo Malulani mawaho pono

*Ten o'clock at night
The Malulani passes by*

Kū mai Hailama pa‘a i ka hoe
Imua a i hope ke kulana nei

*Hiram⁴ stands by and grasps the paddle
Bow to stern it careens*

Ākea ka moana nou e Makee
Ma ke kai holuholu o ka ‘Ie‘ie

*Broad is your ocean o Makee
And the swaying seas of ‘Ie‘ie*

Ha‘ina ‘ia mai ana ka puana
‘Auhea iho nei la ‘o Makee

*Tell the refrain
Where is the Makee?*

In some accounts Lei Wann says Hailama at some time was involved in sugar, and she thinks it was at the Makee mill in Kealia; at other times Hailama has been called a Captain or a shipman. These two roles intersect when the ship Makee wrecks off of Kapaa. According to the Wann family story “the ship [Makee] was stuck out for several days and nobody knew what to do.”⁵

Here Lei Wann explains, “we kind of get a sense again of his unusualness because in some stories they list him as a captain or a shipman, but he was more of a voyager or a navigator,” she surmises perhaps its poetic license they took in the lyrics because she goes on to say,

But the story in our family, he was here in Hā‘ena at the time [of the wreck]. And they came at night, drove at night on cart and horse to find Hailama, because for days it [the ship *Makee*] was stuck and nobody knew what to do. So, they said, ‘Go get that unusual man in Hā‘ena.’

⁴ ‘Hiram’ is a transliteration of Hailama. It is possibly Hiram was the Captain of the Malulani (Elbert and Mahoe 2009:55).

⁵ An account of the Makee’s beaching can be found in the article *Kokoke e Poino ke Kimo Maki*, in the Hawaiian language newspaper “Ka Maka‘āinana”, on January 4, 1897.

So, they come and at night to gather him [Hailama] from here in Hā'ena, and they get him and take him back through the night. And in the morning, he gets an idea of what's happening and watches it [the shipwreck] and then at some point he decides, he says, 'Oh, wait for the tide.'

And the tide comes. He waits for the tide and he uses a series of ropes and he walks it off the reef.

So that's how they got it off the reef. And then of course, you know, as Hawaiian should be, they turn it into love mele of rocking, you know, the ship off the reef and what not.

What is very unusual and extraordinary is of all the people from Kapa'a to Hā'ena it is Hailama that is called upon to dislodge the *Makee*. He must truly have been a waterman of some skill.

Hailama and Huaka'i had one daughter, Sarah Ulu Henning Hailama, which is the mother of Lei Wann's grandmother; and so the mo'olelo has been passed down through generations of their 'ohana and now shared here with us. Mahalo nui to Lei Wann, her sister and 'ohana who kept their traditions and mo'okū'auhau, and who made the choice and took the time to share with us the story of Hailama, one of the last sons of Nihoa.

Nā Moku 'Aha

Kupuna Eddie Ka'anā'anā was interviewed in 2007 as part of a consultation pertaining to the Northwest Hawaiian Islands Reserve and Sanctuary status determination. "Nā Moku 'Aha" is another name for PMNM that was shared by Mr. Ka'anā'anā, who recalled the name Nā Moku 'Aha as the old name for the Northwestern Hawaiian Islands (Maly 2003:1218; Kikiloi 2012:71). Mr. Ka'anā'anā's interview is included in a series of oral history interviews conducted by Kumu Pono Associates from 1977 through 2003, and compiled in the second volume of *Ka Hana Lawai'a A Me Nā Ko'a O Na Kai 'Ewalu, A History of Fishing Practices and Marine Fisheries of the Hawaiian Islands* (Maly and Maly 2003b:1200-1248).

Kupuna Eddie Ka‘anā‘anā recalls learning the purpose of families voyaging from the southern region of Hawai‘i island to Ni‘ihau and to Nihoa (note, translations in brackets done by the author):

Hele lākou i kēia ‘āina Manamana, hele lākou i Nihoa. [*They go to this place named Manamana, they go to Nihoa*] And we figure, from the place I come from, Hawai‘i, what, why do they have to go over there? Forget this fish or whatever they do over there, when we have all the fish over here. But we don’t ask questions. We were not supposed to ask questions. But you hear stories, they did go over there.

Well, mai Kapalilua, hele lākou a hui lākou me nā ‘ohana o Ni‘ihau. A noho lākou i ka ‘āina o Ni‘ihau, a ma laila hele aku la lākou i laila. Ka po‘e holo moana. [From Kapalilua, they go and meet with family members from Ni‘ihau. They stay on Ni‘ihau, and from there they depart. The voyagers.] So the story that you hear of our people, they are seafaring people, our navigators. The sun, the stars, and they go over there, it’s just like a training area for them


Then you wonder, why are they going to those islands? That’s just like a part of their training, po‘e holo moana [voyagers]. (Maly and Maly 2003b: 1218)

The traditional training practice shared above is aligned with previous accounts of voyaging between the Main Hawaiian Islands and PMNM. It is testament to the many small, unpublished accounts retained by Hawaiian families.

Ulua⁶ on Nihoa

Kāwika Kapahulehua, a kūpuna from Ni‘ihau and former captain of Hōkūle‘a describes the extremely seasonal practice of the lawai‘a Ulua (traditional Ulua fishing practices) on Nihoa. The same eight men would prepare their canoe, ti leaf rain jackets, ‘umeke (calabash) of salt, and other handmade tools to make the sail up to Nihoa at the time of the seasonal wind shift for a one-week trip. Once on the island, they would use what bait they could catch to lure in the

⁶ Ulua is a genus of *crevalle*, also jack, or pompano.



Ulua which was speared and hoisted onto the rocks. The fish was then cut, salted, and dried the next morning for transport back to their home community (Maly and Maly 2003: 1150-1152).

He inoa no Nihoa

We conclude our Cultural Historical overview with these last accounts of continued connections of individuals and families to Nihoa and the waters of Papahānaumokuākea. At the turn of the last century these accounts are testaments to the persistence of ocean roads through time. These Hawaiians, visiting Nihoa in the 1800s and early 1900s were not merchants, large-scale fishing or whaling ventures, ali‘i or dignitaries, these accounts were of every day, yet extraordinarily skilled, Hawaiians who continued their cultural and familial traditions, maintaining deep connections to the NWHIs even during historical times. Our research team believes, like the Wann ‘ohana’s story of their kupuna Hailama, that there are more such mo‘olelo, held closely by families, that might one day be shared; so expanding our awareness of the enduring relationships of Hawaiians to the seas between and the islets of Papahānaumokuākea.

Community Consultation

Community consultation efforts for the CIA and LA spanned from January to April 2023. The consultation methods included questionnaire distribution, email exchanges, presentations, and individual and group interviews, with knowledgeable individuals with lineal/cultural connections to Papahānaumokuākea. Nohopapa Hawai‘i also delivered invitations to consultation via a remote meeting with the Cultural Working Group (CWG) on 12/22/2022, and the NOAA Section 106 consulting parties group on 1/24/2023. An invitation to consultation and informational sheet regarding Nohopapa’s purposes, goals, and intentions for the CIA and Legal Analysis was provided to 154 potential consultees and organizations on 01/05/23.

In total, 34 individuals including two (2) representing the office of Hawaiian affairs, confirmed their interest to participate in CIA and Legal Analysis consultation. Of the respondents, 25 individuals completed the consultation process. 20 consultees elected to provide their mana‘o by completing either a Google document questionnaire or Word document questionnaire. One consultee participated in an individual interview on 2/07/2023. Mike and Kaikea Nakachi were interviewed on 02/01/23. One group interview with Kealoha Pisciotta and Akoni Palacat-Nelsen occurred on 02/02/23.

Of the 25 of individuals consulted, 11 wished to remain anonymous. Information with the potential to compromise anonymity was edited from the responses of individuals who wished to remain anonymous. Hawaiian language punctuation was inserted into ‘ike and mana‘o provided during verbal interviews and group talk story sessions. Out of respect for their voice, perspectives, and preferences, Hawaiian language punctuation was not inserted into ‘ike and mana‘o consultees provided in writing.

Table 4. Papahānaumokuākea CIA and LA Consultation Participants

	Participant Name	Participant Affiliation	Consultation Type
1	Anonymous	Maui organizational and personal affiliations to Papahānaumokuākea	Questionnaire

	Participant Name	Participant Affiliation	Consultation Type
2	Anonymous	Graduate student at the University of Hawai‘i involved in stewardship and research at Papahānaumokuākea	Questionnaire
3	Anonymous	Works in higher education; Involved in the Cultural Working Group (CWG)	Questionnaire
4	Anonymous	Cultural and genealogical connections to Papahānaumokuākea; Involved in the CWG	Questionnaire
5	Anonymous	Lineal and cultural connections to Papahānaumokuākea and Edith Kanaka‘ole Foundation as their affiliation	Questionnaire
6	Anonymous	Pilina to Papahānaumokuākea as long-standing involvement in marine resource management using approach selectively combining traditional knowledge systems with Western science	Questionnaire
7	Anonymous	Professional and personal connections to Papahānaumokuākea and Edith Kanaka‘ole Foundation as their affiliation	Questionnaire
8	Anonymous	Graduate student at the University of Hawai‘i involved in stewardship and research at Papahānaumokuākea, cited Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) as their affiliation	Questionnaire
9	Anonymous	Voyaging connections to the PMNM; Polynesian Voyaging Society and Niu O‘ahu as their affiliation	Questionnaire
10	Anonymous	Cited personal and previously professional connection to Papahānaumokuākea	Questionnaire
11	Anonymous	Long-standing involvement with the stewardship and protection of Papahānaumokuākea	Interview

	Participant Name	Participant Affiliation	Consultation Type
12	Akoni Palacat-Nelsen	Personal, cultural, organizational, and professional connections to Papahānaumokuākea, including Kealakekua Bay Cultural ‘Ohana and Ale‘ale‘a Heiau in South Kona, Nā Hoa Aloha o ka Pu‘uhonua ‘o Hōnaunau, South Kona, and Public Policy Advocate at the OHA	Interview; w/Kealoha Pisciotta
13	Kealoha Pisciotta	Personal, cultural/stewardship, organizational, and professional connections to Papahānaumokuākea, including their role as Public Policy Advocate at the OHA, and with Mauna Kea Anaina Hou, and Kai Palaoa	Interview; w/Akoni Palacat-Nelsen
14	Brad Ka‘aleleo Wong	Personal, cultural, and professional connections to Papahānaumokuākea, including sailing, marine conservation, and fishing; former Office of Hawaiian Affairs (OHA) Papahānaumokuākea Program Specialist	Questionnaire
15	Catherine Fuller	Personal, cultural, and organizational connections to Papahānaumokuākea, including navigation, voyaging, and the Polynesian Voyaging Society as their affiliation	Questionnaire
16	Chadd Paishon	Personal, cultural, and organizational connections to Papahānaumokuākea, including navigation, celestial observation, and ceremony; affiliated with Na Kalai Wa‘a Moku o Keawe	Questionnaire
17	Hōkū Pihana	Personal and professional connections to Papahānaumokuākea, including “Native Hawaiian outreach education, resource management, cultural practices, research.”	Questionnaire

	Participant Name	Participant Affiliation	Consultation Type
		Affiliated with Mokupāpapa Discovery Center.	
18	Isaac “Paka” Harp	Makani Hou o Kaloko-Honokohau as affiliation and connection to Papahānaumokuākea as maoli koko/maoli kuleana	Questionnaire
19	Kēhau Springer	Personal, cultural/stewardship, organizational, and professional connections to Papahānaumokuākea	Questionnaire
20	Kepā Maly	Pilina with Papahānaumokuākea as owner of Kumu Pono Associates and “Ethnographers and interviewers of Kūpuna who had personal knowledge of the Moku Manamana/Moku Papapa region (“Papahānaumokuākea”).”	Questionnaire
21	Onaona Maly	Pilina with Papahānaumokuākea as owner of Kumu Pono Associates and “Ethnographers and interviewers of Kūpuna who had personal knowledge of the Moku Manamana/Moku Papapa region (“Papahānaumokuākea”).”	Questionnaire
22	Mike Nakachi	Personal, cultural, and professional connections to Papahānaumokuākea, including as Kahu Manō	Interview; w/ Kaikea Nakachi
23	Kaikea Nakachi	Personal, cultural, and professional connections to Papahānaumokuākea, including as Kahu Manō	Interview; w/ Mike Nakachi
24	Nai‘a Lewis	Cultural, stewardship, and professional connections and kuleana to Papahānaumokuākea	Questionnaire
25	Pelika Andrade	Na Maka Onaona Maly and connections and kuleana to Papahānaumokuākea as personal, cultural, and professional	Questionnaire

He Leo Mahalo

Nohopapa Hawai‘i would like to mahalo the individuals and organizations who shared their precious time, memories, and mana‘o for this study. Without their willingness to share personal recollections, stories, and recommendations, this important study would not have been possible. The mana‘o that was shared will help to mālama Papahānaumokuākea for future generations to better understand, appreciate, and cherish the uniqueness of these kūpuna islands and their connected sky and sea-scapes.

Community Mana‘o Synthesis

Interview summaries were reviewed and synthesized below for ‘ike and mana‘o regarding:

Mo‘okū‘auhau

- Consultees’ identities and personal, professional, and other kinds of connections to Papahānaumokuākea
- The access kuleana (e.g. marine resource management, lawai‘a, ceremony, education, resource gathering, special use, research, etc.) consultees have within PMNM
- Consultees’ historical and genealogical relationship to Papahānaumokuākea
- Travels to Papahānaumokuakea, including cultural practice(s) consultees, their ‘ohana and kūpuna have done or do in Papahānaumokuākea

Cultural Resources, Practices, Beliefs, and Connections

- Connections between Papahānaumokuākea and the main Hawaiian Islands.
- Affects, if any of the health of Papahānaumokuākea and its ecosystems on the main Hawaiian Islands
- Cultural and spiritual connections between Papahānaumokuākea and the main Hawaiian Islands
- Cultural resources, practices, and/or beliefs consultees associate with Papahānaumokuākea and the surrounding sea- and sky-scapes.
 - Including wahi kūpuna resources, practices and beliefs identified; their location(s) within the broad geographical area in which the proposed

action is located, as well as their direct or indirect significance or connection to/with the project area;

- Details regarding Native Hawaiian traditional cultural resources, practices, and/or beliefs (*e.g. location, seasonality, lifespan, etc.*)
 - Recommendations to mitigate or avoid impacts and make pono decisions regarding management
 - Considerations of any conflicting information, in regard to identified cultural resources, practices and beliefs.
- Cultural resources, practices, features, and/or beliefs with the potential for loss or obliteration by proposed project.
- Areas critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities
 - Including a discussion of the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, potentially affected directly or indirectly by the proposed project;

Oral Traditions Associated with Papahānaumokuākea

- Akua affiliated with Papahānaumokuākea
- Mele, mo‘olelo, oli, ka‘ao, and/or significant inoa ‘āina (place names) of Papahānaumokuākea that are key to cultural understandings and interactions with the ‘āina and/or the relationship to the pae ‘āina.

Preservation and Management Concerns and Recommendations

- How can cultural practices be integrated into resource management and/or restoration today?
- Adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary recognized by consultees
- Whether consultees support, oppose, or have concerns about the proposed National Marine Sanctuary designation
- If consultees have any preferred alternatives to the proposed action - sanctuary designation for Papahānaumokuakea

- Which of the proposed sanctuary boundaries consultees support or if they have suggestions for other sanctuary boundaries
- Any preferred or desired mitigation measures relative to the impacts proposed by the sanctuary designation
- Short or long-term concerns regarding the project
- Role(s) envisioned to mālama Papahānaumokuākea and the proposed National Marine Sanctuary designation
- Traditional or local strategies recommended for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation

Mo‘okū‘auhau

Consultees’ identities and connections to Papahānaumokuākea (personal, professional, and other types)

Consultees who wish to remain anonymous as well as those who felt comfortable disclosing their names discussed their identities and connections to Papahānaumokuākea. One individual cited their Maui organizational affiliations as their connection to Papahānaumokuākea, further characterizing their connection as personal. Two participants are graduate students at the University of Hawai‘i (UH). One shared their connection to Papahānaumokuākea was first as a student and mentor, then as a research cruise participant, program coordinator, and finally, as a Native Hawaiian alternate seat member for the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council.

Another works in the UH System and is involved in the Cultural Working Group. They stated:

I am moved by the professionals who are working in that space to help support their/our activities there to mālama Papahānaumokuākea. In this personal capacity, I have also become involved with the Cultural Working Group, ensuring that Hawaiian voices, language, culture, and perspective are placed at the forefront in efforts to manage, conserve, and share the mo‘olelo of

Papahānaumokuākea. Spiritually and genealogically, as a Kanaka who recognizes the ancestral connections we have to that space.

One anonymous consultee described their affiliation to the PMNM as the Cultural Working Group, and their connection to PMNM as cultural and genealogical. Another participant listed the Polynesian Voyaging Society and Niu O‘ahu as their affiliation and described their connection to Papahānaumokuākea as through experiencing voyaging to the PMNM. Two individuals shared their affiliation as the Edith Kanaka‘ole Foundation (EKF). One defined their connection to Papahānaumokuākea as cultural while the other characterized theirs as professional and personal. Another participant detailed their connection to Papahānaumokuākea, with pilina (relationships, connections) that began when they were a teenager in the UH system, “stepping into the kai pāpa‘u of what integration of traditional knowledge systems and western science really means and more importantly, how do we apply that in research approach supporting effective community-based marine resource management? That started my journey as a Kānaka ‘Ōiwi scientist wanting to better understand our marine ecosystems through a Hawaiian worldview.” They described their participation in an “Ola Nā Iwi course immersed in ‘Ōlelo Hawai‘i conducting archival research of Kuaihelani and then getting to go there and breathe life into our ‘Ōlelo Makuahine,” as “a profound experience”. Through mentorship and non-profit work, the individual journeyed to Nihoa, Mokumanamana, Lalo, and ‘Ōnūnui/‘Ōnūiki on the Papahānaumokuākea Intertidal Research Cruises. They also participated in a research journey to Nihoa and hiked on the island. The individual stated:

From ‘Ōlelo Hawai‘i, to being able to eat ‘opihi, hā‘uke‘uke, and fish caught on the journey to Papahānaumokuākea, and the many hō‘ailona this special place has shown me over the years has strengthened my pilina to Papahānaumokuākea. I will spend the rest of my life supporting a collective pilina and kuleana to ensure the voice of ‘Ōiwi are always at the forefront of guiding co-management.

An anonymous individual described their connection to Papahānaumokuākea as personal and previously professional. Another shared the history of their connection to the PMNM, “as part of that original hui that lobbied and pushed for the creation of the Northwestern Hawaiian Islands Coral Reef Ecosystem.” They continued:


So that was under President Clinton and the governor at the time was Linda Lingle. She was being lobbied by the Western Pacific Fisheries Management Council, who really had the jurisdiction on fishing up there and did not want to see any type of protections or incursions into their jurisdiction. Later, I was chairman of the RAC, the Reserve Advisory Commission, several times over the 20 plus years. And just recently rotated off the RAC on January 1st (2023). There is a kūpuna council that's being set up in I've been asked to serve on that. Rallying for the Monument to be expanded played a role in that. Also, Chairman of the first Hawaiian Cultural Working Group." They elaborated on their real connection: "After seeing all of those things was just being in the shadow of Uncle Walter Paolo, Uncle Eddie Kaanana, and Uncle Buzzy Agard, three kūpuna. And I also have to mention two others, Uncle Kawika Kapaleihua and Uncle Val Ako. Five kūpuna who influenced the early sort of cultural foundation of the Northwestern Hawaiians Reef Ecosystem, which became the Papahānaumokuākea National Marine Monument, which hopefully will transition into a Papahānaumokuākea National Marine Sanctuary.

Akoni Palacat-Nelsen described his affiliations:

The first one would be on a personal level which would be the Kealakekua Bay Cultural 'Ohana which maintains heiau practices at Hikiau, Hale o Keawe, and Ale'ale'a Heiau in South Kona. Also, the Nā Hoa Aloha o ka Pu'uhonua 'o Hōnaunau which maintains descendants' 'ike kūpuna from descendants of Keawe from South Kona. My third affiliation would be my professional affiliation with the Office of Hawaiian Affairs (OHA) as a Public Policy Advocate through the Community Engagement Division working out of West Hawai'i on Hawai'i Island.

He shared that his connection to Papahānaumokuākea started on a professional level with OHA, which personally and simultaneously connected him on a spiritual level:

OHA, being a trustee of Papahānaumokuākea, I was asked to support OHA's function and responsibilities to the Cultural Working Group (CWG), which is an advisory group to OHA. OHA's role in supporting and facilitating advice from the



CWG so OHA is able to respond to some of their responsibilities on the different boards and responsibilities within Papahānaumokuākea’s construct. So given that, I also have a personal affiliation, not physically, but more spiritually through some of the work that members of the lāhui spent time out there during the Polohiwa a Kāne. As well as, other solstice and spiritual connections at Papahānaumokuākea and being able to connect to those ‘ike kūpuna that come out of that Pō region of Kāne. So, pretty cool dynamics where my connection to Papahānaumokuākea started off professionally and then being able to connect to it on a spiritual level.

Akoni Palacat-Nelsen added: “Our ‘ohana also received feathers for our Lono Makua from Papahānaumokuākea. So, they currently reside on our Lono Makua during the season of Makahiki. And so again, another personal affiliation to Papahānaumokuākea.”

Kealoha Pisciotta stated:

I have two Native Hawaiian organizations both have been recognized in the past in federal consultations, as well. The first is Mauna Kea Anaina Hou, which is our Mauna Kea group. And the second is Kai Palaoa, which is the ocean group, mauka-makai.

Kealoha Pisciotta described her professional affiliation as a Public Policy Advocate at OHA. On a personal level, Kealoha Pisciotta said her relationship to the PMNM extends back to her childhood and is intertwined with her relationship to sila (*monk seals*). She elaborated:

I have worked with monk seals since I was a child, actually. I got kind of looped in in the early days through KAHEA’s campaign with uncle Buzzy and uncle Paka Harp Harp, who did write some of the original white papers for the formation of the protection and for what is now known as Papa. Back then it was referred to as Northwest Hawaiian Islands. The cetaceans and marine mammals are one of the connections that are very important to me and the protection of all of our Kanaloa over there. That’s where it started for me a long time ago. I also was a member of the Cultural Working Group, and honestly, I’ve been a member for a really long time. But sometimes my other kuleana on the Mauna (Kea) took me

away from being able to attend everything and participate as fully as I would like to. Like Akoni Palacat-Nelsen, I have a spiritual connection with temple ceremony in the Polohiwa's from Mauna Kea. I have a mo'olelo from my 'ohana that shares the story of how Mauna Kea and Mokumanamana, and other places in Papa are connected. In doing the ceremonies on Mauna Kea, they do connect directly to the Solstice and Equinox alignments connect directly to Papa (hānaumokuākea) itself. So, there's a spiritual connection. Those ceremonies were kind of brought back to life on Mauna Kea many, many years ago with the Royal Order (of Kamehameha). Uncle Kahu Rotorangi, who's Hawaiian and Maori, and some of the star alignments and through those connections as well.

I participated on the team with Kekuewa in the Pew Charitable Trust Ocean Team to help advocate for OHA to become the fourth co-trustee. And had the honor of joining Kekuewa to speak with President Obama's men, and to help not only expand Papa to give it greater protections, but also to provide for a Hawaiian voice. Since we didn't have an official acknowledgement of having a voice there, even though the State cannot speak for us. They want to, but they're not really lined up to. So, those are my basic connections there. I have advocated/fought the Navy in the sonar cases that the area of potential impact included parts of Papa. Have also participated in the Section 106 consultations with the Navy and they're still ongoing litigation. The concern for Papa is all of the Kanaloas that reside within Papa and including beginning with the coral, and going forward there.

Brad Ka'aleleo Wong was the former OHA Papahānaumokuākea Program Specialist and characterized his connection to the PMNM "[a]s someone with a background in sailing, marine conservation, and fishing."

Chadd Paishon is affiliated with Na Kalai Wa'a Moku o Keawe. He detailed his connection and kuleana within Papahānaumokuākea as:

My connection is through voyaging and the connection to Mokumanamana and our navigational heiau, Ko'a Heiau Holomoana in Mahukona. I was able to make my first connection physically to Mokumanamana as a team headed by Auntie Pualani Kanahale, that traveled there to observe the winter solstice.

Hōkū Pihana described her affiliation with the Mokupāpapa Discovery Center and her connection to Papahānaumokuākea as both professional and personal. Her access kuleana within Papahānaumokuākea is “Native Hawaiian outreach education, resource management, cultural practices, research.”

Uncle Isaac “Paka” Harp listed Makani Hou o Kaloko-Honokohau as his affiliation. He stated his connection to Papahānaumokuākea as maoli koko/maoli kuleana, and expanded:

I drafted a management plan leading to the Coral Reef Ecosystem Reserve designation in December 2000. I was kākō‘o to the late Louis “Uncle Buzzy” Agard, Jr. who had an agreement with the military to maintain a military runway in exchange for exclusive fisheries access around Tern Island. Uncle Buzzy fished the NWHI since 1946.

Kēhau Springer shared the history of her connection to Papahānaumokuākea:

I first connected to Papahānaumokuākea as an undergrad student when Kekuewa Kikilo (working for NOAA PMNM) who came to speak to our internship program about the NWHI and its cultural significance, prior to that, I would read a little about the place in articles but didn’t have much context. My first hands on experience into pō, was in 2009 when I was a graduate student in the 1st cohort of the Kū‘ula (Traditional Hawaiian Marine Management) course at UH-Hilo. We were so privileged to go to Pihemanu. That course and trip changed my life. I forged lifelong bonds with my classmates as we shared a beautiful experience learning from our kumu, cultural practitioners and from ‘āina/kai. While in graduate school at UH-Hilo, I studied intertidal ecosystems and ‘opihi where I would survey and monitor ‘opihi as part of my thesis research at Kalaupapa National Historical Park. I was invited to other communities across Hawai‘i to also support monitoring efforts. I would work with scientist, communities, and managers to set up and monitor the intertidal ecosystems. Our close hui included managers from PMNM, so I was fortunate to become a researcher and principal investigator on the Intertidal cruise and visit the kūpuna islands in 2011-2015.


I also participated in workshops aimed to develop and refine inquiry and cultural practice methods, activities and measures for inclusion in the Native Hawaiian Plan text for Papahānaumokuākea Marine National Monument. The workshop was held on Pihemanu (Midway) in November 2012 and included place-based, experiential meetings, workshops that utilized māka‘ika‘i, hana no‘eau, pule and kūkākūkā.

Uncle Kepā and Aunty Onaona Maly, the owners of Kumu Pono Associates, described their connection with Papahānaumokuākea as “[e]thnographers and interviewers of Kūpuna who had personal knowledge of the Moku Manamana/Moku Papapa region (‘Papahānaumokuākea’).”

Mike Nakachi and Kaikea Nakachi provided information on their affiliation and connections to the PMNM in a joint interview. On the West side of Hawai‘i Island, Mike Nakachi and his ‘ohana own their company, Moana ‘Ohana, where kilo is done on a daily basis from the ocean. He shared that their mo‘okū‘auhau dates back to Kaluahea to Kekaulike through Kamehameha Nui and reaches to the last generation of his son, Kaikea Nakachi, and his daughter, ‘Alohi. He mentioned their last name, Nakachi, is from the Uchinanchu side of their ‘ohana.

Kaikea Nakachi stated that their practice and genealogy are recently learned:

The kanaka side is on my grandpa’s side, my dad’s dad who has since passed, but his mother was the Hawaiian side, and she passed when he was only a kid. So, a lot of that information as far as if we did have a more direct lineal or mo‘okū‘auhau tied connection to Papahānaumokuākea was lost. Grateful that my great, great grandma’s first cousin was still alive to teach my grandpa and my dad a little bit more about our family’s role as Kahu Manō. That’s something we’ve more recently learned and tried to implement our practice here. But knowing that we had many generations in Maui specifically as Kahu Manō. Again, that’s the care for patron sharks around Maui. We know that they’re constantly moving. That we come from a line of Kahu Manō that would’ve taken care of sharks, both Maui and across the pae ‘āina that would have visited Papahānaumokuākea, whether our ancestors went there or not. So, there’s a chance there was a more direct connection. But even indirectly, there is that connection of caring for manō while they’re here in the pae ‘āina. And then, them probably traversing into Papa



(hānaumokuākea) on their own. And most Hawaiians, whether they know it or not, are connected to Papa. Many of the i‘a species population centers actually are up in Papa. So, whether you’re harvesting or hānai, mālama certain ko‘a, you may be inadvertently connecting yourself to that lineage of i‘a, too.

Mike Nakachi discussed their ‘ohana connection to manō:

We lived in Ko‘olau Poko in the ahupua‘a of Waimānalo. When I was in the 3rd grade, my dad was lost at sea for 30 hours in the Kaiwi Channel. Eventually he gets rescued by the Coast Guard. He’s all pāpa‘a, not from the sun, but from the gas that was around the boat. A few months later, we had a big family reunion with Uncle Lawrence Aki and Aunty Pilahi Pākī walked in. I’m maybe 8 years old at the time and I never forget her look of seriousness. At the top of her voice she says, ‘Leimakani.’ My dad’s middle name is Leimakani. She told everyone to be quiet and then she pule. She did an oli and did different things that we were like, “Whoa, what’s going on here?!” We didn’t even know what Hawaiian language sounded like as an eight-year-old. She told us things of our ‘ohana and showed us our whole genealogy chart, where we come from, and then what happened with my dad.

She told my dad when he was born in 1932 on the shores of Māla, what his mom and Aunty Pilahi was there to authenticate that they did an oli, a pule, and they offered ho‘okupu. When my dad was born, the manō showed up. Not any manō, but their manō. And that manō, she believes, was watching over my dad in the ocean. My dad having no understanding of this, did not know this story. And that was, I think, a life-changing experience for me that then kind of gave my na‘au, and moral compass a direction of which way I needed to go. And I haven’t wavered. We have done all kinds of things in the main pae ‘āina to try and advocate for our manō or for the lāhui’s manō. For manō kānaka. And I think that that was probably the most pivotal moment in our life that then has even influenced my children.

Pelika Andrade shared her affiliation is Nā Maka Onaona Maly and described her connections and kuleana to Papahānaumokuākea as “All of the above.”

Access kuleana consultees have within PMNM

Consultees who wished to remain anonymous as well as those who felt comfortable sharing their identities recognized an array of access kuleana within the PMNM. Two anonymous individuals identified theirs as research. Another described theirs as ceremony. Nai‘a Lewis’ access kuleana within Papahānaumokuākea was formerly management.

The majority of consultees listed multiple access kuleana that topically overlapped or were embedded within each other. One individual stated their access kuleana is through marine resource management, lawai‘a (shoreline), and research. Two others identified theirs as education and marine resource management and research and ceremony, respectively. One participant listed their access kuleana within the PMNM as: “ceremony, voyaging, education, resource gathering, and resource management.” Chadd Paishon’s access kuleana is education, non-instrument navigation, and voyaging. Uncle Kepā and Auntie Onaona Maly described theirs as “education, research, and preservation/stewardship”. An anonymous individual explained: “[m]y access kuleana is centered around voyaging which is related to education, ceremony, special use, and research...” Another individual described their PMNM access kuleana:

As a member of the RAC in the Native Hawaiian alternate seat, I have kuleana to provide recommendations about current and prospective management and research activities in Papahānaumokuākea and to voice concerns about culturally sensitive issues so they’re discussed and acknowledged. As a researcher and former PMNM staff member, I have experience accessing most islands in Papahānaumokuākea and I have training needed to support various research operations. I’m also experienced leading outreach and educational lessons for PMNM within local communities. As a lifelong student of lawai‘a, I have a kuleana to understand the distribution and condition of marine resources throughout the pae ‘āina and apply knowledge of these resources to improve and test my lawai‘a skills. As an educator, I have a kuleana to share my experiences and perspectives about Papahānaumokuākea to help future generations of Hawaiians build a relationship with this place.

Akoni Palacat-Nelsen said:

My professional role with the OHA is to sit on the permitting committee that would advise the MMB [Monument Management Board] committee or the decision makers of all the permits that take place. All activity requires permit for Papahānaumokuākea. Being part of the initial review process, that's the kuleana I feel is super important as to one, making sure there is transparency. As well as accountability and responsibility for stewardship. And that data that's provided from these researches or accesses and reports that come out of all of these accesses be taken into strict consideration and be part of an ongoing decision-making process. I'd like to think that that's the kuleana we have as an agent for the Office of Hawaiian Affairs. I take that quite seriously. As far as the personal level, my commitment since I was six years old to the heiau is about maintaining wahi pana and the cosmogonic connections to our ancestors. I think it's important that we understand and fulfill those obligations as well to our ancestral cycles.

Regarding access kuleana, Kealoha Pisciotta stated that she serves as alternate CEO and chair of OHA and sits on the MMB which is a governing and decision-make board for Papahānaumokuākea. She mentioned she has not had the honor to go, physically, to Papahānaumokuākea and also said:

Even some of the kupunas that have been doing all this work for all these years, they have not been allowed or not had an opportunity to even go out there. Many of them take the position that no human footprint is good, too. I also do believe though, that many of our species have symbiotic relationships with kānaka because of our history of living with them in a more harmonious way. I also consider kānaka as a part of the landscape, but I do understand that certain sacred areas need to be revered in a specific way and to maintain their sacredness. And that's some of the challenge of the science versus culture, even though it should not be versus. It's just that scientists haven't quite begun to understand how our 'ike kūpuna is science. It meets the requirements of science. It's measurable, it's repeatable, so on and so forth.

Catherine Fuller's access kuleana is special use and voyaging. She discussed her connection to Papahānaumokuākea:

As a Native Hawaiian, I consider the islands to be a sacred cultural site because of the evidence of habitation and use by our kūpuna as well as their place in ao and pō. As a citizen of the Hawaiian Islands, I think of them as a place of hope, reminding us what a pristine marine ecosystem looks like. Papahānaumokuākea is a living treasure held in trust for all of Hawai‘i. As a member of the Polynesian Voyaging Society who has had the privilege to visit Nihoa, Mokumanamana and Lalo, the islands are a place of learning that our kūpuna used to study navigation. Today, being able to voyage through the islands also provides a way for modern voyagers to learn and perpetuate voyaging as a part of our culture.

Regarding access kuleana within PMNM, Uncle Paka Harp said:


I have no need to go there. My kuleana is to join others to ensure the perpetuation of established protections and to gain additional protections so that the area remains as healthy as possible until the US occupation ends and the area is returned to the rightful State, the Hawaiian Kingdom.

Kēhau Springer described her access kuleana within Papahānaumokuākea: “At the time when I went to PMNM in 2012-2015 for the Intertidal Cruises, I held Native Hawaiian practices permit to gather and harvest invertebrates (‘opihī, hā‘uke‘uke, ‘a‘ama, pūpū) and limu kohu/pālahalaha.”

Brad Ka‘aleleo Wong described his access kuleana within Papahānaumokuākea as “Ho‘okele wa‘a, kilo” [sailing wa‘a and tracking observations].

Consultees’ historical or genealogical relationship to Papahānaumokuākea

The majority of consultees described personalized, nuanced historical or genealogical relationships to Papahānaumokuākea. Some identified direct family connections to the place. One person recognized a historical and genealogical relationship to Papahānaumokuākea, stating “my family name is Nihoa and much of my ancestors are from Kaua‘i.” An anonymous



individual mentioned that all Kānaka Maoli have a genealogical relationship to Papahānaumokuākea. An anonymous individual said:

As a Kanaka, I recognize the genealogical relationship we all have to Papahānaumokuākea as understood in our traditional mo‘olelo. At this moment in time, however, I am unaware of any specific genealogical relationship (specific members of my ‘ohana) that is connected to this space. That is yet to be found.


Another shared:

Currently, I’m unaware of any historical or genealogical relationship to Papahānaumokuākea. I am not entirely clear on my Hawaiian genealogy previous to 1800 and therefore I cannot say for sure. However, knowing that our moku kūpuna are within Papahānaumokuākea, therefore I do have a historical and genealogical relationship to Papahānaumokuākea as a Native Hawaiian and practitioner of voyaging and navigation.

Another person mentioned they have lineal relationships to the PMNM through a kumu and a kupuna mentor as well as more general historical and genealogical relationships “[a]s a Kanaka Maoli and cultural practitioner who understands the wholeness and interconnectivity of the Hawaiian world.” Pelika Andrade stated she and her ‘ohana have genealogical relationship to Papahānaumokuākea. Regarding their historical or genealogical relationship to Papahānaumokuākea, an anonymous individual stated: “Not that I’m aware of in my consciousness, there is certainly connections likely in the subconscious.”

Akoni Palacat-Nelsen shared mana‘o regarding the connections between Native Hawaiians and Papahānaumokuākea:

The ko‘ihonua, the Kumulipo connects us to that wahi, to that region. Also, our ka‘ao of Pele arriving in Hawai‘i and how Kamohoali‘i had steered the family through Papahānaumokuākea all the way down to Moku o Keawe. So definitely there’s a genealogical relationship for many Hawaiians to that, not just myself on a personal level, but for many other Hawaiians historically. As well as afterlife. Kealoha Pisciotta had mentioned where they’re lele points or souls returning to



pō. Or ‘aumākua being deified and then returning to pō. These spaces are really important spiritually to us. And they’re embedded as we all chant our mo‘okū‘auhau upon birth and upon our rights of passages throughout our life. And then death and then rebirth again. It’s important that we recognize these areas in our oli to maintain the symbiotic relationship. I say if anything, if you claim to be kanaka maoli, you have a genealogical relationship to Papahānaumokuākea.

Kealoha Pisciotta agreed:

I would agree in that context. I know they may differentiate according to iwi. But overall, just like Mauna Kea, it’s the same relationship of ao and pō. We are all connected. I do have genealogical and ancestral mo‘olelo because my family is rooted, not only there but also connected to Kaua‘i. Part of the mo‘olelo is that we formed some of our ‘ohana were part of the northern migration to Aotearoa. And it’s connected to Mokumanamana as the northern turnaround of the sun.

Hökū Pihana shared: “As Kanaka ‘Ōiwi Papahānaumokuākea is part of my mo‘okū‘auhau and as a kia‘i moana, marine steward. In 2012, our hui studied the wahi pana of Papahānaumokuākea and have since participated in the naming practices as a PMNM cultural working group participant.”

Uncle Paka Harp stated:

I served as Chair of the first Native and Indigenous Rights advisory panel to Wespac in the late 1990s. Due to disregarding sustainable fisheries management by Wespac and the National Marine Fisheries Service, I drafted a plan in early 2000 to protect our kupuna islands’ surrounding marine environment and all marine and terrestrial species existing within.

Regarding whether he, his kūpuna, or members of his ‘ohana have been to Papahānaumokuākea Uncle Paka Harp answered: “Not that I am aware of. My kūpuna had more than sufficient marine resources than necessary available to them in the main islands so there would have been no need to go further.”

Uncle Kepā and Aunty Onaona Maly stated: “Onaona Maly shares genealogical connections with po‘e kahiko and the genealogies of the Hawaiian Islands. Kepā, as an ethnographer.”

From a kānaka lens, Mike Nakachi mentioned their connections go back several hundred years, adding “[b]ut then I think from a lens from a manō being here for 450 million years and visiting Kure being the oldest to now Lō‘ihi [renamed Kame‘ehuakanaloa]. That connection between a form of akua or family member that we may know that may be in that realm.” As Kaikea Nakachi mentioned previously, their direct lineal or mo‘okū‘auhau connection to Papahānaumokuākea was lost: “We do know that we have an indirect connection from what we know of our genealogy. And it may further be strengthened if there was a more direct connection too.” Mike Nakachi shared that it’s more of a modern perspective since their first time was in the late 1990s:

I believe there is a connection, but it’s more of a modern day. So as for the kāhiko [ancient] version, I truly believe it is intertwined because we have had wonderful manifestations there in a modern time that was probably a lot more intense and reverent in a kāhiko time. And I’m sure that through koko or through mana, that transformation happened previously.

Nai‘a Lewis mentioned she has broad genealogical ties to the PMNM “[a]s a Native Hawaiian. I would add that as a Native Hawaiian who has worked with the ONMS (Office of National Marine Sanctuaries) offices, I am part of the history of caretaking.” Brad Ka‘aleleo Wong mentioned he’s not aware of historical or genealogical relationships to Papahānaumokuākea.

Travels to Papahānaumokuakea, including cultural practice(s) consultees, their ‘ohana, and/or kūpuna have done or do in Papahānaumokuākea

Over half of the consultees interviewed reported visiting and experiencing Papahānaumokuākea, some of them repeatedly. Some consultees have multiple generations of ‘ohana who have journeyed to the kūpuna islands. Consultees’ descriptions of travels to the PMNM were often

combined with the cultural practices and familial connections they associate with Papahānaumokuākea. Their combined mana‘o is featured below:

An anonymous individual traveled to Papahānaumokuākea to practice “[r]esource management, education, and ceremony.” Another shared that they have journeyed to Papahānaumokuākea and: “As a kanaka maoli, I have a historical and genealogical relationship to Papahānaumokuākea.” Another stated they are the only one in their family to journey to Papahānaumokuākea. One consultee wrote they have a genealogical relationship to Papahānaumokuākea and their ‘ohana have been to the PMNM and practiced “Kilo, lawai‘a on subsistence basis, and ho‘omana.”

Regarding whether they, their kūpuna, or members of their ‘ohana have been to Papahānaumokuākea one person answered: “From what I know, I am the first in my ‘ohana to go to Papahānaumokuākea.” The cultural practice(s) one anonymous individual undertakes in Papahānaumokuākea include “[n]avigation training and ceremony.” One individual shared that they have been to Papahānaumokuākea along with their family. Practices they have done or do in PMNM include the “[s]tudy of stars, sun, and moon as they relate to manamana.” An anonymous individual shared that they have been to Papahānaumokuākea at least six times. They talked about actuating a wide variety of practices “[a]round prayer/contemplation, observation of natural phenomena, ceremony, voyaging, mele composition and performance, naming, story interpretation and telling, and resource collection.”

One consultee explained their family connections to the PMNM:

My father went fishing within the Monument waters prior to it becoming a protected area as well as visited Midway prior to Fish and Wildlife Service (FWS) taking over its management. I was fortunate enough to travel to Midway (Kuaihelani) twice within 2018 as part of a research opportunity considering the future of visitation to Kuaihelani. I was able to connect to Kuaihelani as a cultural practitioner and interviewed several Kanaka ‘Ōiwi to learn of their connections and mo‘olelo to Kuaihelani.


Another individual who wished to remain anonymous talked about practices and huaka‘i (journeys) to Papahānaumokuākea:

Was fortunate to visit Papahānaumokuākea three times. Midway twice, and then Nihoa, Mokumanamana, and French Frigate Shoals on a research cruise. I was fortunate enough to be able to provide ho‘okupu on each of the island on Nihoa, Mokumanamana, and La Perouse at French Frigate Shoals. So, it was a different experience because it was not allowed to bring ho‘okupu from outside the Monument. The compromise was to bring wai which had to be frozen and then allowed to melt and present wai and i‘a from each one of those areas, i‘a ‘ula‘ula. In the case of Nihoa and Mokumanamana was ‘ū‘ū. And in the case of French Frigate Shoals, it was a red ‘uhu. So, I speared them and I presented them along with the wai. I also collected wai at the same time from all three areas, which were then used as ho‘okupu in many ceremonies. Makahiki ceremonies at Mākua at least three or four other ceremonies around the State of Hawai‘i. Very sacred water coming from a very ancestral place.

On their huaka‘i, the individual commented about fishing within Papahānaumokuākea, “No other types of fishing took place, it wasn’t in the permit that’s why. I think it’s important when you talk about the legal analysis that there is a permitting process under the Native Hawaiian permit to conduct cultural activities such as fishing, navigating, and any other culturally appropriate activity. As you go through the analysis, especially Ka Pa‘akai there is a process by which the State and OHA and the other management board managers have allotted for Native Hawaiians who have the means, who have the ability to access the area. There is a process in which that exists and has existed since the beginning of the process for cultural practices.

Kēhau Springer shared that both she and her kāne have been to Papahānaumokuākea and she detailed the relationship she sees all Hawaiians as having with the kūpuna islands:

My kāne and I have been. As kanaka maoli, we all have historical and genealogical ties and relationships to Papahānaumokuākea. In our Kumulipo we know that the first being is the ko‘a and that is our genealogical relationship to the ko‘a and all living beings within our whole pae ‘āina and Papahānaumokuākea.




She detailed a few practices: “We grounded ourselves in cultural protocol, including oli and mele; conducted kilo observations of the lani [sky], honua [land] and kai [beach, ocean]; participated in integrated research of our intertidal and coastal fisheries.”

Mike Nakachi and Kaikea Nakachi stated their family kuleana as Kahu Manō and connection to Papahānaumokuākea is more from a practitioner point of holomoana [sailing]. Mike Nakachi talked about the first time they went to Midway Atoll in 1999 and how it was an honor to take his dad:

We went up there specifically to know that realm of Kanaloa, that all of our islands are connected, and we know that forms of Kanaloa have these pathways that they do navigate. It was actually quite humbling that it was actually opened up to visitors or anyone to go fishing, recreational fishing. It was quite hewa from the first time we went there, seen hāpu‘upu‘u, and kumu, and ula, and all these various things that are there at Midway Atoll, and you could fly in with Aloha Airlines and you could depart. But then also seeing man’s negative impact over time. So, I think with that being said, we really wanted to go there specifically for manō and specifically to honor that realm of Pō and what it represents for spiritual deities to pass from the living realm to that realm, and then have their ability to even come back whether it was to get momona on eating the albatross up there. Whether it was to get momona on enjoying a pu‘uhonua away from man. There’s so many questions that me, Kaikea Nakachi, ‘Alohi, and our family keep having that we don’t have answers on, and we probably never will, but we wanna know how much closer we can get to that connection with manō.

Mike Nakachi shared about their first trip to Midway with his dad and how his dad wanted to take pōhaku and ho‘okupu to place in the channel:

Upon arriving, we bumped into another young man from our moku, Lincoln Ahlo, who was a boat captain. Being malihini, we asked Lincoln permission before we entered and before we did anything improperly. We went there to look at the various biomass of manō there to get that kilo of what was happening, whether it was white tips, whether it was Galapagos Sharks, whether it was gray



reef sharks. Dad wanted to pule and also offer ho‘okupu to any of the potential niuhi that were there. The introduction of ho‘okupu did not have any animal parts, did not have any of those kinds of things that are kind of done on a daily basis on the North Shore of O‘ahu today. Dad wanted me to go down, so I actually had to go down on scuba and take the ho‘okupu with the rocks and everything. We did that even before we even did any dives there. He just wanted to make sure that we were coming from the right space, that we were doing things in honor of a place that we knew was of the highest reverence, and that we needed to pay a tribute and offer that to the ancestor spirits that have been there long before the arrival of man. And so that’s what the intent was. So, I think that’s was the starting piece of then us going twice in 1999.

Mike Nakachi talked about their other trips to Midway during the specific months of July, August, and September:

The reason why we went during this time was we knew that the Black Albatross and Laysan Albatross were fledglings during those months. We knew that the keiki were learning how to fly. And inadvertently some of them were so not ma‘a that they would then crash in the water, their wings would get wet. Then that was in turn ho‘okupu for all of the manō in the area. We did that ‘99, 2000 and again in 2001. And so that was the start of something very beautiful. But the witnessing of people of non-Kanaka or even kama‘āina that may not have understood what that realm was. Went from a recreational standpoint and it was not in the best interest of what the place represented. The sad part was that they would have guys with whipping or jigging or doing different things and it was quite sad to see hāpu‘u which we don’t see in the main Hawaiian Islands, with big jigs, diamond jigs on the mouth. We tried our best to remove some of those things because they’re like puppy dogs and they would follow you on the dive. But our main purpose was to really try and connect with the majority of the tiger sharks that we could see in the area. And, this was done without ho‘okupu a lot of times. This was just to enter their realm to do things without any touristy kind of stuff or without any introduction.

He shared a mo‘olelo of a dive they did on the northern side of Kuaihelani (Midway):

There was a channel there and we couldn't believe the size of some of the he'e that were there. The one thing that we found amazing was all the various forms of kinolau that were there and other forms of 'aumākua, so if you touched the he'e down there or you even went to tickle a he'e, and then the he'e would squirt its ink out. The Hawaiian hogfish, the male, usually would be the first to come and inspect. He would sniff around where the he'e was, and within 30 to 40 seconds, then a Galapagos shark would show up or 70 to 80 sharks within a minute. These sharks would be bumping the coralline algae, breaking it apart to get to the he'e. We witnessed that firsthand. And then in that realm, looking up, we seen a very large niuhi come down, all the other manō bow and clear out. Clear out because they don't want to be exposed with their head down and their 'ōkole up trying to get that he'e. Knowing that niuhi could then come and take a chunk out of them. And that's exactly what we had witnessed was niuhi he came down hot and came down fast because he was trying to seize an opportunity to grab one of the Galapagos sharks and it didn't happen.

We feel the need to tell this to other kākāka so that they know that there are other kākāka like us that are trying to practice in a honorable and a very humble way of doing things that may not be going, you know, into the realms of the modern world. That still are trying to honor those ancestors and trying navigate carefully on what's best for manō first. And if humans enter into the equation and benefit from that, then as a practitioner, I'm off. So, that's why we went up there and it was to try and authenticate if we had any that we could recognize. But honestly, Kaikea Nakachi now, by the time he was in the third grade, he was way smarter than his dad, you know. He is a repository of information and has the keys to the kingdom in terms of our capacity as practitioners. From the visual. From 'ōlelo through the mo'okū'auhau. It's always been our dream was to go back up to kind of honor what I learned from my dad that he hadn't had that opportunity. As a modern-day scientist and as a modern-day practitioner as he is, he should be given that kind of opportunity.

From a kākāka perspective, Akoni Palacat-Nelsen commented:

I mentioned how we're all connected, not just through the ka'ao [story] of Pele, and our familial connections. But I'm sure that many of us had ancestors that traveled into the region for different purposes. Especially if you're connected to an ali'i such as Kawelo. Within the last three or four generations, I know that, physically, I have no family members that visited any of the islands up there. It's hard to say. During the war days, I think a lot of the uncles went up there too. Definitely know it's not an access that we would allow just willy-nilly to happen.

Catherine Fuller mentioned that she went to Papahānaumokuākea in June 2021 and practices included non-instrument navigation and voyaging. Chadd Paishon mentioned that he's been to Papahānaumokuākea, elaborating "I have made a connection through voyaging history. Continued practice of non-instrument navigation and voyaging." Nai'a Lewis shared: "I have been on an expedition during International Year of the Reef (IYOR) in 2008, and an access to Kuaehelani or Midway in 2010. Oli and protocol as appropriate." Pelika Andrade listed a few practices connected with the PMNM: "Māka'ika'i. Mālama. Huaka'i. Lawai'a. Ho'okele. Kilo. Noho." Uncle Kepā and Aunty Onaona Maly stated ancestral traditions, customs, and practices are associated with Papahānaumokuākea.

Cultural Resources, Practices, Beliefs, and Connections

Whether consultees consider Papahānaumokuākea and the main Hawaiian Islands connected

If consultees believe the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands

If consultees believe Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands

All interviewees consulted for this CIA study strongly agreed that Papahānaumokuākea and the pae āina (Main Hawaiian Islands) are connected culturally, spiritually, ecologically, and physically. Many detailed a variety of other ways the Papahānaumokuākea and the pae āina are

pili [related, connected]. There was also widespread agreement that the health of Papahānaumokuākea and its ecosystems are connected to and affect the pae ‘āina. Regarding Papahānaumokuākea and the pae ‘āina being connected, an anonymous individual commented, “Absolutely.” After confirming their connection, several anonymous individuals, as well as Uncle Kepā, Aunty Onaona Maly, Chadd Paishon, and Pelika Andrade, agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, and that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands.

One anonymous consultee emphasized: “Extremely so, in ecosystem wellbeing as well in genealogical connections.” They agreed that the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands, stating “[y]es, absolutely (and vice versa, monk seals are a really strong example of this).” Likewise, they concurred that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands, writing “Yes, absolutely. I would reference Kekuēwa Kikiloī’s work to talk about the genealogical connections and the association of Papahānaumokuākea’s link to our ancestral realm of pō.”

Regarding Papahānaumokuākea and the main Hawaiian Islands being connected, Hōkū Pihana said “I believe they are through our mo‘okū‘auhau as Kanaka ‘Ōiwi.” She agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, stating: “Absolutely. Everything we do to care for and sustain our main Hawaiian Islands is reflected in the health and wellness of our kūpuna islands.” She agreed with other consultees that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands: “Yes, as our kūpuna islands they are ancestral connected to our main Hawaiian Islands both culturally and spiritually.”


Several consultees emphasized Papahānaumokuākea and the pae ‘āina as a single, contiguous archipelago. An anonymous individual emphasized: “They were never not connected. It’s only when Westerners arrived that they become disconnected in people’s minds. From a Hawaiian culture view, there’s not a Northwestern Hawaiian Islands and a main Hawaiian Islands. It’s all the same.” Similarly, another consultee shared: “Although they may be spoken of as two things, they are one in the same thing. They are the left and the right side of a single body of islands.” They also agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands and that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands. Another individual commented:

Yes, Papahānaumokuākea and the "main" Hawaiian Islands are certainly connected. Perhaps magnifying the separation as if they are two separate spaces might affect the way we perceive the relationship. There is indeed a barrier that divides ao and pō, main Hawaiian Islands and the Northwest Hawaiian Islands, however, we know as Kānaka (and even scientists) that we are one Hawaiian chain—ka pae ‘āina o Hawai‘i nei—arising from the volcanic activity beneath the sea and eventually returning to it as time presses forward. Thus, instead of thinking that there is a line two spaces, we know that there is ocean, currents, waves, birds, fish, limu, and so many other things that regularly traverse between and ties Papahānaumokuākea to the “main” islands. We are indeed connected. What happens in one space (good or bad) has a similar impact on the other. I have yet to see our ancestors describe the two spaces as if they are separate. When they mentioned ka pae ‘āina o Hawai‘i, it would always be from Hawai‘i island to Hōlanikū. That is the mindset that we must continue to preserve. There is indeed a cultural distinct, however, they are two parts to one whole. Without the other, there is no Hawaiian archipelago.

Regarding cultural, spiritual, and ecological connections between the main Hawaiian Islands and Papahānaumokuākea Uncle Paka Harp wrote:

All islands in the Hawaiian archipelago are connected. Protecting Papahānaumokuākea from commercial fishing insures continued replenishment of declining fish stock in the main islands to the benefit of the many. The Hawaiian counter-current assists replenishment through larval distribution from the NWHI to the main Hawaiian islands. Please see: <https://www.science.org/doi/10.1126/science.1059781>. This area is the realm of Po, so yes, it is definitely culturally and spiritually connected. Other than US military wrecks, contamination, and trash, commercial fishing wrecks and relics, objects and damages from past commercial exploitation, everything currently existing in the area are cultural resources.

Relatedly, another consultee wrote:




The main Hawaiian islands are heavily connected to Papahānaumokuākea. The main eight Hawaiian islands are geologically, ecologically, socially, and culturally connected to these elder islands. The mele, oli, practices, heiau, and knowledge of animal and invertebrate species in Papahānaumokuākea alongside the dynamics of the main eight Hawaiian islands emphasizes this important relationship.

On whether the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands, they answered:

From my experience voyaging to Papahānaumokuākea, the ecosystems there are keystone to the ecosystems of the Hawaiian islands. Similarly like the wa'a traveling the sea roads to and from places like Nīhoa and Mokumanamana as my ancestors did, many species are migratory such as native seabirds, monk seal, 'opihi, shark, Ulua, reef fish, phytoplankton, coral reef etc. In fact, many populations of these species in the main Hawaiian islands are reliant on their succession pathways in Papahānaumokuākea. The list is infinite in terms of the species connection between these places aside from the monument border are relative to one another at ecosystem levels. Moananuiākea and throughout (Pacific Ocean) the world is connected by our weather and ocean systems. The temperature of the ocean and atmosphere drive our weather and ecosystem health in the Hawaiian islands. This is something we learn practicing navigation and as kānaka. Therefore, of course the health of Papahānaumokuākea not only affects the Hawaiian islands but the entirety of our planet.

Concerning Papahānaumokuākea's cultural and spiritual connection to the main Hawaiian Islands, a consultee shared:

While I did not go on the island while voyaging to Papahānaumokuākea, some of our 'ohana wa'a have been to the navigational heiau on Mokumanamana and Nīhoa. With the expertise of Randy Kosaki, who was on the wa'a with us, we were directed to pay respect and observe the navigational heiau on the cliff areas as well as the remnants of terracing. Spiritually and culturally, this is where my connection as a navigation student and voyager is centered. Navigating to Nīhoa and Mokumanamana during Ke ala Polohiwa a Kāne and observing the past



iterations of the Hawaiian star compass is a cultural and spiritual connection explicated in two different ways. The present and the physical of the canoe at these moku juxtaposed with the upright stones transcends time periods of kānaka continuing to visit and utilize these spaces for cultural and spiritual connection.


An individual who wished to remain anonymous agreed that Papahānaumokuākea and the main Hawaiian Islands are connected. They also agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, and emphasized the need to approach and steward PMNM as a contiguous biocultural seascape:

We need to understand how to tend to these spaces as one pae‘āina. If we need to describe it as a biocultural seascape, then we can call it that. We have different pilina and knowledge associated with an intimate understanding of how these spaces function and what they need to be productive. Our kūpuna understood that Papahānaumokuākea has a different kapu and function in the Hawaiian Universe, so it is all connected. Just with different functions and relationships.

They asserted Hawaiian oral traditions convey a detailed understanding of Papahānaumokuākea’s cultural and spiritual connection to the main Hawaiian Islands, stating:

‘Ōiwi practices and customs changed according to how our kūpuna understood the function of these realms and spaces - interconnected spiritually, physically, ecologically, etc. In all of our epic oral narratives and traditions, we see that Papahānaumokuākea represents a journey to Pō, the ‘Āina Akua, as an ultimate test of ancestral knowledge, mana, expertise, and so much more. It’s about the journey there and back. All these histories continue onto the Main Hawaiian Islands. There is no gap between these connections, though there is a major change of practice, customs, and values associated with Pō, Ao, and ‘Āina Akua.

Another person wrote: “‘Ae, Papahānaumokuākea’s islands have Hawaiian names and are genealogically connected to our ‘main’ islands. ‘Ae. Anything that hurts our oceans and air anywhere in our islands (from Ha‘eha‘e to Hōlanikū and beyond) affects the whole.” They concurred that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands.




Nai‘a Lewis commented: “They are one long genealogy of ‘āina.” She agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, writing: “Yes and vice versa -- on all levels. Physical/ecological and spiritual.” She also agreed the Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands, sharing: “The place also supports increased spiritual awareness and connection within kānaka.”

Another individual detailed the array of connections between the kūpuna islands and pae ‘āina:

In the ocean the survival of species depends on successful dispersal of offspring in both directions (into and out of Papahānaumokuākea) which depends on changing oceanographic patterns and environmental conditions (i.e. current directions and seasonal changes). In this way, both regions can impact the health of each other depending on the dispersal direction of a specific species. Over geologic time, the kupuna islands have been stepping stones for species of birds, plants, fish, invertebrates to colonize younger islands as they were born. The genetic diversity found in some populations currently living in Papahānaumokuākea (i.e. ‘opihi) spans millions of years longer compared to populations of the same species found in the main Hawaiian Islands. Understanding patterns in the genetic diversity of these older lineages can help us to figure out which species are sharing offspring between Papahanāumokuākea and the main Hawaiian Islands.

They shared about the health of Papahānaumokuākea and its ecosystems affecting the main Hawaiian Islands: “Observing and sharing the direct impacts of anthropogenic activities happening in Papahānaumokuākea shapes new cultural norms and political decisions in positive ways to promote sustainable lifestyle choices and legislation (i.e. marine debris impacts on turtles, marine mammals and seabirds).” Lastly, they agreed that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands, stating: “It is evidenced within chants and ka‘ao that establish these connections through genealogy and migration.”


Akoni Palacat-Nelsen and Kealoha Pisciotta agreed on the connection between Papahānaumokuākea and the pae ‘āina. Akoni Palacat-Nelsen elaborated on the relationships he perceives:



One more perspective connecting the Northern islands and the more inhabited islands is looking at our ‘āko‘ako‘a, our coral and how particularly in Kealakekua Bay, 97% of our coral has been depleted. So, we only have 3% left which is a huge part of our life. Without the coral, the fish is gone. I mean, it tells us the state of our ‘āina. It tells us the state of our community. It gives us a sum of an equation that we may have to rewrite. And that’s what our kahuna’s did on the heiau. That’s what our chiefs did in their ability to prove their worth to be leaders in the kānaka society, was to be able to make those corrections and those equations. I feel that Papahānaumokuākea is a missing part of that equation today. If we just make any kind of willy-nilly research up there, it could impact us negatively down in the main islands. And vice versa, if we’re not having a connection to our Northern islands, then we could be missing out on an important part of the equation to restore or sustain or maintain or manage our ability to have life. As Kealoha Pisciotta mentioned that a lot of our protocols is to restore abundance. But restoring abundance equals quality of life. So, the end result to that equation is the ability to have a quality life. I think that connection between the Northern and Southern parts of the pae ‘āina is super important that we restore that connection. So, it is separated, but it’s not. It’s kind of like in Kumulipo you have dualities. You have mauka and makai. Same concept.

Kealoha Pisciotta discussed the ways in which Mauna Kea and Mokumanamana, including other places in Papahānaumokuākea, are connected to each other through pō and ao relationships:

I did want to acknowledge that the pō and ao relationship exists from mo‘olelo, exists both vertically and horizontally. So, the two major places where we have entranceway to pō is Mauna Kea and in Papa. That’s an important connection that needs to be understood. This is our cosmology; this is our genealogical connection and where we sit within those cosmological structures is very important to knowing how to relate and perform practice or not. Enter or not. Things like that. Those cosmologies, governed by Kumulipo and other chants relating to our origins and things should be first and foremost.



Regarding Papahānaumokuākea and the main Hawaiian Islands being connected, Brad Ka‘aleleo Wong commented, “Yes, a part of our pae‘āina.” He agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, stating:


I am sure there are biological/scientific links that can be made, however I believe that there are important lessons that we can learn from the health of the ecosystems in Papahānaumokuākea that can provide us with guidance for how we best manage our resources here in main Hawaiian Islands.

He also supported the understanding of Papahānaumokuākea as culturally and spiritually connected to the main Hawaiian Islands:

Our kupuna created a foundation of pō/ao that spans the entire pae‘āina and our surrounding seascape. There are many mo‘olelo and accounts of the importance of pō, as a place where life comes from, and returns to upon passing. The things that one experiences in the region of Papahānaumokuākea validates these mo‘olelo and helps us understand why our kūpuna described this area the way they did.

Kealoha Pisciotta discussed how dualities fuel the connection between Papahānaumokuākea and the pae ‘āina:

The concept of the male-female, which isn’t gender based. Those other dualities come into play like heaven, earth, you know? Those things all come into play too. And let me add about percentages, as big as Papa is, it only makes up 3 to 5% of the marine protected areas on the planet. So, for example, regarding fishing, they’re worried about this one area. But they have over 90% of the rest of the ocean. Another example, over 90% of all honu that we see, even on Moku o Keawe, were born out there and they made their way all the way over here. And people often don’t understand that concept. So, on those islands, climate change is going to affect even the honu’s ability to reproduce. So those kinds of things are so important to our ability, as kānaka, to understand fully what is going on out there and to put our mind towards how to figure out the change.



Catherine Fuller commented, “Yes, they are all part of one movement of the earth’s crust, part of Pele’s journey, and a part of one history.” She agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, stating “Absolutely! They exist in the same ocean and share many sea creatures that venture between different islands.” Catherine Fuller concurred that Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands: “It is a place that our kupuna inhabited and used for ceremonial and practical purposes. It is important to native Hawaiian spatial awareness because of ke ala polohiwa a Kāne [summer solstice], and the realms of ao and pō.”


Kēhau Springer commented on the connection between Papahānaumokuākea and the pae ‘āina as a single, contiguous archipelago:

Yes, our whole pae ‘āina and archipelago of islands are all connected. The ocean, currents and animals do not see boundaries between Papahānaumokuākea and the lower Hawaiian Islands, so you cannot separate them.” She agreed that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, “Yes, the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Island physically and spiritually. Physically it is abundant and has some of the most diverse species in our archipelago, so it creates a refuge and holding bank of resources to help support the lower Hawaiian Islands.

She agreed on the connection between Papahānaumokuākea and the pae ‘āina: “Papahānaumokuākea is connected culturally and spiritually to the lower main Hawaiian Islands. Spiritually it is the cross between pō and ao for kanaka maoli and on a cultural and spiritual level it affects both kanaka and ‘āina kai because our lāhui can only be healthy when our ‘āina/kai are healthy as well.”

Mike Nakachi agreed that Papahānaumokuākea and the main Hawaiian Islands are connected and that the health of Papahānaumokuākea’s ecosystems impacts the pae ‘āina. He shared:

Absolutely, there’s no doubt we’re connected, but we also feel the same connection whether we have lau‘īpala or we have kole all spawning here and that sperm and eggs gets released into that realm and six weeks later they’re fertilizing themselves and maybe ends up somewhere off of Hāna. Now, seeing what Kalani



and them have done and everyone else has done to actually authenticate and go through nomenclature to give them their appropriate names of place. I think, it's very distressing to know that our kumu and a lot of our other fish are depleting. And so that you hope that that realm of that same kind of fecundity there would allow the release of sperm and eggs, and then it gets blown with the current, and then that actually comes down with the Tradewinds to then help replenish the main Hawaiian Islands. I'm a true believer that that does happen. And we are only speculating, but I think deep down in our na'au, we all know that does happen. And you know, especially understanding Moananuiākea has a very unusual thing that happens way out there, and you just don't know whether it floats some different things that may bring in different things. Currents come in different directions. And especially now with things changing quite dramatically, I think that it may increase or it may decrease just depending on the way the weather patterns have changed.

Kaikea Nakachi shared additional mana'ō about appropriate ways to steward and interact with Papahānaumokuākea, emphasizing that disrespectful practices need to be replaced with restored “cultural practices of mālama first and non-invasive kilo second.” He stated:

Since its formal formation the monument has mostly been host to permitted activities of take. Whether it was recreational fishing, research, or even Western management. Taking data, taking samples, taking fish, taking matters into their own hands to cull/engineer/build/etc. The question should be, what is it that we can give to Papahānaumokuākea? More trips need to be for kānaka to visit the realm of pō, to visit the ancestors, to visit kinolau, to conduct ceremony, to teach the next generation of the place and practices of place. Those are cultural practices that give to both Lahui and to Papa. Those same people in turn should be in turn listened to. The CWG (Cultural Working Group) needs to have more than just an advisory role. If any proposed activity/research is not wanted/needed by Lahui and only takes without giving, then there is no reason for that permit to be approved. Assigning a token Hawaiian to a cruise that is made up of malihini to play god in sacred Papa is not pono, and should not be allowed to continue. Our 'ohana has only had a few individuals go a few times.

And we gave our aloha, voice, and ho‘okupu to Papa with a main focus on honoring the manō. However, nearly every year a team of scientists go up to this sacred area and lay hundreds of baited hooks to catch and tag sharks. Only recently they were caught with many, many more hooks in the water than their permit allowed and they were in the water for longer than their permit allowed and they were caught with a dead shark on one of their hooks. Who knows how many other sharks have been killed both inadvertently or even purposefully by researchers who don’t see Papa as a sacred place, and don’t view the manō as kinolau or ‘aumākua, but as potential data for their academic careers to be made off of. Yet we allow these researchers to go back year after year. It is time to end those disrespectful practices and restore cultural practices of mālama first and non-invasive kilo second. We have much to atone for and to make right in Papa, or we run the risk of eroding Papa just like we have in the Main Hawaiian Islands.

Mike Nakachi added:

We kind of have evolved as ‘ohana, we find it’s just something that we need to keep doing and keep advocating and keep engaging in a pono direction that hopefully will change. We met some other very special kānaka over the years, whether it was Uncle Charlie Kauluwehi Maxwell from Maui and others. A lot of them now don’t look to me, they look to Kaikea Nakachi. And so, that’s the one thing that I keep seeing is a lot of the kupuna are now putting that weight on his shoulders. And I can sense that, and I can sense he’s got big shoulders and that’s why I told him he needs to be civically engaged in this kind of process.

Cultural resources, practices, and beliefs consultees associated with Papahānaumokuākea and the surrounding vicinity

Including cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project area;

Consultees listed a wide variety of Hawaiian cultural resources, practices, and beliefs associated with Papahānaumokuākea and the surrounding vicinity. Their verbatim responses are featured below:

- “Terrestrial and Marine Ecosystems and everything that it includes = Nature.”
- “Feather-work, moli iwi (albatross bones used in ceremony, tattooing practices), voyaging, mo‘olelo - stories of akua and epics such as Pele and La‘iekawai (connection of Paliuli between Hawai‘i Island and Kuaihelani), navigation centers, Kamohoali‘i (sharks), ceremony, sacred realm, privilege to enter.”
- “Moku Manamana – summer solstice. Marine and terrestrial biota (fish, plants, insects, birds, etc.). Place names, both species and place are mini-carriers of our traditional knowledge system.”
- “A more intimate connection with the elemental akua, and by that intimacy a more fruitful dialogue can be carried out between the subject, the kanaka, and their lord, their akua.”
- “As a navigation student and voyager as well as a native Hawaiian scientist the cultural resources and practices I associate with are very much centered around the navigational pathways and sea roads to and from the monument. In addition, the depth of raw learning and observation of fish behavior, coral reef structure, migratory species, and more are keystone practices of kilo that I associate with.”
- “Utilization of manamana sites to understand the greater environment and to better understand the practices of our ancestors. Traditional fishing and marine resource management.”
- “The whole place is a cultural resource and we as kānaka are part of this biocultural seascape. Practices include Hawaiians returning to their ancestral seascapes growing generational pilina to these ‘Āina Akua for re-connection, powerful remembrance of who they are as ‘Ōiwi, and the kuleana that continues to grow a reciprocal pilina to people and communities. To ‘ikemaka, to taste of the ‘ono of the kai, these are all associated cultural practices. I associate cultural practices with Hawaiians being able to be Hawaiian in Papahānaumokuākea. They perpetuate practices of ancestral inquiry (Huli ‘ia through intertidal cruise and Nā Maka community partners in the Main Hawaiian Islands), cultural protocol/observance of approaching and greeting Papahānaumokuākea, and weaving academic tools to better understand our pilina to

these spaces and how that shapes our practices in the Main Hawaiian Islands. From the work of Aunty Pua, Aunty Kalei, and the EKF 'ohana, to the wa'a 'ohana, to the archaeologists, kia'i manu, intertidal monitoring crew, and more, cultural practices continue through these living pilina and how we conduct ourselves and the work we do to support a collective vision of communities working towards 'Āina Momona back home. Cultural practices also include getting more lineal descendants back to Nihoa."

- "There are too many to list here. Most Hawaiian cultural resources and practices have an expression that's particular to Papahānaumokuākea. The prominent exception to this statement is lo'i cultivation. There is clearly no lo'i cultivation in Papahānaumokuākea."
- "To name a few, Kilo lani, kilo Hōkū Pihana, kilo 'āina, kilo moana, ho'okele wa'a, lawai'a, kuhikuhipu'uone."
- "Resource species – fish, invertebrates, mammals, plants. Geographic features – Nihoa caves, Mokumanamana point. Natural elements – ānuenuē, cloud forms, lagoon colors. Cultural practices, lawai'a, ho'okele, lua, 'aha."
- "All of the activities that are associated with pō. I do believe that there are navigational practices that occur. I do think auntie Pua (Kanahele) and some of her haumāna are actually on the money when it comes to the ahu, the platforms, the marae that are up on Mokumanamana as being navigational points. It also fits right into the Polynesian Voyaging Society's navigators of shooting for a line of islands when they go south. When they come north, they shoot for a line of islands, and sometimes you hit the island that you're looking for. Sometimes you hit an island that's to the left of it, to the right of it, and then you make your course correction. So, it's fortunate to have a line of islands in the south and a line of islands in the north."
- Akoni Palacat-Nelsen: "I think the most important thing today, looking at Papahānaumokuākea and the ideology of how it was named. I know aunty Pua Kanahele provided the name Papahānaumokuākea and the meaning behind of it which I resonate to. But I think there's a little bit more region specific as to how spiritually Papahānaumokuākea can relate to our families in South Kona. On a personal level, today, the cultural practices and the cultural resources that are aligned to some of the possibility of ceremonial things that took place up at Papahānaumokuākea is the ability for us to recall some of the spiritual practices through accessing Papahānaumokuākea. So, I think the important part about this is that providing access for spiritual practices is important. I feel like that process falls into a stringent process and also funding a support for cultural practitioners to continue recalling whatever their specific spiritual

needs would be affiliated with. So, as far as I'm concerned how do we continue the cultural alliances through because we have the ko'ihonua, we have the ka'ao, we have all of the pule. We have those things, but how do we continue the physical connection so that there is a continual connection between the northern and the southern islands. That's kind of where I feel that, I don't know if it's answering the questions, but I feel like those are the things that we can improve on as far as the k̄naka presence and providing kanaka ideology in the process of decision makers at Papahānaumokuākea. We need to have our presence and we need to do our pule. Sort of like Kaho'oawe. If the PKO is not on the island, things going be out of balance, you know. Somebody has to restore and maintain those practices and the akua cycles on those islands or in that region.”

He continued: “I attached to the Polohiwa's and all of that. But we apply it specific to our region in South Kona. So, it's a general philosophy that we receive, but we need to reestablish a firmer connection, I feel, as kanaka. But you know, it's kind of like me going up on mauna, I don't always go up on mauna cuz it's not my place or time at that point. Right. And we should have more of a presence and we should have a more of a streamlined presence.”

- Kealoha Pisciotta shared that Papahānaumokuākea is a source: “It's health or lack thereof or its wellbeing needs to be front and center. Many of the scientists will argue, ‘Well, I'm helping to provide the science.’ But is it good/relevant science? Science has been become like a religion almost. ‘Oh, it's science then we need to do it.’ Maybe we don't. We have to start from that place, the k̄naka worldview. But we are trying to have good relations with all of the agencies and there's really good people in many of the agencies. They do really want to know what we're thinking. But, you know, there's only so much you can explain and then it's outside their realm. So, we're still having to kind of self-regulate ourselves so that we give time for people to understand and not to freak out on us. The World Health Organization defines health as not simply the absence of disease. They define wellbeing, thriving in all of those things.”
- She continued, “We are not thriving as we should, as a people. And by holding Papa in its right place, like Mauna Kea, when we hold those things up, we then are healing also. Even the Apology Bill, right? Public law 103-150 recognizes that the land and the people are one. And when you come from that perspective, when something isn't doing well, then we all aren't doing well. We need to elevate. I think everyone's moving to elevate things up, up, up. But in some ways, they're not caught up to us yet. And we're still sort of colonized and marginalized and treated like, ‘Oh, that's an interesting oral history you

just shared.’ It’s like, no, it’s the basis of the cosmology of our worldview and universe. We’re not just sharing this to get you to act like you’re at the lū‘au. We’re serious and Papa’s connection is vitally important. It’s wellbeing and health is vitally important for our main Hawaiian Islands. And even though there is some science on it, they don’t look at that science. We’re trying to get them to understand the depth and complexity of ‘ike kūpuna. Uncle Paka Harp is famous for saying that, ‘2,000 years of observation is better than your science.’ That’s why we have to be pili to and hold that ‘ike kūpuna up all the time everywhere we can.”

- Brad Ka‘aleleo Wong: “An ‘āina akua. A place that belongs to the akua, which to me means a place that is of the elements of nature, where we as people, may learn from, understand, but to not desecrate.”
- Catherine Fuller: “Voyaging, navigation, gathering of resources, access to ceremonial sites, interaction with kupuna islands.”
- Chadd Paishon: “Non-instrument navigation, Voyaging, Kilo, Malama.”
- Hōkū Pihana: “I connect with the ancestral practices of wa‘a voyaging as these realms held the voyaging pathways that connected us to our Polynesian cousins and taught us how to voyage with our kūpuna on our oceans using our skills and tools.”
- Kēhau Springer: “Wayfinding and voyaging; subsistence gathering while on voyages; kanaloa and pō, a place to deepen a connection and practices to the various akua.”
- Uncle Kepā and Aunty Onaona Maly: “The islets, shoals, pinnacles, are associated with the mo‘okū‘auhau of the Hawaiian Islands, wahi pana, and places of significance in Hawaiian beliefs, traditional & customary practices.”
- Nai‘a Lewis: “Navigation, astronomy, kilo/observation, spiritual practice, intergenerational knowledge and practice, fishing, language.”
- Pelika Andrade: “Everything, it’s all connected.”

Cultural resources, practices, and beliefs that need to be included in the CIA so the project proponents can mitigate or avoid impacts and make pono decisions regarding management

Including a discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.

Consultees detailed an array of perspectives and opinions regarding cultural resources, practices, and/or beliefs that need to be included (e.g. location, seasonality, lifespan, etc.) in the CIA so the project proponents and management team can mitigate or avoid impacts and make pono [appropriate, righteous] decisions regarding management. Kēhau Springer shared: “I believe there are, but it is not my place to disclose as I am not the holder of that ‘ike.”

Several consultees commented on resources generally in Papahānaumokuākea. One stated: “Details should include all the beliefs related to the practices named above, including the resources needed for those practices.” Relatedly, another mentioned: “Attributes of specific species (behavior, color, abundance, size). A digital resource like a catalog of cultural resources/sites and their function might be useful for visualizing the scope of cultural resources being considered for this project.”

Regarding cultural practices generally, Chadd Paishon shared: “I think that the recognition of connection to cultural practices is important when connecting to these kupuna islands and that the stories that are shared are relevant to these modern times because we continue to practice these within Papahānaumokuākea.”

Several consultees mentioned discussed specific cultural practices, intertwined with resources and features, associated with Papahānaumokuākea. Grouped thematically, their mana‘o is presented below:

Voyaging

- With my limited experience in Papahānaumokuākea, the seasonality of voyaging is typically from March until August. These summer months provide the best non-hurricane weather that we need to sail in consistent conditions to Papahānaumokuākea. For permitting purposes with wa‘a kaulua, these are the seasons where we have the most need to practice navigation and ceremony there.
- Catherine Fuller: “The practice of voyaging and traditional navigation can happen in any season, weather permitting. The islands of Nihoa and Mokumanamana are valuable as small, visible targets that provide a manageable navigational challenge. Navigating and

voyaging to Lalo and the islands beyond requires more skill and, for the safety of vessels and the ecosystem, modern navigational instruments as a backup.”

Spiritual Practices

- “I think resources from a physical standpoint, that’s the archaeology and the perfect guy to answer that question is Keks (Kekuewa Kikilo). He’s done the most research. But because there is physical evidence of stacked stone there’s clearly physical evidence or physical representation of practice. I think for the spiritual side, you have to look to the mele and oli and sort of the historical records that have been captured. But from a modern perspective when Halealoha and his crew reinterred iwi that was held at the Bishop Museum back to Nihoa, that’s a modern example of mālama kūpuna. So, it continues even to today. The very act of trying to protect the area, spiritually, is a reflection of our kūpuna pushing us at this time to provide these protections.”

Fishing

- Brad Ka‘aleleo Wong offered perspectives on fishing, and what should and should not be allowed:

While fishing is an important tradition for Hawaiians, and should be practiced with restraint in Papahānaumokuākea, it should not be the main purpose of our activities while there. Fishing should only be used to enhance one’s experience and to share in its abundance while also providing back to the place in some way. The action of fishing in Papahānaumokuākea should carry a certain mindset while doing so, and one that emphasizes reciprocity, respect, and kuleana to the place. As someone that enjoys fishing, too often we get carried away with the “sport” of it, and for some, the financial gain of it. That is not a knock on those types of activities in general, because I think they are important too. I just think there is a time and place for that to occur, and there is enough ocean for that close to the main Hawaiian Islands. I do believe Papahānaumokuākea can be a region that should feed us physically once again, at some time in the future. However, until that time I think it is important that we learn from the region and utilize that knowledge to

better mālama our resources here in the main Hawaiian Islands so we may once again think sustainably.

- Hōkū Pihana: Also, I think it is important to clearly and concisely describe fishing practices for consumption and cultural purposes while in Papahānaumokuākea so there are minimal to no ambiguity in how these practices are defined.”
- Uncle Kepā and Aunty Onaona Maly referenced their 2003 “Volume I: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu (A History of Fishing Practices and Marine Fisheries of The Hawaiian Islands) Compiled From: Native Hawaiian Traditions, Historical Accounts, Government Communications, Kama‘āina Testimony and Ethnography” and “Volume II Oral History Interviews: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu...”

De-occupation

- Uncle Paka Harp: Concerning details regarding cultural resources, practices, and/or beliefs that need to be included (e.g. location, seasonality, lifespan, etc.) in the CIA report so the project proponents and management team can mitigate or avoid impacts and make pono decisions regarding management, Uncle Paka Harp shared: “Undeniable evidence exists that the United States does not possess sovereign jurisdiction over the Hawaiian islands. The United States’ belligerent occupation of the Hawaiian Kingdom must be documented in the record. This must no longer be ignored. De-occupation in addition to financial reparations for injuries inflicted on the Hawaiian islands and on Hawaiian subjects regardless of race is the primary and truly appropriate mitigation that should be pursued.”

Stewardship Approaches and Frameworks

- An anonymous consultee wrote: “Details and specifics around cultural resources and practices are less important to note in a CIA than processes, organizational mechanisms, and governance that uplift knowledge and kuleana holders as primary decision-makers for all activities in and overall management of PMNM. Impacts cannot be mitigated and avoided through an inventory of words--it can only be mitigated and avoided through direct governance by knowledge and kuleana holders.”
- Nai‘a Lewis: “I think multiple disciplines, utilized within a cultural context, should inform management decision making.”

- Hōkū Pihana: “I think it is important to include language about sample gathering and repatriation practices to ensure pono research behavior.”
- Pelika Andrade: “We are connected and have responsibilities there... but do not live there so we must act accordingly. It is not our playground or pillaging site... but the “home” of our hulu kupuna... a place to tread softly, and respectfully. As we would a treasured kupuna. As that relationship is grown and deepened, our actions will too!”

Cultural resources, practices, features, and beliefs that will be lost or obliterated if the project proceeds

Eight consultees, including anonymous individuals as well as Brad Ka‘aleleo Wong, Catherine Fuller, Chadd Paishon, Uncle Paka Harp, Kēhau Springer, and Hōkū Pihana did not believe that any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds. Hōkū Pihana emphasized: “I believe we should ensure they aren’t regardless of designation. They should be the foundation for why expanded designations are important.”

Six consultees provided stewardship and management suggestions for the mitigation of potential impacts. Two individuals encouraged the mitigation of impacts through ‘ōiwi leaders involved in decision-making. Concerning any cultural resources, practices, features, and/or beliefs that will be lost or obliterated if the project proceeds, one consultee wrote:

I do not know enough about the entire process of sanctuary designation however, from what I do know with the resources provided to me, prevention of potential losses can be mitigated by including ‘ōiwi leaders in the decision-making level for designation processes. From the one-page info on NOAA's website about sanctuary designation, it is unclear what potential losses there could be, it is mostly focused on communicating protections.

Relatedly, Nai‘a Lewis commented: “Again, it’s about how the designation is written and implemented. Native Hawaiians, with relevant expertise and access experience, should be involved in writing the designation and related documents.” One anonymous individual felt the Mitigation of impacts could be achieved through how governance is structured. Another shared “Nothing will be lost or obliterated if allowances will be made for kanaka maoli to continue our

traditional practices.” Another individual commented: “No, but there could be the potential for misinterpretation of cultural resources, or beliefs if consultation with cultural practitioners does not occur.” Lastly, an anonymous individual shared they are unsure that any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds, expanding “[b]ut don’t imagine that our sites will be impacted. I would like to add, in addition to ‘Ōiwi wahi pana [Hawaiian storied place], that I would love to see improvements to the care of currently neglected World War II sites, particularly on Midway.”

Areas critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities

Including a discussion of the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project

The majority of consultees expressed that the entirety of Papahānaumokuākea - including its interconnected seascapes, oceanscapes, landscapes, and skylscapes - is critical for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities. As expressed by one individual: “All areas—including islands to the depths. A Kānaka perspective tells us that these are all critical because of their interconnectedness.” Kēhau Springer said: “Everywhere in Papahānaumokuākea, especially Mokumanamana.” Others relatedly shared:

- “All areas east to west, from beneath the sea floor to above the celestial dome.”
- “All of it inclusive of land and ocean especially the ocean pathways for our Kānaka and kinolau of Kanaloa (whales, turtles, fish, etc.) to journey there and back.”
- “The ocean, the islands, inclusive of its flora and fauna, and the skies.”
- “Mokumanamana (and Nihoa)- navigational and spiritual/ceremonial center, Kuaihelani- “backbone of heaven”, sacred site, storied area of akua visits, makaloa weaving, Kānemiloha‘i- association with Pele family, with Mano (sharks).... so much... each atoll/island has a different association and placement within Pō, ancestral realm, within ceremony, and gathering practices to the inhabited islands also make them the most likely to be used for gathering of resources.”

Hökū Pihana emphasized:

All of the Native Hawaiian practices in and relationship with PMNM have existed long before any types of marine protection designations existed and should be sustained always under every important designation given to Papahānaumokuākea and should be the main purpose for why the spaces of our kūpuna islands are protected, cared for, and recognized as invaluable culturally, spiritually, and environmentally.

Specific places within the contiguous whole of Papahānaumokuākea’s interconnected seascapes, oceanscapes, landscapes, and skyscapes were also mentioned. Nai‘a Lewis stated: “The entire archipelago is important but islands and atolls like Nihoa and Mokumanamana and Holaniku are important in specific ways that have been documented. Research and new knowledge and cultural production by Hawaiians created for specific locations should be archived and referenced as needed.” Another individual shared: “Nihoa, Mokumanamana, Pihemanu – ceremonial. All islands, subsistence gathering.” Brad Ka‘aleleo Wong said: “The islands themselves, particularly Mokumanamana, however each location can be its own critical point of connection; including the ocean space being traveled.” Catherine Fuller wrote:

While all of the islands and reefs are significant because of their status as kupuna islands, the two most significant in terms of voyaging and navigation are Nihoa and Mokumanamana. It seems to me that these two are also the most culturally significant because of existing structures. Their proximity to the inhabited islands also makes them the most likely to be used for gathering of resources.

Uncle Paka Harp identified Mokumanamana and Nihoa as the primary critical areas for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities. Chadd Paishon shared: “I believe the areas of cultural practices are critical for Papahānaumokuākea because if we do not continue to practice then we will lose all Native Hawaiian traditional subsistence, spiritual, religious, and ceremonial activities.”

Oral Traditions Associated with Papahānaumokuākea

Akua affiliated with Papahānaumokuākea

The majority of those interviewed stated that all akua are affiliated with the PMNM. Uncle Paka Harp stated “All Akua are affiliated with the entirety of the Hawaiian archipelago. There are no known boundaries for Akua. Personally, I recognize Kanaloa is the primary Akua of the ocean realm.”

An anonymous individual shared:

All of the akua Hawai‘i are affiliated with Papahānaumokuākea. The akua Hawai‘i are elemental energies (the earth, the ocean, its currents, the sky, celestial bodies, lava, earthquakes, tsunamis, etc). Each play a role in shaping the islands of Papahānaumokuākea.” She also named a few ka‘ao and mo‘olelo, “The ka‘ao Pele and mo‘olelo ‘Umi.

Another individual commented and expanded:

All of the akua are in Papahānaumokuākea. Depends on who the practitioner calls upon.” This community member continued about key cultural understandings and interactions, “Many of these knowledge resources have been gathered. Some are recently created. All are telling of cultural understandings and interactions. None are useful as words at the fingertips of the untrained or under-trained. If a ‘key’ is to be identified, it’s a process that always lifts the truly knowledgeable into positions of decision making and supports multiple schools of knowledge being brought to bear on decisions.

Pelika Andrade likewise commented: “All, Papa, and Wākea. Pele. Aukele, Ka wai a kāne. Nāpakahakuakeaolono. Moaniliha, etc.”

Some consultees listed specific akua and recommended additional resources. One anonymous individual listed “Pele, Kāne, Kānemiloa‘i, Kamahoali‘i, Kū, Hina, Kanaloa,” and recommended reviewing Kekuewa Kikiloī’s work. Another wrote: “Papa mā, Wākea mā, ‘Aukelenui‘aikū mā, Mo‘oinanea mā.” One consultee listed akua affiliated with Papahānaumokuākea as “Pele, Wākea, Keaomelemele, ‘Aukelenuiaikū, Mo‘oinanea, Keānini‘ulakalani, Kauluakalana,” and mentioned that all mele, mo‘olelo, oli, ka‘ao, inoa ‘āina about Papahānamokuākea are key to cultural understandings and interactions with ‘āina and relationship to the pae ‘āina. Another listed: “Kanaloa, Kū, Kāne, Wākea, Lono, Hina, Keaomelemele, Mo‘oinanea, Pele, Kūhaimoana, Kānehekili, Kamohoali‘i.” Brad Ka‘aleleo Wong commented about akua affiliated with Papahānaumokuākea: “The many elementals that are experienced there. For myself given my ocean background, I associate closely with Kanaloa and his many forms while on various holomoana.” Catherine Fuller listed “Pele, Kāne, Papa, Wākea.”

Chadd Paishon shared that he associates Kāne and Kanaloa with Papahānaumokuākea, adding:


The practice of non-instrument navigation continues into Papahānaumokuākea specifically in my practice to Mokumanamana and understanding the movement of stars, moon, sun, waves, migration of whales, and movement of birds all of which happens in Papahānaumokuākea.

Regarding akua affiliated with Papahānaumokuākea Hōkū Pihana commented:

Kanaloa, Hina, Papa, and Wākea. And through Akua process, there are many more that help to mālama tall realms of the ocean and Papahānaumokuākea. Pīhemanu is a Pilina to me as I was able to be present in that space. Hā‘ena was a special place on Pīhemanu where I felt connect to my Papa. There are so many inoa Hawai‘i in Papahānaumokuākea that share the mo‘okū‘auhau of Hawai‘i. These are just two that resonated with me at this moment.

Nai‘a Lewis commented: “Akua like Kanaloa are known by many, but I feel others can speak to specific deities with greater authority.”


Other consultees offered extensive considerations and analysis of akua they associate with the PMNM. Akoni Palacat-Nelsen shared:



Everyone says Kāne, Lono, Kū, Kanaloa are the primary akua. But we also have female primary akua as well that our male domineering society today forgets to announce. So, we're looking at some female deities that are primary to Papahānaumokuākea, which I feel that would one the Pele families and maybe physically they did start off from the top of the island chain and came all the way down. Or metaphorically, those islands were born as Pele being the magma and the rest of her family metaphorically symbolized all the other entities that come with magma, returns back to its source. And so, them being the oldest island, perhaps Pele landed on those islands or brewed those islands first. Today, she's continuously doing that. So, I think the ka'ao can help give us insight as to how we can build our relationship as humans to the environmental cycles up in Papahānaumokuākea.

He continued:

The primary god that I learned within the last maybe 30 years is of course Kāne, being that region where it splits the ao and pō. Kāne is a primal god, not just primary but primal along with Kanaloa. You hear a lot of times that there's a Kanaloa-Kāne affiliation up in those areas. And every time we always think about Kāne through the Polohiwa a Kāne practices, that's the Kāne region. But when we look at Kāne being a region where we spring out of pō and into ao, Kāne is that entity that protrudes, it's that heat that protrudes out of pō. We see that happening at that Tropic of Cancer. Instead of looking at it as just why is it the Polohiwa, but we can also see that it's the heat that comes out of pō region. And the pō region is where all creation takes place. And that's through some of our mo'olelo or in ka'ao about our ancestors arriving to the pae 'āina. When they talk about our ancestors arriving to the pae 'āina, sometimes that means metaphorically they appear into the physical realm. Not necessarily they when jump on one canoe and they came from another island or something. Sometimes those ka'ao also discuss how they can appear. For example, Mauna Loa erupted recently and a lot of people was like, 'Oh, it has a different feel than Kīlauea.' Those ancestors probably went to sleep for a few thousand years and they just reawakened. We never know some of those akua's because it's been a thousand




years since they appeared so they reappeared again. And similar to Papahānaumokuākea, I feel like those akua's out there would reveal themselves if we're willing to accept their appearance and be able to recall and understand which of these akuas.

Kealoha Pisciotta offered additional insights:

Hina'ōpūhalako'a and we mustn't forget about Mahina playing a role in the life force of the ko'a. Also, Papa and Wākea, they play this vertical role of earth's mother, sky father and have all these other important aspects that come in the Kāne and Kanaloa, for sure. Even not dividing, but connecting our space from the South to the North so they almost set our kūkulu's. Also, the importance of the kai and the wai and the depths on the land and in the sea and in the heavens. Kanaloa has forms in the heavens as well. As Kāne does, also. Kanaloanuiakea, I think, it's the first four or five lines are basically describing the Polohiwa's. And so those are also not only the sort of northern turnaround, but the motion of the sun. In the four Polohiwa's and if you look at their names, you see the connections and the Kāne and Kanaloa connections too. Those are very important and they help us understand Kanaloa's bodily forms too as the he'e coming in and connecting all these things and being like the koru. The spiral effect that we see in the oceans on massive levels that are hard for our own perception to see from a human level. You can see it actually in the satellite photographs, for example, of the koru spiraling of icebergs way out there that you would never see. And then Lono, is also mentioned as some of the low-lying islands, the white papa. Some of our mo'ō wāhine come into play, too. They protect these kapu places.

Kaikea Nakachi shared 'ike and mana'ō about kahu manō and the mo'okū'auhau of manō ali'i. He stated:

Traditionally kahu manō and by extension/dissemination the larger communities intimately knew and understood the mo'okū'auhau of manō ali'i. Their names, genealogy, appearance/marks, behavior, demeanor, territory, and movements were studied. With western influence these practices were oppressed along with




the language and the sharks themselves targeted and killed through disrespectful recreational sport/trophy fishing and savage culls. So, we have an exponential loss in manō populations and practices in the main Hawaiian Islands. In just a few short decades centuries of coexistence and understanding is nearly wiped out. Only through precious few oli and old documents do the names of some manō akua, ‘aumākua, ali‘i were preserved. We now live in a Hawaiian world where the average Hawaiian could tell you the shark is their ‘aumākua, but not know the precious ‘ike kūpuna we once knew. How do we now differentiate between Niuhi and manō i‘a, manō kākana, mano akua, mano ‘aumākua, and manō ali‘i? I wish I could tell you with certainty inoa and mo‘okū‘auhau, but we have not regained enough yet. And it is unlikely we will regain the ‘ike if we do not do more in Papa and the main Hawaiian Islands to protect manō and the practice of Kahu Manō. If we do, then with patience and lots of hard work we may one day be able to report inoa and mo‘okū‘auhau, and be able to kilo their movement between kahu and moku and papa.

Regarding Kūhaimoana, Mike Nakachi shared:

We know that her hale is there on the northwest flank of Ka‘ula Rock. We know that she was probably the queen of all sharks as mo‘olelo indicate. She was massive. You hear about the mo‘olelo of her going through the channels and then, auē, stuck on the bottom because the tide was too low. You hear the mo‘olelo of Kamohoali‘i being 12 fathoms long, ooh, I would love to see that manō at 72 feet. Certain things that fascinate me, Kaikea Nakachi, and our family about the kahiko mo‘olelo. But here’s the thing is that the kahiko mo‘olelo, we are authenticating that as modern-day practitioners, and we are going back to these spots. And what our ancestors knew was spot on! Was spot on. The mo‘olelo is authenticated kahiko through a modern day kākana lens. And Kaikea Nakachi is a prime example of that.

Mike Nakachi also talked about the art form of asking permission:

Going to the realm of Kamohoali‘i, asking permission. Anytime we go anywhere, we try and reach out to whoever maybe have been the konohiki of that area. We



checking in with everyone. I think that is something that is a lost art form. And here is something that is of the most humbling thing that I have ever learned, and that's from dear Nainoa, is that he asked permission even to this day. So, from one kanaka to another, I'm trying to honor that same way of us, whether we're holomoana on a wa'a. Or if I'm on a wa'a that is powered with horsepower on a motorboat, I want to have that same courtesy of asking. And of coming from a place of respect of those people and their wishes. That's something that understanding about Kūhaimoana, we would not go there unless we did the proper protocol, ask the right questions, take the right people that should go with us to then do things.

Mike Nakachi relatedly stated regarding akua: “Akua no need permission, right? I think that's the one thing that they go wherever they want and they go wherever they please.”

One anonymous individual offered a pan-Polynesian and beyond perspective on akua, mele, oli affiliated with Papahānaumokuākea. They said:

Because it was experienced at many different times in successive waves of the precursors to Native Hawaiians, our Polynesian ancestors in general. I do think that there are many, many different stories and many, many different names and many, many different akua that have been assigned to the area at different times. I'm not aware of any specific ones that I would point out. I would just acknowledge all of them because they're all true.

Mele, mo'olelo, oli, ka'ao, and significant inoa 'āina about Papahānaumokuākea that are key to cultural understandings and interactions with the 'āina and/or the relationship to the pae 'āina

Some consultees identified an array of traditional through contemporary oral traditions associated with Papahānaumokuākea. These included mele, mo'olelo, oli, ka'ao, and/or significant inoa 'āina (place names) important in cultural understandings and interactions with

the ‘āina and/or the relationship to the pae ‘āina. Interviewees repeatedly recognized the ongoing cultural practice of creating new oral traditions in and related to PMNM. Per Nai‘a Lewis: “I would add that the mele, mo‘olelo, oli, ka‘ao created in recent years by Hawaiian[s] (often on cultural accesses) should be uplifted and made known in appropriate ways for the community”.

An anonymous individual listed several mele, ‘ōlelo no‘eau, mo‘olelo associated with Papahānaumokuākea:

Mele No Papahānaumokuākea Na Kainani Kahaunaele a me Halealoha Ayau (I also heard there was a hui that went to Papahānaumokuākea to create mele).
‘Ōlelo No‘eau #1924 Ku pākū ka pali o Nihoa i ka makani. The cliff of Nihoa stands as a resistance against the wind. ‘Ōlelo No‘eau #2311 Nihoa i ka moku manu. Nihoa, island of birds. Ka‘ahumanu mā, Lili‘uokalani mā going to visit Nihoa. The naming of Papahānaumokuākea by Aunty Pualani Kanahele.

They continued:

I think there is something to be said about contemporary mele, mo‘olelo, oli, and inoa that are associated with PMNM. Besides names of each island—Kai‘anae, Hā‘ena, Kūkaehao (newer place names given to areas at Kuaihelani/Hōlanikū). Hāwane Rios also gave place names to certain areas on Hōlanikū during her time there. Names were given based on her observations and time spent there. She created a cool map that shows these place names. Hāwane has also created mele for this place. Names are a way that we can bring Papahānaumokuākea and its inhabitants to our people and the people across the globe, specifically, names in Hawaiian. This is how I started getting involved with the work at PMNM because of the ongoing effort to name places and species in Papahānaumokuākea. This represents a living language, culture, and people. To date, the Nomenclature Hui has given/repatriated a total of 63 names to species, places, and other activities in/from Papahānaumokuākea. The Nomenclature Hui has a growing list of naming requests mainly coming from the scientific community who also understands the important role that language and culture play in the conservation and protection of PMNM. This also represents the understanding of

PMNM scientists/managers etc. of how important Hawaiian culture and language is to the mālama of that space.

Akoni Palacat-Nelsen shared a mo‘olelo:

One important mo‘olelo that captures me, because understanding the ‘aha season, which we’re coming up to right now. A lot of people call them the Kū season and the war season. But I disagree with the whole entirety of war being a season. But more of an ‘aha season, which is about unification and unifying chiefdoms and resources. The story of Kawelo and his rights of passage actually takes place up in the Northern islands and his ability to capture the ulua for the purpose of sacrifice and to gain the ability to manage resources so that he can have the ability to become the chief in charge of creating kapu for that particular area. We can learn from his ka‘ao about what akua’s that he tapped into which would help us understand how to sustain and maintain kapu today. Some of the akua that could generally be affiliated, I’m thinking of the other ones is of course is our goddess, Hina‘āko‘ako‘a, which is super important to the fisheries of Papahānaumokuākea. I think today we can probably name a few akua’s that would probably want to stand up and appease these akua’s to assist in maintaining our abundance and our life.

Brad Ka‘aleleo Wong recommended several PMNM-related mo‘olelo:

Keaomelemele, Pele genealogy, stories of Keaumiki and Kaukā, Kaulu, Keaniniulaokalani, ‘Aukelenuiaikū, Wākea, Umi, are a few that come to mind, and there are many others. I do also want to point out that I think our presence as kānaka in Papahānaumokuākea on huaka‘i is highly important to not only remember these and other mo‘olelo, but to experience what our kūpuna experienced, feel what they felt, and understand what they know. In this instance, we are also able to create new mo‘olelo and forge new connections to this place.

One individual who wished to remain anonymous shared regarding significant inoa ‘āina: “Ka papa kaha kua kea o Lono, Kuaihelani, Kānehunamoku, Kapou, Kahiki.”


Uncle Kepā and Aunty Onaona Maly referenced their 2003 *Volume I: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu (A History of Fishing Practices and Marine Fisheries of The Hawaiian Islands) Compiled From: Native Hawaiian Traditions, Historical Accounts, Government Communications, Kama‘āina Testimony and Ethnography* and *Volume II Oral History Interviews: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu*.

Uncle Paka Harp stated that he is not familiar with mele, ‘ōlelo no‘eau, mo‘olelo about Papahānaumokuākea that are key to cultural understandings and interactions with the ‘āina and the relationship to the pae ‘āina, but cautioned that his lack of knowledge should not be interpreted as there being none.

Preservation and Management Concerns and Recommendations


Several consultees expressed concerns or provided recommendations regarding the preservation and management of Papahānaumokuākea. The majority of their comments focused on the research permitting process. Consultees expressed a desire for greater scrutinization of scientific research permit requests and the prioritization of what’s culturally appropriate and best for Papahānaumokuākea. Akoni Palacat-Nelsen and Kealoha Pisciotta shared mana‘o regarding negatives, positives, and possible improvements to the permit review committee processes:

Along with OHA Ka Pouhana, Dr. Sylvia Hussey, Kealoha and myself, we do have some ideas about how this works out. We also do respect the policies that the federal government have been working with. They do some due diligence on a legal side. But they could include a little bit more cultural views as well in the process. For example, I don’t agree with just any willy-nilly researcher to come out and say, ‘My white paper is on sharks, so I need to come to Papahānaumokuākea.’ Maybe Papa doesn’t need research on sharks. Maybe it doesn’t need research on certain things. But they’re doing this and it’s creating data that’s affecting the existing policies. So next thing you know, we’re prohibiting things that could negatively impact the Native Hawaiian community or our genealogical connection to the place. That’s the negative side.



The positive side to the permitting process is that there's a lot of discussion that takes place, and it's a learning curve for everyone on the committee itself. And again, the committee does not make the decision. We make recommendations to the managing board, which is the MMB, and they make decisions. But I've seen a few times where they kicked the decision making back to the permitting committee to review some things, especially when I fought against National Geographic bringing in community scientists just for funding sources for more research to be done. I did not agree with something like that. And the reason for that is because it was not providing support for cultural and natural resources. I saw nothing to that. I just saw a big party on a boat."

Just to be aware of how the process is a researcher will apply. They pull all the facts to the permit, and then we make recommendations. In that same process, OHA has a subsidiary process which we need to actually improve on. Kealoha and I were just talking with our Ka Pouhana for the past few months on how we can improve our advisory group, the CWG, into the permitting process. How can OHA improve on our process in ensuring that permits are commented appropriately. Both Kealoha and I try our best to include cultural viewpoints. As you know, OHA's position is actually on a legal basis. So, we chime in based on traditional customary rights, UNDRIPS, the United Nations Indigenous Rights. A few other federal policies that we can use to help impose cultural viewpoints or at least broaden enough cultural viewpoints or allow cultural viewpoints to be included in the consulting process. The thing that the permitting committee doesn't like is stalling the process. Most of the time I try my best to take my time because we need the advice from the kānaka's. A lot of times researchers who are requesting permits are on a grant and have a deadline. They need to know if the permit's going to be approved or not or whatever, based on their funding sources as well. And so, I don't want to be an impediment on that, but at the same time I am not into compromising stewardship of our culture and natural resources. My priority is pretty adamant and straightforward and sometimes not well taken and received by the rest of my committee members.



Kealoha Pisciotta commented about the lack of scrutiny and quality control regarding scientific permit requests:

Akoni and myself have really had to deal with some of the scientific permits that come forward that are generally not scrutinized tightly enough. And in a way, OHA, the MMB operates sort of in a consensus way. And we've had to chime in these certain ways to say, 'Wait, hold on.' For example, one permit was wanting to record seascape sounds of whales but we said, 'We think you might not be getting the science you're looking for since you're trying to collect whale songs when it's not whale season.' They voluntarily withdrew their permit to reassess and realign what they're trying to do. But this is the value of both having the Cultural Working Group and OHA to be able to advance these certain aspects. When agencies or scientist are talking about functioning in Papa and affecting our kinolau, then we do need to know. We're not trying to add more work for them, but they have to be cognizant of the fact that if they want to do something with the mōlī, they need to let us know. Because the Cultural Working Group should have a say. They want to do work on honu. We need to know about that. These entities that they're referring to are kinolau and we're connected to them. They're part of our family.

Akoni Palacat-Nelsen stated: "For me it's about kuleana of the resources. This is the realm of Kāne. You don't mess around in this realm." An individual who wished to remain anonymous relatedly commented:


I strongly believe that access opportunities should be given to practitioners to grow in their understandings of this ancestral realm and was something I advocated for strongly in my assessment of visitation on Midway. I'm not sure how sanctuary designation might affect this.

Regarding preservation and management concerns, Kaikea Nakachi recommended a multi-prong approach to protect the sacredness of Papahānaumokuākea:

If this is how we have allowed the ali'i of the sea, the kinolau of Kanaloa, our own 'ohana as 'aumakua to be treated in the sacred realm of pō, then how easy it is to

continue to desecrate further. How easy it is to allow foreign industry to exploit fishing and other very dangerous practices in and around Papa and the Main Hawaiian Islands. We must simultaneously do a top down and bottom-up approach to restoring that what is sacred to actually be treated like it is sacred. And for the top-down approach we must advocate for these cultural practices of mālama manō and stop harmful practices of insensitive catching/killing manō. Then we must stop the killing of other kinolau/‘aumākua such as honu, palaoa, Nai‘a Lewis, and again more manō from long liners whose miles of lines have effectively encircled and ensnared our islands. I don’t mean to be cynical but our Main Hawaiian Islands are covered in sacred places that are no longer treated sacred. And it has led to the decline of biocultural resources and our own identity as these places are replaced by colonizers. We cannot allow the same to be done of the ONLY remaining place that has some semblance of the health of biocultural resources under Hawaiian practices and proper treatment of sacred spaces. Moving forward with the monument and rules, I believe everything should focus on not just minimizing impact but replacing any and all permitted activities that would cause any impact with cultural ones that give. Once we do that for sacred Papa then maybe we have a chance at doing the same here in the Main Hawaiian Islands too. I think we should protect Papa to the greatest extent we can. If that is the maximum 200-mile EEZ then we need to do that and enforce it. I agree with my dad, if can do more, then absolutely let’s do more. If it means international cooperation, I think aloha and mālama can be gifts to the rest of the world where Hawai‘i can lead by example. Things like Marae Moana and the Ross Sea Region MPA are great just like PMNM, but we will need to do more and protect more. And on to the very last section I agree that not only should we not take anything back from Papa other than marine debris, but we also should not be going if we aren’t giving something of value to Papa like ho‘okupu, aloha, voice, mālama.

How can cultural practices be integrated into resource management and/or restoration today?




Consultees identified varied processes and approaches for the integration of Hawaiian cultural practices into current Papahānaumokuākea resource management and restoration initiatives. Prevalent themes included Hawaiian agency and authority in the stewardship of PMNM, and the careful, considered implementation of Hawaiian cultural concepts and practices (konohiki system, kapu, etc.). One individual expressed this is a “HUGE process question that starts with the governance framework--that impacts what and how things happen within the system. If this type of discussion is wanted, I’d love to kōkua to figure out how to approach and facilitate the discussion, as well as offer my mana‘o in that discussion.” Speaking to how cultural practices can be integrated into resource management and/or restoration today, Pelika Andrade wrote: “Purposefully! Respectfully! And deeply, not surface.”

Approximately one third of consultees recommended the integration of cultural practices and Hawaiian agency and authority into resource management and protection at PMNM. Uncle Kepā and Aunty Onaona Maly advised: “[m]ake Hawaiian beliefs, practices, and traditions an equal partner in the long-term resource management/restoration/stabilization decision making and hands-on programs.” Hōkū Pihana recommended: “These cultural practices should be interwoven into all aspects of how we care for and engage with Papahānaumokuākea most importantly how we weave our sciences and knowledge systems in research, stewardship, and sustainability.” An anonymous individual stated: “Traditional cultural beliefs and practices should inform modern resource management and restoration efforts. Our kupuna knew how to live sustainably and thrive in these islands, who better to inform and guide us in management and restoration?”

Another individual who wished to remain anonymous stated:

The fact that there’s a Native Hawaiian Cultural Working Group that helps to analyze the applications of permits both Native Hawaiian and others is a very, very important way of making sure that the activities that occur presently are in alignment with resource protection and cultural resource protection. You know, having slept in a bomb crater on Mokumanamana was one of the most surreal things that I have ever experienced because here’s a sacred ‘āina that, because it was, I don’t think we were ready at the time as Hawaiians because it wasn’t recognized or we didn’t have the knowledge to push for protections. Having the



island used as a bombing range is sad, but good. Because now we know what happened and now we have kuleana to make sure it doesn't happen again.

Relatedly, Uncle Paka Harp stated that ensuring the continuance of the existing Cultural Advisory Council to advise management is a way to integrate cultural practices into resource management and/or restoration today. Kēhau Springer commented: “Share with the next generation and continue to have Native Hawaiians at the table for discussions about management and restoration.” One anonymous individual shared “By allowing cultural practitioners to be a big part of the process.” An anonymous individual shared: “Easy. Just get proper access, follow proper cultural and science protocols and practice.” Catherine Fuller shared: “We can continue to speak them, recognize them, include them in protocols and public education.” Chadd Paishon wrote: “Continued observation within Papahānaumokuākea of these people allows us to be prepared for change.”

Specific suggestions and recommendations were also offered for the integration of cultural practices and Hawaiian agency and authority into resource management and protection at Papahānaumokuākea. An individual who wished to remain anonymous encouraged “[f]inding alternatives to federal and State-based management regimes like designating konohiki who can restore and maintain cultural resources in Papahānaumokuākea.” Kealoha Pisciotta advocated for Hawaiian agency and authority in the implementation of kapu as a PMNM stewardship measure. She said:

Kapu as sacred. Kapu is a socio-religious understanding but seen as a limitation. Actually, it's a protection for abundance and to maintain the reverence of place, land, and area. Basically, it's within the construct of our sacred ways. We don't need the State to call the kapu. We call it. We need them to enforce it. These areas we're calling on that protection because it's a protection that connects us. It protects the whole world actually. When we protect the biodiversity on the smallest level, it helps the biodiversity on the grand level as well. But we just need more of it. Our kūpuna, our konohiki, and some of our leadership are the three most important parts that could call those things in the past. When they have kuleana, when they have 'ike kūpuna, and when they have this kilo, power of observation, that's how it needs to be done. Not just some State agency doing it because they can't do it. They don't understand it.

Brad Ka‘aleleo Wong recommended additional resources to consult:

Much of the cultural background of Papahānaumokuākea was worked into the development of *Mai Ka Pō Mai*. Its integration into the new management plan would be a good first step in recognizing cultural knowledge, practices and values into management. Another important effort would be to ensure that Native Hawaiians have a meaningful role within management so that cultural knowledge can be advocated for, where appropriate.

Nai‘a Lewis noted:

There have been substantive cultural activities which were documented; they should continue and new activities designed across the life of management in the region. I would add that all activities need to be packaged and shared in ways that allow them to be referenced and built upon as needed. We need more cultural collaboration to innovate on what has come before.

An anonymous individual shared:

Specifically with how naming can support management, but to reaffirm the point, naming something (especially with a Hawaiian name grounded in a traditional naming process/practice) is a way to make these species and places real and relevant to the world. The reality is that most people of the world will not see any of these species in real life; nor will most people be able to witness the true human impact (plastic, waste, invasive species etc.) on Papahānaumokuākea; nor will most people ever see the decline and extinction of a species; nor will most people ever see an eroding island return to the sea—most people in the world will never have that experience, but cultural practices demand spiritual connection. Thus, by doing these practices, creating and saying these new names, listen to mele, read mo‘olelo, these people who will never have a chance to ‘ike maka PMNM will be instantly transported there—helping to increase the important and priority these cultural resources.



Another stated:


Cultural Working Group (CWG) Nomenclature process, leading the way we articulate what inoa wahi mean to us, wahi pana, mo‘olelo, mele, oli in building, maintaining, and strengthening pilina to these places. Also being able to adapt and know that knowledge and pilina drive practices, so we know that names can evolve over generations. We have to be careful that our cultural practices are not distilled or white-washed into resource management and restoration today. The goal needs to be clear: ‘Āina Momona, healthy and thriving communities of people and place. Different places served different functions formed through generations of intimate pilina, so how do we learn how to listen to the needs of our ‘āina to thrive, and also re-adjust our behaviors to support productive places for our communities.

Another anonymous individual suggested:

Practitioners as scientists, longer term or recurring opportunities for Hawai‘i peoples to do seasonal kilo (observational practice) and to build pilina to place, that are potentially independent of jumping on a research cruise or marine debris removal effort but elevating this relationship building and kilo as research that is valued in its own right.

Adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary

Many consultees associated an array of adverse impacts to cultural practices and resources stemming from efforts to declare Papahānaumokuākea a National Marine Sanctuary. An anonymous individual commented: “Perhaps access by Kānaka for cultural purposes. I can imagine that an unregulated process might hinder or place too much red tape on projects/programs for Kānaka to continue our cultural practices and connections at these certain places.” Another discussed the following regarding impacts (direct, indirect,



accumulated through time) they believe sanctuary designation will have on cultural resources, practices, and/or beliefs they associate with Papahānaumokuākea and the surrounding vicinity:

Monument designation has uplifted Papahānaumokuākea into a highly protected and managed area, which I believe, raises the preservation and conservation goals that we typically have in western science approaches. While I do believe that protections are important and vital, especially for sacred areas in Papahānaumokuākea, the impacts of any MPA or sanctuary designation can have affect on ‘ohana who were once able to enter the monument and practice, connect, learn, and continue their culture. This is a negative impact because it has potential to disconnect practitioners, lineages, families and a whole culture from Papahānaumokuākea while being un-inclusive of "them" in conservation priorities and objectives. As many native Hawaiian people have already become disconnected from practice and lineage, this small pause to meet management or conservation goals can have lasting effects in long-term for cultural practitioners. I think these impacts are important to understand in future management decisions that are adaptive and inclusive of all stakeholders for considering sanctuary designation. Finding a balance with sanctuary designation and ability for ‘ohana to visit and practice is a beautiful goal that future models can improve on. I think it would be important to include a regulatory clause or protection for processes allowing native Hawaiian practice (science, cultural ceremony, voyaging, special harvesting permits etc.) in the language of sanctuary designations as management positions may change and policy makers shift over time.

One individual expressed concerns regarding the intersection of Hawaiian cultural fishing practices and fishing regulations within the PMNM. They said:


It depends on the Wespac (Western Pacific Regional Fishery Management Council) proposed fishing regulations and on the outcome of its pending review under the Sanctuary Designation process, it could definitely be harmful and negative in setting a dangerous precedent or loophole for exploitation and misinformed management decisions through the guise of cultural subsistence practices. If their proposed fishing regulations package is approved, it will

definitely have adverse effects on the biocultural seascape of Papahānaumokuākea. It will change the relationship at a very basic level and will open up the flood gates to cultural subsistence being exploited through inaccurate information regarding cultural customs specific to Native Hawaiians. Our ‘Ōiwi kūpuna like Uncle Buzzy Agard and Uncle Kāwika Kapahulehua remind us that Papahānaumokuākea needs to be protected and the many conversations amongst the CWG led to the support for using the definition of sustenance (everything taken in the monument is consumed in the monument). Positive impacts would be if our cultural practices and ‘Ōiwi voice and position to support co-management of the Sanctuary through the CWG are protected in perpetuity.

One individual commented: “Sanctuary designation will strengthen existing protections in Papahānaumokuākea that stem from the current monument designation under the Antiquities Act which is vulnerable to alteration (i.e. reduced size of protected area), or removal by the president of the U.S. Commercial activities being promoted as part of sanctuary designation. Lack of Hawaiian involvement with developing long term management plans. Positive impacts, Prevent repeal of current designation under the Antiquities Act.” Another anonymous individual felt that it “[a]ll depends on how governance is structured.”

Mike Nakachi and Kaikea Nakachi discussed adverse impacts to cultural practices and resources from extractive and harmful research practices that are not in alignment with Hawaiian cultural beliefs or practices. Mike Nakachi worries for our culture, researchers, and the governing bodies of PMNM:

Researchers hide behind research because of funding and because of money. And they want to poke, test, or they want to get something too. I get that, you know. I’m all for certain things done in a non-intrusive way. But I think what happens is that the researchers have seemed to control the narrative ever since the monument was established. When you have a governing body that are all co-trustees and even though OHA is a trustee to a certain degree there at the table, it just sometimes seems three outweigh the one that represents the culture there. And, I don’t think that that’s weighted properly for the benefit of Papahānaumokuākea. People asking me why don’t I come to French Frigate



Shoals to talk about monk seals or culling manō. I say, ‘No, I don’t need to go there.’ No one really needs to go there, and you don’t need to cull any manō there.

Regarding the permitting process, Mike Nakachi commented:


The layer, upon layer, upon layer of bureaucracy or permits or process that don’t benefit the lāhui in any way, shape, or form. And then don’t allow people that who really should witness that. And that would be in the right mind, in the right space to go there, get deprived that privilege of going there. So that’s the kind of stuff that I think would really would love to see change within the monument that it’s more weighted evenly or waited in lāhui’s favor for kānaka to engage in their place and space more so than the others that are at the table, now, currently. Kamehameha said, ‘You ready to drink the bitter water?’ And I don’t think that federal government, I don’t think the state government, no one wants to drink the bitter water, and we constantly are drinking the bitter water every day.

Mike Nakachi continued:

But here’s the thing is we all then have to navigate knowing what has happened, but still trying to lead with Aloha on a daily basis to make the change. And that’s what we keep doing. We just keep engaging here, talking about these things, putting it on an administrative record that then will hopefully create change for the future and hopefully the near future. So young ones and others can witness something that they feel very passionate about and will be able to uplift others and enjoy that place. Or go back to offer ho‘okupu in a place that you would feel very privileged and honored to go.

Mike Nakachi identified and expanded on a few impacts associated with the proposed sanctuary designation:

Impacts of a place that is supposed to be of the highest reverence. I think for all of us as kānaka or even as a human race, we have impact. So, to places that are of the monument, they’re dealing with the impact of the ‘ōpala, right? They’re dealing the impact of plastics. They’re dealing with the impacts of global



warming. But then we forget about things like noise pollution and I think that's one big one. And the only reason why I tie ourselves to that is because when we are underwater, sound travels four to five times as fast. So, it's very intense. Motors, war games, all of those various things, you hope that they're staying outside of that 200-mile zone or what have you. But, if a blue whale or a humpback whale song or blue whale and those low frequencies can be heard, whatever, 7,000 miles away, that's another thing that I think bothers me about an impact...sound.

He continued and talked about Midway Atoll being an emergency place for fueling and industrialized fishing:

Another big one, the fuel spills that could devastate the area. I can see the vital part on why maybe the federal government would want that there as an emergency. And I can see how important that is. You know, whether it's Aloha Airlines or Hawaiian Airlines or other people making emergency stops. The other impacts that would worry me is just impacts of our industrialized fishing, which is the biggest one. How in the world did we allow, even in the main Hawaiian Islands pae 'āina, a billion-dollar industry to exist that really has relatively a low percentage of kānaka contact?! The 97% are probably the business that are involved with Westpac are probably foreign owned. And how is that to exist in Honolulu Harbor with 140 boats laying 30 miles of hooks on some of these boats. And then that gear. So, then I think of Papa and I think of our pae 'āina, they can basically surround sections of our pae 'āina that then affect migratory patterns of fish stocks that then can create a smorgasbord of dead fish. And then they wonder why there's bycatch. So, I think that's one big one that I will continue to advocate. I think lawai'a, once you're a lawai'a and you're going for sustenance, that's one thing. That's one thing my dad always said, 'Catch what you can eat and that's it.' As a modern society, some people na'au have wavered or wandered because they have too many things on their plate that they financially need to secure funding for. Hence, then comes the greed that then impacts that area in our oceans. So, I think from an ocean perspective, those are kind of some of the bigger things.

Mike Nakachi also identified some negative impacts associated with research:


The researchers that go into Papahānaumokuākea that have no cultural oversight, zero. Maybe they get the approval from the cultural working group and they get to go in. I think we have to do the honorable thing as human beings to other human beings and then do the honorable things to all the forms of akua and kinolau that could be people's aumākua that the federal government, fish and wildlife, and the state government allow people to do their practice and to do what is right by those forms of akua or 'aumakua for many."

Regarding impacts from lights, Mike Nakachi stated:

Light in our main pae 'āina is just devastating to so many things, you know? And I just think of like 'ōpe'ape'a, how that's been affected by lights. I think of all the manu that are affected by lights and I think of all the other forms of ocean life that then get affected by light. And so, you know, it's like I'll tell you another story. You catch lau'īpala (yellow tang fish) off of our reef here and you put it in a tank and then it goes to Boston and the person leaves the light on. What do you think happens to that lau'īpala over time? Make. Why? Because lau'īpala isn't used to that light all the time. We need to be sensitive enough, have that kind of lens, that kind of optic of being very sensitive. But I think that you have to put yourself in that perspective of that particular kinolau that needs the cloak of darkness. They need to be, whether it's a Hilo moon or whatever they need that 'ele'ele, black. They need it dark.

Mike Nakachi revisited impacts from humans, stating:

I wish that the tables could churn through the cultural impact assessment, that it was a little bit more slighted differently for people of place and people of host culture to then go there as a practitioner. Or go there as a scientist. Or go there as legal advice that have the necessary mo'okū'auhau of place. What I'm getting at is you just want to be careful that it just seems like it's for the benefit of others instead of for the benefit of kānaka. Researchers stand on the back of Papahānaumokuākea for a lot of their scientific justification, and it's not in the



best interest of the place. So those are the kind of things that I would be a little bit more concerned around those impacts that could negatively impact Papa. And that's just coming from more of a cultural lens.


Kealoha Pisciotta expressed concern over the impacts of sanctuary designation on cultural perspectives and stewardship approaches in the PMNM. She commented:

I support maximum protections for Papa, we need to maintain some of the jurisdiction. Sanctuary designation needs to have like a federal overlay to protect it against some crazy president just overturning all of those protections with an executive order. I support the maximum protections for Papa, but I support them not just because there's a federal entity. We need to make sure that the protection is coming from a culturally based focus. And the federal entity has a few misunderstandings about who we are as k̄anaka and their legal obligations to us as k̄anaka. It's more than just our Constitutional rights. It's tied in with the Admissions Act and the compact between the United States and Hawai'i. And so why am I saying yes when I'm supporting greater protections, but I'm also saying it could negatively impact certain cultural perspectives being kind of run over by the fed's lack of understanding and we're working on it.

Akoni Palacat-Nelsen mentioned the Paoakalani Declaration and need for foundational 'ike k̄upuna and k̄anaka mana'o and philosophies to inform the stewardship of PMNM:

I want to mahalo those who convened to create the Paoakalani Declaration which provides us an avenue to assert and also protect intellectual property rights which include 'ike k̄ipuna. The ability to utilize 'ike k̄upuna to develop data that would then develop policy. That would develop our stewardship construct. And so, I agree with Kealoha Pisciotta that I'm not against effectuating some sort of protection over Papahānaumokuākea. But I do wanna make sure that the foundation of that comes from the k̄anaka, or at least the perspective of k̄anaka and the philosophies. Particularly in that region that should be protected.


He continued:



I was going to bring up the fact that it could negatively impact the implications of Paoakalani Declaration would protect intellectual property rights. Given the advocacy efforts for Native Hawaiians today, we understand that there are many rights out there. But to protect the practices as well as our position in society. It's important that we maintain control of how data is processed and which data is being processed. I feel that for decades, the way how policy is developed, which governs our resources, is based on data and who's providing that data. And so, the omission of 'ike kūpuna, and the ability to utilize so not just protecting our intellectual property rights, but being able to, if the project can harness that properly this is where I think we're trying to affect, even our agency, the Office of Hawaiian Affairs in maintaining the kānaka positions in society, not just in Hawai'i, but on this planet.

Kealoha Pisciotta talked about Indigenous Traditional Ecological Knowledge (ITEK):

This is a vitally important opportunity to get 'ike in, but it's a little lacking on how to protect that 'ike. Like the feds want to integrate it, which is a really good thing, but how is it protected? That's why the Paoakalani Declaration is vitally important. As is the UNDRIP, the United Nations Declaration on the Rights of Indigenous People, regarding our traditional lands that includes seascape and landscape. I mean, we are ocean people. What is our traditional so-called landscape, seascape, right? That's what needs to be upheld, in particular talking about Papa. Kekuewa has done a lot of good research on all of this and written all this really important stuff about our ali'i's role too. It's also our genealogical connections and things like this that are connected to that indigenous knowledge. The fact that the ITEK is rising to the surface, gives us an opportunity to address exactly what's Akoni Palacat-Nelsen is talking about. How do we protect the 'ike kūpuna while putting it into a place where we can use it on a global level?! We're a part of humanity and we played a major role in humanity, even though they continue to sort of treat us as invisible. The truth of the matter is we're not really invisible, but they still need to keep us in that frame and scope. But this executive order is helping all the federal agencies, forcing them to have to reach out and gather that kind of information. And we just need to make sure that that information is gathered and used properly as well and protected because we do



have rights, but with those rights are the responsibility. It's connected to our being and our genealogy and things like that. That's something that really needs to be addressed at some point. We might as well start now, because we're dealing with the feds, right?

Brad Ka'aleleo Wong similarly expressed concern about how Hawaiian values and traditions will be upheld in the management structure of the proposed sanctuary. He said:

An indirect impact of Sanctuary designation that creates some level uneasiness is how the potential new Sanctuary will uphold Hawaiian values and traditions within its management structure. And additionally, how it will incorporate the perspectives of the Cultural Working Group, whose members have provided a wealth of knowledge and experience to environmental and cultural management.

Some individuals recognized a mixture of benefits as well as impacts to cultural resources from the proposed sanctuary designation. Uncle Paka Harp stated the following regarding impacts (direct, indirect, accumulated through time) he believes sanctuary designation will have on cultural resources, practices, and/or beliefs he associates with Papahānaumokuākea and the surrounding vicinity:

Sanctuary designation provides a stabler platform for protections compared to Presidential proclamations under the Antiquities Act, which are subject to legal challenges. The caveat is that I have great concern over the differences between Monument and Sanctuary designations. Typically, under a Monument designation everything is prohibited unless specifically allowed. In comparison, under a Sanctuary designation everything is allowed unless specifically prohibited.

When questioned about adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary, Uncle Paka Harp stated that “[o]ther than perpetuating the occupying government’s control over Hawaiian Kingdom assets, there are no additional adverse impacts that come to mind.” He also noted that “[p]ositive impacts are yet to be determined.”

Chadd Paishon commented:

I think the impact on Papahānaumokuākea will be both positive and negative due to time and the changing environment which has continued from wa kahiko and that will continue past us but is exactly why we need to continue our cultural practices. The positive is the continued recognition and practice to care for this very important area and the negative is that in access to this fragile environment, we will continue to see the progression of time and the process of erosion and others impact the area.


Other consultees did not identify adverse impacts of the proposed sanctuary designation, although some individuals shared reservations. Uncle Kepā and Aunty Onaona Maly wrote:

We do not know of any current impacts but suggest that preservation and protection of the “Papahānaumokuākea” region should not exclude the right of Hawaiians to exercise/engage in traditional cultural practices.

Protection/preservation does not mean exclusive access for science purposes only. Too often the protection has led to denying access and perpetuation of practices that have time-depth in native history. Take the example of fencing off forest regions to protect rare species (good plan, poorly executed), and finding that acts of sabotage occur, and the fences are cut open. Continue building stewardship initiatives and cultural practitioner partnerships. Done properly with actual respect and honor for native Hawaiian traditional and customary practices will enhance the long-term stewardship of “Papahānaumokuākea.”

Hōkū Pihana wrote:

Positive, (1) more protection and support of PMNM. (2) increased food resources. (3) improved health and wellness of PMNM and MHI. If the sanctuary designation is grounded in Kānaka ‘Ōiwi practice and worldview with the intent to further protect the mo‘okū‘auhau of Hawai‘i nei through genuine and transparent relationships with all involved partners then I don’t see any major adverse effects from this designation.




One anonymous individual commented: “I think an additional layer of protections are necessary. Another individual stated: “I believe that sanctuary designation will have a positive impact on cultural resources however native practitioners should have a say on how the sanctuary is managed.” An anonymous individual shared: “It is my hope that sanctuary designation will protect our cultural resources and practices from commercial and nontraditional purposes and allow for kanaka maoli practitioners to continue our traditional practices.” Another person stated:

I can't think of any negative outcomes. I can think of only positive outcomes. So, with the designation and eventually adoption of a National Marine Sanctuary comes the protections that are associated with the National Marine Sanctuaries Act. The promulgation of rules. The implementation of fines. The sort of recognized structure of a federal agency as opposed to executive orders or executive proclamations. The additional recognition and hopefully increase in budget, which will increase protections. And then having the National Marine Sanctuary implores other federal agencies such as the Coast Guard, the military, other agencies to contribute at an increased level because of the designation.” They further explained: “The protections of any future actions could not be reduced below the ‘floor’ that was set by a Presidential Proclamation. Protections such as those suggested in future regulations could only be made stronger.

Brad Ka'aleleo Wong noted: “A positive impact is that it will provide additional protections for the region while hopefully providing necessary recognition to the importance of indigenous and cultural knowledge.” Catherine Fuller likewise discussed the benefits she perceives from sanctuary designation:

Increased protection would be beneficial for the marine resources to eliminate any illegal fishing and gathering in the monument. Increased interagency consultation would continue to be a benefit, following in the model of the current use agreement, with multiple constituents continuing to create and provide commentary on protections as well as educational material for the public. With the continuing progress of climate change, it will be increasingly important to monitor and document the health of the marine and terrestrial ecosystems. I think that the impacts would continue to be positive and important as a model of



indigenous leadership in the protection of cultural, environmental and spiritual resources.

Kēhau Springer stated: “I believe there will be positive impacts to allow for cultural practices to continue within Papahānaumokuākea.”

Whether consultees support, oppose, or have concerns about the proposed National Marine Sanctuary designation


Three anonymous individuals expressed their support for the marine sanctuary designation, with one anonymous individual underscoring their strong support.

Other consultees expressed support for the marine sanctuary designation alongside an array of concerns, mostly regarding the role, agency, and authority of Native Hawaiians in the management of PMNM and their right to access and continued cultural practices within the sanctuary. One shared:

Having sat on the Humpback Whale National Marine Sanctuary and working at Mokupāpapa, I do know that there are benefits to the Monument designation and to the multi-org board that runs it with OHA (the Office of Hawaiian Affairs), NOAA (National Oceanic and Atmospheric Administration) FWS, and DLNR (Department of Land and Natural Resources) as ‘equal’ partners. NOAA’s main competency is not in managing cultural and historic sites.

Another commented:

Yes, I do support the designation. My biggest concern is ensuring that Kānaka voices are at the foundation and the forefront of National Marine Sanctuary designation from planning to implementation. However, I know that there are many Kānaka who are in these spaces doing just that. For this reason, I do support it.



One individual encouraged modeling the sanctuary’s mission after the Kaho‘olawe Island Reserve. They wrote:


I support designation and encourage the Office of National Marine Sanctuaries to consider adopting a similar mission as the Kaho‘olawe Island Reserve Commission to ‘manage the sanctuary in trust until such time and circumstances as a sovereign native Hawaiian entity is recognized by the federal and state governments.

One person stated: “I support with concerns of government regulations that may restrict cultural access.” Another commented: “I support additional layers of protection provided through this sanctuary process to protect our ‘Āina Akua from those who wish to exploit or devalue its existence and our genealogy.” Another wrote: “Support, as long as it maintains or enhances Native Hawaiian governance mechanisms.” A community member talked about a primary concern - “[t]he maintenance and enhancement of Native Hawaiian governance of Papahānaumokuākea,” and outlined what they felt would be the best governance regime for Papahānaumokuākea:

When Native Hawaiians are self-governing, I would greatly prefer that Papahānaumokuākea were governed entirely and holistically under a Native Hawaiian government with continued U.S. financial support. The total of financial resources that the U.S. spends on the management of Papahānaumokuākea would affect all-around more positive outcomes under Native Hawaiian governance.

Both Kealoha Pisciotta and Akoni Palacat-Nelsen support the project with maximum protections. Akoni Palacat-Nelsen shared: “I’d say we have comments.” Kealoha Pisciotta added: “We support the maximum protections, and if sanctuary designation helps provide greater protections, we support that. However, the federal agency needs to be responsible to us, our knowledge, and our ‘ike and our kūpuna’s ‘ike.” Brad Ka‘aleleo Wong commented:

In general, I support the protection of the place as an ‘āina akua. Whether that is through a Sanctuary, Monument, Reserve, or other, is not my biggest concern, as it has been shown that each has provided protection and a level of elevation of



cultural knowledge. If NOAA has decided that a Sanctuary is what they need to provide the necessary resources to help protect the place, then it is agreeable if they continue to give reverence to Native Hawaiian interests.

Catherine Fuller commented: “I support it as long as it continues to be a collaboration between governmental agencies and native Hawaiian constituents.” Hōkū Pihana commented: “I support and want to ensure that the Kanaka ‘Ōiwi gathering rights aren’t exploited or misinterpreted by other parties whose intent is to exploit the resources of Papahānaumokuākea for capital gains.”

Kēhau Springer wrote: “I support the proposed Marine Sanctuary designation, so it can be permanently safeguarded as a place where kanaka maoli can connect spiritually and culturally to Papahānaumokuākea.”

Mike Nakachi stated that he wished the designation was bigger. He said:

I’m grateful there is a monument. Grateful that sanctuary is trying to designate things to expand it. A little bit bigger. I think the only ones who keep pushing back is our other friends at Wespac. So, that just tells us something. And I think that’s wrong. I think the people cannot take that anymore. You know, how is it that a marred company or a federal government agency supports a multi, whatever, \$976 million industry to then extract fish from around our pae ‘āina.

Regarding OHA as a trustee, Mike Nakachi said “Having a larger voice. I believe that they should be treated of the utmost reverence if that’s the agency that is there to represent kānaka.” Nai‘a Lewis stated: “At this time, no. However, it really depends upon what is in the final designation, which also means the process leading up to formal designation MUST include the voices of people who have long standing ties or have accessed the region, preferably (but not solely) Native Hawaiians.” Pelika Andrade wrote: “Have concerns. Ensure Native Hawaiian influence and agency.”

Preferred alternatives to the proposed action - sanctuary designation for Papahānaumokuākea



Four consultees identified preferred alternatives to the proposed action. Uncle Paka Harp's stated preferred alternative to the proposed action – sanctuary designation for Papahānaumokuākea – was: “United States de-occupation of the Hawaiian Kingdom in addition to reparations to the injured State and Hawaiian Kingdom subjects regardless of race is my much preferred alternative.” He also identified de-occupation as a preferred or desired mitigation measure.

Uncle Kepā and Aunty Onaona Maly commented:


Support. Kūpuna have described the Moku Manamana/Moku Papapa as the rookery/nursery for species in the Main Hawaiian Islands. Do not make economic value the focus of management efforts in the region “Kill” the maximum sustainable yield B.S., as we have seen the results of poor science rooted in building economic revenue. (See oral History interviews with elder kama‘āina – po‘e lawai‘a, in Vol. II, Maly & Maly 2003).

An anonymous individual advised: “Explore the idea of special area designations to allow for cultural practitioners to access Papahānaumokuākea for specific ceremonial, stewardship, and subsistence gathering practices.”

One consultee commented that they preferred the sanctuary designation. Regarding any preferred alternatives to the proposed action of sanctuary designation, Nai‘a Lewis stated: “No, I think Sanctuary Designation would prove stronger protections for the long term and give greater leadership from ONMS, which also strengthens the overall network of national marine sanctuaries.”

Which of the proposed sanctuary boundaries consultees support or if they have suggestions for other sanctuary boundaries

Four consultees expressed support for the current proposed sanctuary boundaries. An anonymous individual commented that they support the current boundaries including the proposed PMNM sanctuary designation of the marine portion of the existing monument. An



anonymous individual stated their support for the proposed marine sanctuary boundaries staying within the same current boundaries. They added “I also want to ensure the moana [ocean] is protected from mining.” Catherine Fuller shared that she supports maintaining the 2016 boundaries. Nai‘a Lewis shared that the boundaries should match the expanded boundaries of the existing monument.

Two individuals expressed preference for the sanctuary designation to encompass the largest area possible. Regarding sanctuary boundaries, one anonymous individual stated: “[t]he bigger the better.” Another shared that they prefer boundaries that include the maximum area possible, “[i]ncluding land areas, and any jurisdictions within that area. It is better to reduce or even do away with the patchwork of jurisdictions and rules in favor of a unified approach under a single jurisdiction. The patchwork of jurisdictions creates unnecessary work and challenges.”


Two anonymous individuals mentioned the Middle Bank in conjunction with sanctuary boundaries. One stated:

Middle Bank needs to be addressed at some point down the line. There are those on the Reserve Advisory Council who want to close off all of Middle Bank when the initial agreement to get fishermen support for the Expanded Area of PMNM was to let half of it stay open for Native Hawaiian fishing.

An individual who wished to remain anonymous asserted:

The full sanctuary out to 200 miles that does not change the sort of the pimple in the southwestern side that splits Middle Bank. I think that that boundary should remain the same because it allows fishermen mostly from Kaua‘i to fish an area that they have fished for many, many years. And I suspect that pre-contact folks that went up to Nihoa and Mokumanamana also fished that area because it’s on the way and it’s so convenient. So, if you’re looking for lunch, you are going to stop there because you can tell always going to have birds in that area, you’re always going to have upwelling. Grab one quick mahi, or ono or shibi or aku, and then you have food to sustain yourself during that trip.

Brad Ka‘aleleo Wong identified instances of boundary alteration he would not support:



As long as the Sanctuary stays within or ONLY encompasses what is already protected under the Antiquities Act, then that is maika‘i. I would not support any expansion outside of current Monument boundaries towards the main Hawaiian Islands, as that would erode trust within various Native Hawaiian communities and practitioners.

Three consultees identified alternative preferred boundaries. Uncle Kepā and Auntie Onaona Maly stated: “Boundaries and scope described by elder kama‘āina – po‘e lawai‘a in Maly & Maly 2003.” Pelika Andrade shared: “Expansion. Ensuring that Native Hawaiian influence and agency remains intact.”


Any preferred or desired mitigation measures relative to the impacts proposed by the sanctuary designation

Two individuals communicated preferred or desired mitigation measures. An anonymous individual stated: “The term cultural resources should be applied to other resources along with archaeological sites such as resources that are used for ho‘okupu and Hawaiian cultural arts (i.e. feathers for kahili, ‘iwi manō for weaponry).” Brad Ka‘aleleo Wong commented:

In the impacts I mentioned in prior questions, one way to ensure Hawaiian knowledge and values are used as the baseline for management, is to lean on the expertise of folks such as the Cultural Working Group to provide foundational knowledge for any new management plan.

Short or long-term concerns regarding the project

Several consultees shared short and long-term concerns related to sanctuary designation related to sovereignty, Wespac, and funding. Uncle Paka Harp’s short and long-term concerns regarding the project are “that the United States is in violation of the norms of international laws of occupation and the norms of international human rights laws. Truth be known, there was no annexation of the Hawaiian Kingdom, ever.” Uncle Paka Harp commented: “I support Sanctuary designation with concerns that are presented in my previous responses.” Nai‘a Lewis described



her short and long-term concerns regarding the project, “At this time, only Wespac shenanigans.” An anonymous individual expressed their funding concerns: “Securing funding needed to employ sanctuary staff positions in ways that don’t adversely impact current PMNM staff.”

Relatedly, Brad Ka‘aleleo Wong commented:

In regards to cultural concerns, I do not, beyond what I have shared already. However, given the world we live in, sustainable funding issues are always a pressing concern, both short and long-term. Access is not cheap; how will we continue to fund the important work in the region, while also protecting the resources there?


Two consultees identified an approach that would assuage their concerns. Uncle Kepā and Aunty Onaona Maly wrote: “Considering earlier comments and giving equal weight to ‘ike kūpuna in the long-term stewardship of ‘Papahānaumokuākea’ would eliminate concerns.”

Roles envisioned to mālama Papahānaumokuākea and the proposed National Marine Sanctuary designation

Consultees envisioned their mālama of Papahānaumokuākea and the proposed National Marine Sanctuary designation through actions involving access, cultural practices, advocacy, involvement, and stewardship.

Seven consultees described their role to mālama the PMNM through continued cultural use and the application of ancestral knowledge, cultural practices, and frameworks. One anonymous individual pledged:

I embrace a forever kuleana to continue supporting ‘Ōiwi voice, practices, research, and self-determination in guiding the co-management from agency, state, and community partnerships. One way or another, I know I will continue to stay active in the Sanctuary designation process and beyond. This is our



generational work to keep opening doors and pushing boundaries - re-claiming spaces and our voice to self-articulate as much as possible.

Another described how they envision their mālama of Papahānaumokuākea:

To help apply Native Hawaiian, cultural practitioner, and innovation lenses to planning and plan implementation with multiple specialties including socio-organizational systems change and systems dynamics.

An individual who wished to remain anonymous shared: “Keeping mo‘olelo alive and advocating for the building of pilina to these sites, particularly to Kuaihelani.” Another described their role in caring for Papahānaumokuākea:


A resource to support continued access for Hawaiians to Papahānaumokuākea. I can give my perspectives as a former employee in the Sanctuaries program and help with developing education materials focused on cultural resources in PMNM.

Brad Ka‘aleleo Wong shared:

As a former employee of a managing agency, I see my role as continuing to advocate for Native Hawaiian interests within Papahānaumokuākea in however ways possible by using my experiences from a management role perspective to ensure continued protections. Additionally, as a practitioner of wa‘a, I believe it is important to provide those experiences from the ocean as well and to ensure those traditions continue within that space.

Two individuals connected their roles to voyaging. Catherine Fuller stated:

As a voyager and a Native Hawaiian, any time I spend within Paphānaumokuākea would be conducted with the utmost respect for the protocols and rules necessary to protect the area. Having been there, it is my kuleana to represent my experience appropriately to the significance of the area as well as to educate others as to the area’s value.



Chadd Paishon shared, “To continue to access Papahānaumokuākea via the cultural practice of voyaging with our wa‘a.”

Consultees also mentioned ways to mālama Papahānaumokuākea as advisors and advocates. An anonymous individual shared that they see their role to mālama as an outside advisor: “Perhaps when they get back on the RAC, if need be. Will certainly be an advisory council to NOAA and Fish and Wildlife Service should the sanctuary designation be approved. Also advocating in educating.”

Kēhau Springer stated: “I will continue to be an advocate for the protection of Papahānaumokuākea. As time and opportunity allows, I would also give back and mālama by providing research experience or other needs that may arise.” Hōkū Pihana shared: “My role is to be present in the conversation for our Kūpuna Islands. To listen and stand firm for our kūpuna and our keiki to ensure Papahānaumokuākea is always cared for and sustained throughout generations. And to ensure our Kānaka ‘Ōiwi voices are always present.” Nai‘a Lewis described her kuleana: “[t]o leverage my experience working for ONMS-PMNM in support of protecting this sacred region with aloha.” Uncle Kepā and Aunty Onaona Maly Maly see their roles as ethnographers to mālama Papahānaumokuākea.

Continued involvement is another way those interviewed envisioned their mālama of Papahānaumokuākea. Uncle Paka Harp responded: “Trying my best to stay involved...” and Pelika Andrade mentioned she’ll continue what she’s been doing.

Traditional or local strategies recommended for the resource management and stewardship of Papahānaumokuākea and the proposed National Marine Sanctuary designation

Interviewees recommended a broad range of traditional/local strategies and approaches for resource management and stewardship of Papahānaumokuākea. The mana‘o they supplied is grouped by theme and presented in its entirety below:

‘Ike Kūpuna

- Uncle Kepā and Aunty Onaona Maly encouraged reference of their 2003 Maly & Maly, oral history interviews with elder kama‘āina – po‘e lawai‘a, in Vol. II.

Increased Hawaiian Authority, Management, and Involvement

- Traditional or local strategies recommended by Uncle Paka Harp for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation were “that only patriotic Hawaiian Kingdom subjects be in charge of management. These individuals should be elected by patriotic Hawaiian Kingdom subjects to management positions rather than being appointed by the occupying government.”
- Kēhau Springer recommended: “Kanaka maoli need to be present in the space to maintain pilina and connection and to offer management strategies. Sometimes kapu are needed especially on endangered and threatened species.”
- Mike Nakachi and Kaikea Nakachi recommended: “Expansion of what we talked about within the OHA culture working group. A great process to then engage the State and engage others. And I think that the State is also in the same position of trying to expand their divisions of whatever, DAR and others to within the DLNR to include more Hawaiian. And I think that that is going to be a big changing point, whether even at NOAA or Fish and Wildlife Service also do the same. I believe that all four of those agencies need to collaborate on looking at more host culture people of place to then help influence the decision on what’s best for Papahānaumokuākea, the sanctuary or the monument.”
- Pelika Andrade recommended: “Continue to partner, collaborate, and grow traditional and local relationships.”
- One person recommended: “Getting more Hawaiians to work, study, visit, practice within Papahānaumokuākea,” for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation. They added, “I think OHA (the Office of Hawaiian Affairs) and the Papahānaumokuākea group are doing a good job. I would rely on their responses.”


- An anonymous individual shared: “I am a language person, and I have always been interested in the ‘ōlelo Hawai‘i aspect of every area I have ever been involved in. I want to make sure that ‘ōlelo Hawai‘i and the unique perspective it offers is always incorporated into the management and protection of PMNM. Language is one of the ways we can ensure that it remains a Hawaiian place and a Hawaiian space offering more layers of cultural analysis and protection. Thus, anyway that ‘ōlelo Hawai‘i is a part of the designation is the role that I will assume (naming, research in Hawaiian language resources etc.)”

They also recommended: “See *Mai Ka Pō Mai* document; land management perspectives in *Native Land and Foreign Desires* (Kame‘eleihiwa), in *Moku System* (Winter et al), & in *No Mākou ka Mana* (Beamer); *Naming Practices in Hānau Ka Palihoua* (Pihana & Lorenzo-Elarco).”

- An anonymous individual stated: “Another HUGE process question that starts with the governance framework--strategies are best designed with this context in mind. If this type of discussion is wanted, I’d love to kōkua to figure out how to approach and facilitate the discussion, as well as offer my mana‘o in that discussion.”
- Nai‘a Lewis recommended: “I think others will have shared details about specific activities. I would add that it is critical that management continues to engage the public, to support the NHCWG (Native Hawaiian Cultural Working Group), to support innovations like *Mai Ka Po Mai*, and to uplift cultural research and processes designed by Native Hawaiians.”

Continued Access and Stewardship

- One person responded: “Mālama ‘āina.”
- An anonymous individual recommended: “Allowing opportunities for subsistence harvest by lawai‘a and other cultural practitioners to perpetuate tangible experiences and arts with younger generations.”
- Catherine Fuller: “Continue to gather commentary and ‘ike from a variety of constituencies to advocate for PMNM, educate about it and manage it safely. Ensure that those constituencies have access to the area to continue their relationship with it as *kia‘i*.”
- Chadd Paishon: “E ho‘omau.”

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- Hōkū Pihana: “I feel that by using our Native Hawaiian tools, science, language, and knowledge systems in ocean stewardship throughout our pae ‘āina such as wa‘a, kilo, and wahi pana we will contribute to the health and wellness of Papahānaumokuākea.”

Continued Protection and Outreach

- An anonymous individual recommended: “Continue bringing the place to the people and not the people to the place. Continue to be maka‘ala for other federal advisory agencies like Wespac with their continued incursions to weaken protections that have been so hard fought for over the last 20 plus years.”

Elevating Indigenous Science as its Own Research Category

- One individual referred back to their earlier answers on kilo and pilina: “Being elevated as Indigenous science that is supported within its own category instead of tagged on to other research efforts as it is now.”

Removing Western Frameworks and Motivations

- Kealoha Pisciotta: “We are being confronted with a Western way and being forced to look in a Western way. Because Papa is a significant player. Uncle Paka Harp Harp has some papers relating to this that are important about, for example, that Papa is like a nursery that helps to feed the main Hawaiian Islands also because the numbers don’t add up. The abundance, right? To fish, to extract per se. And then in the modern construct, there is an idea of because something is open to fish, that we should go in and take as much as we can because someone else is going to take it. This kind of adapted Western mana‘o is frustrating the situation. First of all, because of Papa’s sacred nature, we need to view Papa from that construct first. Then you look at where the k̄naka’s place in that construct is. Or in that cosmology. And from that place, I support the positions that, no, we don’t want to open it up. We don’t want to allow commercial extraction in any way, shape, or form. And anyways it’s not really permitted, as it is. But there is this movement to try to push Native Hawaiian rights as the excuse for Wespac to do that. That’s just not on. We’re having to adjust to their response, but they’re advisory only. Wespac is an advisory body.”
- Kealoha Pisciotta: “We need to move based upon our k̄naka worldview. What comes first, sources (not resources) because Papa is a source of our existence, our life, and that of pae ‘āina. So, if we start from there, then everything else will follow. I do support subsistence for our people, but we still need to sort of self-regulate. And we’ve been being forced to self-regulate just to deal with the onslaught of the western consumption and kind of destructive ways of being. It forces us to have to go, wait a minute. If we were more in self-determined and in control, we would be coming from that place. Not having to just react to that place. And so that’s why I think we have to keep going back to source and, subtext resource because resource assumes exploitation. Source changes that paradigm so that we’re actually looking at it as our guideposts to our life and lifeways

and cultural ways and ways of being in on earth. And interacting with earth’s mother, sky father, through the heavenly relationships and lewa lani’s and all of those things.”

- Akoni Palacat-Nelsen talked about not weaponizing Hawaiian rights: “For their agendas or their purposes. The right to put in place for kānaka to live, not for others to weaponize and profit off of them.”
- Kealoha Pisciotta added mana‘o from Uncle Walter Ritte: “He said, ‘We’re being forced to jump through all these hoops, State, Federal, County. Hoops just to practice, make our loko i‘a flourish. But the rules are not for us because we already have a history of sustainability. We already have a history of creating abundance. The regulation is not for us. It’s for them.’ They keep applying it to us and forcing us to have to adapt to what they want to do. But what they want to do is contrary to our life way, our cultural way, our cultural practice, our cosmological understanding of the worldview and in understanding of the universe. You know, it’s kind of fundamental.”

Additional Mana‘o

Consultees shared an array of additional mana‘o regarding the impact of the proposed National Marine Sanctuary Designation on cultural resources, defined as practices and features. Their mana‘o in its entirety is grouped thematically and shared below:

Regarding Bringing Back Any Type of Resources from Papahānaumokuākea to the Pae ‘Āina

- An anonymous individual shared: “We do, some of the early uncles that influenced the process with regards to consumable resources as part of the first conditions of the original Emergency Proclamation made it such that any i‘a or any consumables be consumed while in the Monument and not brought back. Later, there were culturally appropriate items like feathers, seabird feathers, some shells, and some other not consumable. And when I say not consumable, not consumable for sustenance in the human body. They were negotiated with Fish and Wildlife Service through OHA. So those items could be brought back to be used by Native Hawaiians in restoring or creating culturally appropriate products.”

They continued: “I’m going to add one thing very, very clear. The mana‘o was never, ever contemplated or envisioned to include the Western Pacific Fisheries Management

Council's proposed rules described as non-commercial cultural exchange. Bartering from a cultural perspective is something that was never considered pono by the kūpuna who initially advised. There's a distinction, a real distinction that needs to be made that the 'āina up there really was not managed under an ahupua'a system because there were no ahupua'a that we are aware of up there right now. So, things like the Ka Pa'akai analysis to be done with a different lens and a different philosophy. The philosophy when that area was set up for protection was it is fragile. It is pristine. Bring the place to the people and not the people to the place. So, keep those things in mind as you begin to analyze and identify what is appropriate culturally and under the guise of the different statutes and administrative rules that cover the area."

They shared about Uncle Kawika Kapahulehua: "The kūpuna talked about going, especially Kawika. He talked about his tūtū's going to a white sandy area, which likely is French Frigate Shoals. But not for the purpose of catching ulua and turtles to bring back. The purpose of sustaining themselves and then some were brought back because you not going pohō. Salt it and shared with family. But it was not like, we're going to go up there and we're going to catch 10 turtles and we're going to come back and we go and barter those 10 turtles for, you know, 500 pounds of kalo. The mindset was never, ever like that. The intent was never ever like that. So yes, there has to be a new framework by which natural resources and cultural practices and how they get applied to this area."

- Akoni Palacat-Nelsen stated: "On a practical level, I say subsistence meaning for those families who would provide subsistence and these would be family members probably living towards the Northern Islands versus families from Moku o Keawe would interact with that subsistence. But I can share with you that if there is a particular species that migrates to Papahānaumokuākea and then all the way down to Moku o Keawe waters, I think that we're looking at the seasonal kapu's that may need to be imposed if that happens. As far as lawai'a is concerned, going up physically and fishing in the area, I feel that for practical reasons, it should be available for subsistence."

He continued: "As far as commercial is concerned I think we have a lot of fish outside of that jurisdiction that can be used for commercial. But I do have super huge concerns about extractive industries like large fisheries participating in the area. I'll be open about it. This is my personal opinion. I'm not too fond about Westpac's focus on how to open up fisheries for Papahānaumokuākea without consulting or without taking into consideration the cultural dynamics, as well as the ko'ihonua of the area."

- Mike Nakachi said: “The only thing we should bring back is memories and if you had the ability to go to Papahānaumokuākea, that should be enough. I don’t think that we need to look at any type of resource extraction at all from that area. Zero! I just don’t see anything in any way, shape, or form being commercially driven on extracting a resource of any kind out of there for financial gain.”

Proposed Regulations for Fishing Within PMNM

- Mike Nakachi mentioned he opposes any type of commercial fishing in the PMNM: “I would be adamantly against any type of commercial fishing. Period. I know that a multimillion or even a billion-dollar industry is probably lobbying to try and change certain things. I think it’s wrong on the way that they’re going about things by trying to say, ‘Oh, you can go up there, you can recoup your gas and you can get \$15,000.’ No! That was never the intent. Even Uncle Sol from Lāna‘i cannot even go, and he has been one of the biggest people trying to protect that realm. I think I have to honor all of those kūpuna that have come way before me to kind of be at that same like-minded mindset and say no to fishing there. If you are traversing and you’re in the realm of holomoana, and maybe you hanapa‘a an aku and you eat that aku then. Or Kanaloa provides that to you somehow. And I know Kanaloa is not a fishing god. But if that happened, then you enjoy that opportunity, but it’s not something to think about it from a financial or commercial perspective at all.”

Sanctuary Designation and Hawaiian Land and Decision-making Authority

- Akoni Palacat-Nelsen talked about not weaponizing Hawaiian rights “[f]or their agendas or their purposes. The right to put in place for kānaka to live, not for others to weaponize and profit off of them.”
- Kealoha Pisciotta mentioned mana‘o from Uncle Walter Ritte: “He said, ‘We’re being forced to jump through all these hoops, State, Federal, County. Hoops just to practice, make our loko i‘a flourish. But the rules are not for us because we already have a history of sustainability. We already have a history of creating abundance. The regulation is not for us. It’s for them.’ They keep applying it to us and forcing us to have to adapt to what they want to do. But what they want to do is contrary to our life way, our cultural way, our cultural practice, our cosmological understanding of the worldview and in understanding of the universe. You know, it’s kind of fundamental.”
- Kealoha Pisciotta stated: “Papa is a part of our traditional land base too. Putting a federal overlay should not affect our land base is what I’m trying to say, and our right to co-

manage our land base. OHA is a co-manager because the State cannot speak for us. There are three parties in the original compact in 1959, the Admissions Act, and we're the first one. Because the newly created State couldn't be created without the land and we are inherently connected to the land. So, our people and our land has become the land base of the State. But, they're also responsible for the proper use of that land base as well. So I guess we could say we're watching very carefully.”

- Brad Ka'aleleo Wong added: “I do want to best advocate for Hawaiian interests within Papahānaumokuākea, and if there are opportunities to advance things like Hawaiian involvement, knowledge, or management role or other, within this Sanctuary process, I think we should look into all those options.”

Sanctuary Designation and Foundational Hawaiian Wahi Kūpuna Stewardship Approaches

- Akoni Palacat-Nelsen wrote: “To ensure that, again, the foundation of stewardship should come from ‘ike kūpuna. That’s my lifetime advocacy effort, whether it’s professional, personal, that’s something that I live and breathe. That decisions should come from that level. But also maintaining the evolution of our culture is important as well, so that we’re relevant to our society today. So, we can look at cultural practices from the past. As we all know, a lot of our cultural practices today are not exactly the same as it was 200 or 300 years ago, but it’s built upon those practices, which I think we can start doing up at Papahānaumokuākea to provide a foundation of stewardship in the area. I think that that’s something I would advocate which to me is the most important thing, is creating that foundation, which would then have a triple effect on protection and also utilization of the area. That would resonate more with our community.”
- Brad Ka'aleleo Wong wrote: “I do want to best advocate for Hawaiian interests within Papahānaumokuākea, and if there are opportunities to advance things like Hawaiian involvement, knowledge, or management role or other, within this Sanctuary process, I think we should look into all those options.”

Regarding additional recommended protections

- An anonymous individual added: “I also want to ensure the moana [ocean] is protected from mining.” They further stated that the “[p]rotections of everything within the monument is essential to cultural integrity throughout the pae ‘āina.

Impact of Native Hawaiian Visitation and Research

- One person shared: “There be Native Hawaiian permits for continued research and in that research the experience because this place speaks to you. This place calls for your commitment for when you return to what is called the main Hawaiian Island, now, to start protecting it and protecting its resources. The allowance for certain, I think, I would say certain young Hawaiians and Hawaiian friends to experience a place and to be inoculated and then to come home and then to start programs in their ahupua‘a is one of the positive things that results from visiting. Their voices on the wind. There are fish and birds that can communicate with you with just looking at you. There’s so much hō‘ailona up there, if you’re open for it. And along with that hō‘ailona comes ‘ike and so there’s a lot of ‘ike that remains there to be shared then to be implemented back home.”

Recognizing Previous Efforts

- An anonymous individual emphasized the need to recognize previous efforts to protect the PMNM. They said: “Many of the kūpuna are no longer with us at this time but their words and mana‘o lives on. Presidential Proclamations are on the floor so in this process the Marine Sanctuary designation, even NOAA, cannot propose rules that provide any less protections of the areas. The one area is the Monument Expansion Area which will be included in the Sanctuary, the only thing still open in the rulemaking that the agencies can promulgate.”
- Additional mana‘o Uncle Paka Harp wished to share is that “[i]t is very sad that the primary individuals involved in securing protections for the area in December 2000 have all but been ignored. These individuals should not be ignored but recognized and honored for overcoming obstacles such as Wespac’s political influences to secure protections in 2000: Victoria Holt-Takamine, Stephanie Fried, Dave Raney, Cha Smith, and the late Louis ‘Uncle Buzzy’ Agard, Jr.”

Gratitude for participation

- An anonymous individual added, “I’m still learning about what my kuleana is to Papahānaumokuākea. With that said, e hui kala mai for not being able to offer much. Though small, I do hope there is something useful. Mahalo for allowing me to share.”
- One anonymous individual commented, “MAHALO NUI for the solid work your hui is doing!!! I am so happy to support in whatever way I can!!! Ola nā iwi!!!”
- Uncle Kepā and Aunty Onaona Maly shared: “Mahalo! Holo mua a kau mai i ka lei o ka lanakila! ‘Hānai, a e ‘ai! (Kupuna Eddie Kaanaana).”

Cultural Impact Assessment

*All Kānaka Maoli have a genealogical relationship to Papahānaumokuākea.⁷
Most Hawaiian cultural resources and practices have an expression that's particular to
Papahānaumokuākea.⁸*

*Other than US military wrecks, contamination, and trash, commercial fishing wrecks and
relics, objects and damages from past commercial exploitation, everything currently existing
in the area are cultural resources.⁹*

*Uncle Paka Harp is famous for saying that, '2,000 years of observation is better than your
science.' That's why we have to be pili to and hold that 'ike kūpuna up all the time everywhere
we can.'¹⁰*

*I have a kuleana to share my experiences and perspectives about Papahānaumokuākea to help
future generations of Hawaiians build a relationship with this place.¹¹*

This section assesses impacts posed by the proposed PMNM sanctuary designation to cultural resources – defined as practices and resources – within the project area. 'Ike and mana'ō gathered from background research and consultation are utilized to assess cultural impacts of the proposed action, through the sequential, thematic synthesis and discussion featured below.

Cultural resources (practices, beliefs, features) within or associated with Papahānaumokuākea

⁷ Anonymous individual, this study.

⁸ Anonymous individual, this study.

⁹ Uncle Paka Harp, this study.

¹⁰ Kealoha Pisciotta, this study.

¹¹ Anonymous individual, this study.


The following section presents the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project

Background research yielded an abundance of Hawaiian oral traditions, including knowledge generated scientifically through centuries and generations of close observation and information transmission, that evince Papahānaumokuākea as a Hawaiian place and cultural, physical, spiritual, and ecological extension of the pae ‘āina (Kaiaikawaha 1835, *Ka Nupepa Kuokoa* 1861-1927, Kaulainamoku 1865, Manu 1899, Poepoe 1906, 1908). Background research also revealed the following cultural resources associated with Papahānaumokuākea:

- Traditional through current Hawaiian cultural practices and knowledge streams recognize, uphold, and transmit knowledge regarding the inter-related nature of land, sea, and skiescapes and environments (Oliveira 58, 59, 64; Kikiloi et al. 2017). Kikiloi et al. (2017:438) write: The ocean plays a key role for Native Hawaiians not only for the resources it provided, but also for physical and spiritual sustenance in their everyday lives (Andrade 2008; Oliveira 2014; Handy and Pukui 1958). The ocean as a cultural seascape is vital to Native Hawaiians’ identity and being, and is an essential dimension to their cognitive understanding of the world (Lewis 1972; Kyselka 1987). It is imbued with cultural meaning that continues to connect the Hawaiian people in a genealogical web of ecological kinship (Oliveira 2014). As further noted by Kikiloi et al. (2017:437): “These cultural connections are invaluable in fully understanding the resources and essential components in shaping effective management.”
- Hawaiian oral traditions reference the PMNM:
 - The islands beyond the main Hawaiian archipelago, in PMNM, are held by Hawaiian traditions to be within the realm of Pō, a spiritual region facilitating the journey spirits took upon death and the process of deification in the afterlife” (Kikiloi 2012:23). Ke Alanui Polohiwa a Kāne, or the Tropic of Cancer was considered the border between pō and ao with Mokumanamana in a unique position on the tropic, acting as an axis point between these two worlds (PMNM 2008:Appendix A:20). Voyaging pathways between these two realms across the island continuum as well as migrations from beyond Hawai‘i across the moana (ocean) extending the reach of the cultural seascape across the Pacific Ocean.

- Papahānaumokuākea (Papa-hanau-moku) is included in another prominent genealogical account of Hawaiian history and the creation of the islands in the genre of birthing is the tradition of Papahānaumoku (earth mother) and Wākea (sky father) (Fornander [Thrum, trans.] 1916: 2,3; Kamakau 1964: 2,3; Malo 1898:315)
- Wahi kūpuna and wahi pana, storied and ancestral places and resources, encapsulate and are fundamental to Hawaiian cultural practices, beliefs, histories and ancestral knowledge of features such as the physical environment, these are numerous throughout Papahānaumokuākea:
 - In 1835, a Lahainaluna student by the name of Kai‘aikawaha provided an expanded account of the birth of the islands in a manuscript entitled *Moolelo no na kanaka kahiko mai ka po mai, a me ka pae moku i hanau mai ai* (Kaiakawaha 1835, excerpted and translated by Kekuewa Kikiloī, in NOAA et al 2008:145). This manuscript includes a series of names beyond the twelve islands of the main Hawaiian islands, likely ancient names of the islands and islets within the long waters of Papahānaumokuākea, and is evidence of the persistence of Hawaiian relationships, knowledge, and cultural connections to the PMNM.
 - A series of ancestral place names are also recorded within stories of migrations of gods and chiefs that originate in places correlated with the PMNM (Fornander 1916:32-108; Kaunamanō 1862; Beckwith 1971:78).
- In a continuum of cultural practice, traditional through modern oli, mele, and ‘ōlelo no‘eau are associated with the PMNM (e.g. Pukui 1983: 206, 252,; Kahaunaele and Ayau 2007; Kanahale et al. 2017)
- Aware of its existence through oral historical traditions, Hawaiians lived in, accessed, annexed portions of Papahānaumokuākea in the nineteenth century. They also depicted the entire archipelago as well as select mokupuni as part of the pae ‘āina (Norton 1894 in Rauzon 2001:28; Mackenzie and Kalama 2003: 15-20; Kalama, Kepohi, and Kapeu in Forbes 2012: 140,141, 150,151, 158, 159; Lei Wann interview, this study)
- From 1825 through 1870, Papahānaumokuākea and Native Hawaiians played a pivotal role in the Pacific Whaling industry (LaCroix 2019:69).





During community consultation for this study, interviewees identified an array of layered, intertwined, living, and dynamic Hawaiian cultural resources within or associated with Papahānaumokuākea, including explanations of their nature and significance. The Hawaiian cultural practices, beliefs, and features mentioned by those interviewed are underlined in the discussion below, which is organized thematically according to the outline below:

Mo‘okū‘auhau

- Consultees’ identities and personal, professional, and other kinds of connections to Papahānaumokuākea
- Access kuleana, e.g. Marine resource management, Lawai‘a, Ceremony, Education, Resource Gathering, Special Use, Research, etc. consultees have within PMNM
- Consultees’ historical or genealogical relationship to Papahānaumokuākea
- Travels to Papahānaumokuākea, including cultural practice(s) consultees, their ‘ohana, and/or kūpuna have done or do in Papahānaumokuākea

Cultural Resources, Practices, Beliefs, and Connections

- Whether consultees consider Papahānaumokuākea and the main Hawaiian Islands connected
- If consultees believe the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands
- If consultees believe Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands
- Cultural resources, practices, and/or beliefs consultees associate with Papahānaumokuākea and the surrounding vicinity
- Details regarding cultural resources, practices, and/or beliefs that need to be included (*e.g. location, seasonality, lifespan, etc.*) in the CIA report so the project proponents and management team can mitigate or avoid impacts and make pono decisions regarding management
- Cultural resources, practices, features, and/or beliefs that will be lost or obliterated if the project proceeds
- Areas critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities

Oral Traditions Associated with Papahānaumokuākea

- Akua affiliated with Papahānaumokuākea⁴
- Mele, mo‘olelo, oli, ka‘ao, and/or significant inoa ‘āina (place names) about Papahānaumokuākea that are key to cultural understandings and interactions with the ‘āina and/or the relationship to the pae ‘āina?

Mo‘okū‘auhau


The following section presents the consultees’ identities and personal, professional, and other kinds of connections to Papahānaumokuākea

One often over looked and deeply personal Traditional Native Hawaiian cultural practice is that of mo‘okū‘auhau – ones’ identity, genealogy, and pilina (*relationship*) with Papahānaumokuākea. The relationships shared below, by consultees, illustrate a continuum of ongoing pilina and traditional and cultural significance of cultural resources, inclusive of practices, beliefs, and features.

Consultees characterized their pilina to the PMNM as personal, and self-identified as having genealogical or ‘ohana as well as cultural, spiritual, and mālama/stewardship kuleana connections to the Kūpuna Islands and their contiguous, adjoining seascapes and skiescapes. Including the themes of reciprocity such as mālama, stewardship, and kuleana, also themes connecting skiescapes and seascapes; voyaging navigation, celestial observation, and of course spiritual practices surrounding ceremony, including heiau practices at Hikiau, Hale o Keawe, and Ale‘ale‘a Heiau in South Kona and other spiritual connections were all mentioned in affiliation with the PMNM.

Kealoha Pisciotta elaborated on one dimension of her pilina to Papahānaumokuākea: “I have a spiritual connection with temple ceremony in the Polohiwa’s from Mauna Kea.” Highlighting direct connections between the Kūpuna Islands and pae ‘āina and as well as the many layers of her spiritual pilina to Papahānaumokuākea, Kealoha Pisciotta shared:

I have a mo‘olelo from my ‘ohana that shares the story of how Mauna Kea and Mokumanamana, and other places in Papa are connected. In doing the



ceremonies on Mauna Kea, they do connect directly to the Solstice and Equinox alignments connect directly to Papa (hānaumokuākea) itself. So, there's a spiritual connection. Those ceremonies were kind of brought back to life on Mauna Kea many, many years ago with the Royal Order (of Kamehameha). Uncle Kahu Rotorangi, who's Hawaiian and Maori, and some of the star alignments and through those connections as well.


Relatedly, Chadd Paishon detailed his connection and kuleana within Papahānaumokuākea as:

My connection is through voyaging and the connection to Mokumanamana and our navigational heiau, Ko‘a Heiau Holomoana in Mahukona. I was able to make my first connection physically to Mokumanamana as a team headed by Aunty Pualani Kanahele, that traveled there to observe the winter solstice.

Resources from Papahānaumokuākea for cultural practices of hulu weaving, feathers, for items of cultural patrimony that are critical to Native Hawaiian traditional ceremonies and practices; as evinced by Akoni Palacat-Nelsen, who mentioned a dimension of his relationship with the PMNM included that his “...‘ohana also received feathers for our Lono Makua from Papahānaumokuākea. So, they currently reside on our Lono Makua during the season of Makahiki. And so again, another personal affiliation to Papahānaumokuākea.”

Additional cultural resources within PMNM were described by Kealoha Pisciotta as “the Kanaloas”, ocean life forms from corals to whales associated with the akua (god) Kanaloa. Kealoha Pisciotta stated: “The concern for Papa [Papahānaumokuākea] is all of the Kanaloas that reside within Papa and including beginning with the coral, and going forward there.” Relatedly, Kaikea Nakachi shared his ‘ohana’s role as Kahu Manō, which he defines as “the care for patron sharks”. He elaborated on the cultural practice of Kahu Manō and its many connections to Papahānaumokuākea in a statement that recognizes manō (sharks) and i‘a (fish) as cultural resources:

Grateful that my great, great grandma’s first cousin was still alive to teach my grandpa and my dad a little bit more about our family’s role as Kahu Manō. That’s something we’ve more recently learned and tried to implement our practice here. But knowing that we had many generations in Maui specifically as



Kahu Manō. Again, that’s the care for patron sharks around Maui. We know that they’re constantly moving. That we come from a line of Kahu Manō that would’ve taken care of sharks, both Maui and across the pae ‘āina that would have visited Papahānaumokuākea, whether our ancestors went there or not. So, there’s a chance there was a more direct connection. But even indirectly, there is that connection of caring for manō while they’re here in the pae ‘āina. And then, them probably traversing into Papa (hānaumokuākea) on their own. And most Hawaiians, whether they know it or not, are connected to Papa. Many of the i‘a species population centers actually are up in Papa. So, whether you’re harvesting or hānai, mālama certain ko‘a, you may be inadvertently connecting yourself to that lineage of i‘a, too.

One individual stated their pilina to the PMNM began when they were a teenager and student, “stepping into the kai pāpa‘u of what integration of traditional knowledge systems and western science really means and more importantly, how do we apply that in research approach supporting effective community-based marine resource management? That started my journey as an Kānaka ‘Ōiwi scientist wanting to better understand our marine ecosystems through a Hawaiian worldview.”

Kēhau Springer detailed cultural practices associated with an aspect of her pilina to the PMNM:

I also participated in workshops aimed to develop and refine inquiry and cultural practice methods, activities and measures for inclusion in the Native Hawaiian Plan text for Papahānaumokuākea Marine National Monument. The workshop was held on Pihemanu (Midway) in November 2012 and included place-based, experiential meetings, workshops that utilized māka‘ika‘i, hana no‘eau, pule and kūkākūkā.


One consultee shared they “gather and harvest invertebrates (‘opihi, hā‘uke‘uke, ‘a‘ama, pūpū) and limu kohu/pālahalaha,” in the PMNM. Other consultees have been actively involved in the stewardship of Papahānaumokuākea for decades. Uncle Isaac “Paka” Harp stated his connection to Papahānaumokuākea as maoli koko/maoli kuleana, and expanded:

I drafted a management plan leading to the Coral Reef Ecosystem Reserve designation in December 2000. I was kako‘o to the late Louis “Uncle Buzzy” Agard, Jr. who had an agreement with the military to maintain a military runway in exchange for exclusive fisheries access around Tern Island. Uncle Buzzy fished the NWHI since 1946.

Professional pilina to Papahānaumokuākea recognized by consultees included: Organizational (non-profits and Hawaiian-serving organizations like the OHA), as students, research cruise participants, program coordinators, founding hui of the Northwestern Hawaiian Islands Coral Reef Ecosystem, public policy advocacy, members of working group and advisory council hui, public policy and advocacy, ethnographers with “personal knowledge of the Moku Manamana/ Moku Papapa region (“Papahānaumokuākea”)(Uncle Kepā and Aunty Onaona Maly). Fishing, research, and marine conservation were additional cultural practices and features mentioned by consultees’ discussions of their mo‘okū‘auhau to Papahānaumokuākea.

Relatedly, the majority of consultees described personalized, nuanced historical, lineal, cultural, or genealogical relationships to Papahānaumokuākea. Some identified direct family connections to the place. One person recognized a historical and genealogical relationship to Papahānaumokuākea, stating “my family name is Nihoa and much of my ancestors are from Kaua‘i.” An anonymous individual mentioned that all Kānaka Maoli have a genealogical relationship to Papahānaumokuākea. Akoni Palacat-Nelsen shared mana‘o regarding the connections between all Native Hawaiians and Papahānaumokuākea:

The ko‘ihonua, the Kumulipo connects us to that wahi, to that region. Also, our ka‘ao of Pele arriving in Hawai‘i and how Kamohoali‘i had steered the family through Papahānaumokuākea all the way down to Moku o Keawe. So definitely there’s a genealogical relationship for many Hawaiians to that, not just myself on a personal level, but for many other Hawaiians historically. As well as afterlife. Kealoha Pisciotta had mentioned where they’re lele points or souls returning to pō. Or ‘aumākua being deified and then returning to pō. These spaces are really important spiritually to us. And they’re embedded as we all chant our mo‘okū‘auhau upon birth and upon our rights of passages throughout our life. And then death and then rebirth again. It’s important that we recognize these areas in our oli to maintain the symbiotic relationship. I say if anything, if you



claim to be kanaka maoli, you have a genealogical relationship to Papahānaumokuākea.

Kealoha Pisciotta agreed:

I would agree in that context. I know they may differentiate according to iwi. But the overall, just like Mauna Kea, it's the same relationship of ao and pō. We are all connected. I do have genealogical and ancestral mo'olelo because my family is rooted, not only there but also connected to Kaua'i. Part of the mo'olelo is that we formed some of our 'ohana were part of the northern migration to Aotearoa. And it's connected to Mokumanamana as the northern turnaround of the sun.


Hōkū Pihana shared: “As Kanaka ‘Ōiwi Papahānaumokuākea is part of my mo‘okū‘auhau and as a kia‘i moana, marine steward. In 2012, our hui studied the wahi pana of Papahānaumokuākea and have since participated in the naming practices as a PMNM cultural working group participant.”

Uncle Paka Harp stated:

I served as Chair of the first Native and Indigenous Rights advisory panel to Wespac in the late 1990s. Due to disregarding sustainable fisheries management by Wespac and the National Marine Fisheries Service, I drafted a plan in early 2000 to protect our kupuna islands' surrounding marine environment and all marine and terrestrial species existing within.

Kēhau Springer shared that both she and her kāne have been to Papahānaumokuākea and she detailed the relationship she sees all Hawaiians as having with the kūpuna islands: My kāne and I have been. As Kānaka Maoli, we all have historical and genealogical ties and relationship to Papahānaumokuākea. In our *Kumulipo* we know that the first being is the ko‘a and that is our genealogical relationship to the ko‘a and all living beings within our whole pae ‘āina and Papahānaumokuākea.

Another realm and layer of Hawaiian cultural resources found within or associated with Papahānaumokuākea were revealed in consultees' descriptions of travels to the PMNM, which



were often combined with the cultural practices and familial connections they hold with the PMNM. Over half of the consultees interviewed reported visiting and experiencing Papahānaumokuākea, some of them repeatedly. Multiple generations of some consultees' 'ohana have journeyed to the Kūpuna Islands. Mike Nakachi engaged in the cultural practice of oral tradition/knowledge transmission by sharing a mo'olelo of a dive he and his family did on the northern side of Kuaihelani (Midway). His mo'olelo, itself a cultural practice and resource, recognizes numerous additional cultural resources affiliated with the PMNM:

There was a channel there and we couldn't believe the size of some of the he'e that were there. The one thing that we found amazing was all the various forms of kinolau that were there and other forms of 'aumākua, so if you touched the he'e down there or you even went to tickle a he'e, and then the he'e would squirt its ink out. The Hawaiian hogfish, the male, usually would be the first to come and inspect. He would sniff around where the he'e was, and within 30 to 40 seconds, then a Galapagos shark would show up or 70 to 80 sharks within a minute. These sharks would be bumping the coralline algae, breaking it apart to get to the he'e. We witnessed that firsthand. And then in that realm, looking up, we seen a very large niuhi come down, all the other manō bow and clear out. Clear out because they don't want to be exposed with their head down and their 'ōkole up trying to get that he'e. Knowing that niuhi could then come and take a chunk out of them. And that's exactly what we had witnessed was niuhi he came down hot and came down fast because he was trying to seize an opportunity to grab one of the Galapagos sharks and it didn't happen.

We feel the need to tell this to other kānaka so that they know that there are other kānaka like us that are trying to practice in a honorable and a very humble way of doing things that may not be going, you know, into the realms of the modern world. That still are trying to honor those ancestors and trying navigate carefully on what's best for manō first. And if humans enter into the equation and benefit from that, then as a practitioner, I'm off. So, that's why we went up there and it was to try and authenticate if we had any that we could recognize.

Access Kuleana


The following mana‘o discusses the access kuleana (e.g. Marine resource management, Lawai‘a, Ceremony, Education, Resource Gathering, Special Use, Research, etc.) consultees have within PMNM

The majority of consultees listed multiple access kuleana consisting of cultural resources - practices, features, and beliefs - that topically overlapped topically or were embedded within each other. Consultee access kuleana encompassing cultural resources affiliated with the PMNM includes: marine resource management, lawai‘a (shoreline), research, ceremony, voyaging, education, resource gathering and management, preservation/stewardship, a “Native Hawaiian practices permit to gather and harvest invertebrates (‘opihi, hā‘uke‘uke, ‘a‘ama, pūpū) and limu kohu/pālahalaha,” “Ho‘okele wa‘a, kilo” and special use.

As a member of the RAC in the Native Hawaiian alternate seat, I have kuleana to provide recommendations about current and prospective management and research activities in Papahānaumokuākea and to voice concerns about culturally sensitive issues so they’re discussed and acknowledged. As a researcher and former PMNM staff member, I have experience accessing most islands in Papahānaumokuākea and I have training needed to support various research operations. I’m also experienced in leading outreach and educational lessons for PMNM within local communities. As a lifelong student of lawai‘a, I have a kuleana to understand the distribution and condition of marine resources throughout the pae ‘āina and apply knowledge of these resources to improve and test my lawai‘a skills. As an educator, I have a kuleana to share my experiences and perspectives about Papahānaumokuākea to help future generations of Hawaiians build a relationship with this place. (anonymous)

Akoni Palacat-Nelsen said:

My professional role with the OHA is to sit on the permitting committee that would advise the MMB [Monument Management Board] committee or the decision makers of all the permits that take place. All activity requires permit for Papahānaumokuākea. Being part of the initial review process, that’s the kuleana I feel is super important as to one, making sure there is transparency. As well as accountability and responsibility for stewardship. And that data that’s provided



from these researches or accesses and reports that come out of all of these accesses be taken into strict consideration and be part of an ongoing decision-making process. I'd like to think that that's the kuleana we have as an agent for the Office of Hawaiian Affairs. I take that quite seriously. As far as the personal level, my commitment since I was six years old to the heiau is about maintaining wahi pana and the cosmogonic connections to our ancestors. I think it's important that we understand and fulfill those obligations as well to our ancestral cycles.

Kealoha Pisciotta stated that she serves as alternate CEO and chair of OHA and sits on the MMB which is a governing and decision-making board for Papahānaumokuākea. She mentioned she has not had the honor to go, physically, to Papahānaumokuākea and also said:

Even some of the kupunas that have been doing all this work for all these years, they have not been allowed or not had an opportunity to even go out there. Many of them take the position that no human footprint is good, too. I also do believe though, that many of our species have symbiotic relationships with kānaka because of our history of living with them in a more harmonious way. I also consider kānaka as a part of the landscape, but I do understand that certain sacred areas need to be revered in a specific way and to maintain their sacredness. And that's some of the challenge of the science versus culture, even though it should not be versus. It's just that scientists haven't quite begun to understand how our 'ike kūpuna is science. It meets the requirements of science. It's measurable, it's repeatable, so on and so forth.

Catherine Fuller discussed her connection to Papahānaumokuākea:

As a Native Hawaiian, I consider the islands to be a sacred cultural site because of the evidence of habitation and use by our kūpuna as well as their place in ao and pō. As a citizen of the Hawaiian Islands, I think of them as a place of hope, reminding us what a pristine marine ecosystem looks like. Papahānaumokuākea is a living treasure held in trust for all of Hawai'i. As a member of the Polynesian Voyaging Society who has had the privilege to visit Nihoa, Mokumanamana and Lalo, the islands are a place of learning that our kūpuna used to study navigation.

Today, being able to voyage through the islands also provides a way for modern voyagers to learn and perpetuate voyaging as a part of our culture.

Cultural Resources, Practices, Beliefs, and Connections

The following section presents the cultural resources, practices, and/or beliefs consultees associate with Papahānaumokuākea and the surrounding vicinity


Another layer of Hawaiian cultural resources affiliated with PMNM are the specific cultural practices, intertwined with resources and features, associated with Papahānaumokuākea that consultees detailed. Featured in bulleted verbatim quotes with a separate stream of consultation grouped thematically, their mana‘o is presented below:

The mana‘o shared by one consultee summarizes mana‘o shared by most interviewees: “Most Hawaiian cultural resources and practices have an expression that’s particular to Papahānaumokuākea.” Direct verbatim quotes from those interviewed featured below identify multivarious cultural resources affiliated with or located within the PMNM:

- ‘Ike kūpuna
- “Cultural practitioner”
- “Kilo, lawai‘a on subsistence basis, and ho‘omana.”
- “Navigation training and ceremony.”
- “Kilo”
- “Non-instrument navigation and voyaging”
- “Māka‘ika‘i. Mālama. Huaka‘i. Lawai‘a. Ho‘okele. Kilo. Noho.”
- “Ancestral traditions, customs, and practices”
- “Study of stars, sun, and moon as they relate to manamana.”
- A wide variety of practices “[a]round prayer/contemplation, observation of natural phenomena, ceremony, voyaging, mele composition and performance, naming, story interpretation and telling, and resource collection.”
- “Terrestrial and Marine Ecosystems and everything that it includes = Nature.”

- “Feather-work, moli iwi (albatross bones used in ceremony, tattooing practices), voyaging, mo‘olelo - stories of akua and epics such as Pele and La‘iekawai (connection of Paliuli between Hawai‘i Island and Kuaihelani), navigation centers, Kamohoali‘i (sharks), ceremony, sacred realm, privilege to enter.”
- “Moku Manamana – summer solstice. Marine and terrestrial biota (fish, plants, insects, birds, etc.). Place names, both species and place are mini-carriers of our traditional knowledge system.”
- “A more intimate connection with the elemental akua, and by that intimacy a more fruitful dialogue can be carried out between the subject, the kanaka, and their lord, their akua.”
- “As a navigation student and voyager as well as a native Hawaiian scientist the cultural resources and practices I associate with are very much centered around the navigational pathways and sea roads to and from the monument. In addition, the depth of raw learning and observation of fish behavior, coral reef structure, migratory species, and more are keystone practices of kilo that I associate with.”
- “Utilization of manamana sites to understand the greater environment and to better understand the practices of our ancestors. Traditional fishing and marine resource management.”
- “The whole place is a cultural resource and we as k̄naka are part of this biocultural seascape. Practices include Hawaiians returning to their ancestral seascapes growing generational pilina to these ‘Āina Akua for re-connection, powerful remembrance of who they are as ‘Ōiwi, and the kuleana that continues to grow a reciprocal pilina to people and communities. To ‘ikemaka, to taste the ‘ono of the kai, these are all associated cultural practices. I associate cultural practices with Hawaiians being able to be Hawaiian in Papahānaumokuākea. They perpetuate practices of ancestral inquiry (Huli ‘ia through intertidal cruise and Nā Maka community partners in the Main Hawaiian Islands), cultural protocol/observance of approaching and greeting Papahānaumokuākea, and weaving academic tools to better understand our pilina to these spaces and how that shapes our practices in the Main Hawaiian Islands. From the work of Aunty Pua, Aunty Kalei, and the EKF ‘ohana, to the wa‘a ‘ohana, to the archaeologists, kia‘i manu, intertidal monitoring crew, and more, cultural practices continue through these living pilina and how we conduct ourselves and the work we do to support a collective vision of communities working towards ‘Āina Momona back home. Cultural practices also include getting more lineal descendants back to Nihoa.”

- “There are too many to list here. Most Hawaiian cultural resources and practices have an expression that’s particular to Papahānaumokuākea. The prominent exception to this statement is lo‘i cultivation. There is clearly no lo‘i cultivation in Papahānaumokuākea.”
- “To name a few, Kilo lani, kilo, hōkū, kilo ‘āina, kilo moana, ho‘okele wa‘a, lawai‘a, kuhikuhipu‘uone.”
- “Resource species – fish, invertebrates, mammals, plants. Geographic features – Nihoa caves, Mokumanamana point. Natural elements – ānuenuē, cloud forms, lagoon colors. Cultural practices, lawai‘a, ho‘okele, lua, ‘aha.”
- “All of the activities that are associated with. I do believe that there are navigational practices that occur. I do think auntie Pua (Kanahele) and some of her haumāna are actually on the money when it comes to the ahu, the platforms, the marae that are up on Mokumanamana as being navigational points pō. It also fits right into the Polynesian Voyaging Society’s navigators of shooting for a line of islands when they go south. When they come north, they shoot for a line of islands, and sometimes you hit the island that you’re looking for. Sometimes you hit an island that’s to the left of it, to the right of it, and then you make your course correction. So, it’s fortunate to have a line of islands in the south and a line of islands in the north.”
- Akoni Palacat-Nelsen: “I think the most important thing today, looking at Papahānaumokuākea and the ideology of how it was named. I know aunty Pua Kanahele provided the name Papahānaumokuākea and the meaning behind of it which I resonate to. But I think there’s a little bit more region specific as to how spiritually Papahānaumokuākea can relate to our families in South Kona. On a personal level, today, the cultural practices and the cultural resources that are aligned to some of the possibility of ceremonial things that took place up at Papahānaumokuākea is the ability for us to recall some of the spiritual practices through accessing Papahānaumokuākea. So, I think the important part about this is that providing access for spiritual practices is important. I feel like that process falls into a stringent process and also funding a support for cultural practitioners to continue recalling whatever their specific spiritual needs would be affiliated with. So, as far as I’m concerned how do we continue the cultural alliances through because we have the ko‘ihonua, we have the ka‘ao, we have all of the pule. We have those things, but how do we continue the physical connection so that there is a continual connection between the northern and the southern islands. That’s kind of where I feel that, I don’t know if it’s answering the questions, but I feel like those are the things that we can improve on as far as the kākā presence and providing



kanaka ideology in the process of decision makers at Papahānaumokuākea. We need to have our presence and we need to do our pule. Sort of like Kaho‘oawe. If the PKO is not on the island, things going be out of balance, you know. Somebody has to restore and maintain those practices and the akua cycles on those islands or in that region.”

- Kealoha Pisciotta shared that Papahānaumokuākea is a source: “It’s health or lack thereof or its wellbeing needs to be front and center. Many of the scientists will argue: ‘Well, I’m helping to provide the science.’ But is it good/relevant science? Science has been become like a religion almost. ‘Oh, it’s science then we need to do it.’ Maybe we don’t. We have to start from that place, the Kānaka worldview. But we are trying to have good relations with all of the agencies and there’s really good people in many of the agencies. They do really want to know what we’re thinking. But, you know, there’s only so much you can explain and then it’s outside their realm. So, we’re still having to kind of self-regulate ourselves so that we give time for people to understand and not to freak out on us. The World Health Organization defines health as not simply the absence of disease. They define wellbeing, thriving in all of those things.”
- Kealoha Pisciotta continued, “We are not thriving as we should, as a people. And by holding Papa in its right place, like Mauna Kea, when we hold those things up, we then are healing also. Even the Apology Bill, right? Public law 103-150 recognizes that the land and the people are one. And when you come from that perspective, when something isn’t doing well, then we all aren’t doing well. We need to elevate. I think everyone’s moving to elevate things up, up, up. But in some ways, they’re not caught up to us yet. And we’re still sort of colonized and marginalized and treated like, ‘Oh, that’s an interesting oral history you just shared.’ It’s like, no, it’s the basis of the cosmology of our worldview and universe. We’re not just sharing this to get you to act like you’re at the lū‘au. We’re serious and Papa’s connection is vitally important. It’s wellbeing and health is vitally important for our main Hawaiian Islands. And even though there is some science on it, they don’t look at that science. We’re trying to get them to understand the depth and complexity of ‘ike kūpuna. Uncle Paka Harp is famous for saying that, ‘2,000 years of observation is better than your science.’ That’s why we have to be pili to and hold that ‘ike kūpuna up all the time everywhere we can.”
- Brad Ka‘aleleo Wong: “An ‘āina akua. A place that belongs to the akua, which to me means a place that is of the elements of nature, where we as people, may learn from, understand, but to not desecrate.”

- Catherine Fuller: “Voyaging, navigation, gathering of resources, access to ceremonial sites, interaction with kupuna islands.”
- Chadd Paishon: “Non-instrument navigation, Voyaging, Kilo, Mālama.”
- Hōkū Pihana: “I connect with the ancestral practices of wa‘a voyaging as these realms held the voyaging pathways that connected us to our Polynesian cousins and taught us how to voyage with our kūpuna on our oceans using our skills and tools.”
- Kēhau Springer: “Wayfinding and voyaging; subsistence gathering while on voyages; Kanaloa and pō, a place to deepen a connection and practices to the various akua.”
- Uncle Kepā and Aunty Onaona Maly: “The islets, shoals, pinnacles, are associated with the mo‘okūauhau of the Hawaiian Islands, wahi pana, and places of significance in Hawaiian beliefs, traditional & customary practices.”
- Nai‘a Lewis: “Navigation, astronomy, kilo/observation, spiritual practice, intergenerational knowledge and practice, fishing, language.”
- Pelika Andrade: “Everything, it’s all connected.”
- An anonymous individual recognized practices and huaka‘i (journeys) to Papahānaumokuākea: “I was fortunate to visit Papahānaumokuākea three times. Midway twice, and then Nihoa, Mokumanamana, and French Frigate Shoals on a research cruise. I was fortunate enough to be able to provide ho‘okupu on each of the island on Nihoa, Mokumanamana, and La Perouse at French Frigate Shoals. So, it was a different experience because it was not allowed to bring ho‘okupu from outside the Monument. The compromise was to bring wai which had to be frozen and then allowed to melt and present wai and i‘a from each one of those areas, i‘a ‘ula‘ula. In the case of Nihoa and Mokumanamana was ‘ū‘ū. And in the case of French Frigate Shoals, it was a red ‘uhu. So, I speared them and I presented them along with the wai. I also collected wai at the same time from all three areas, which were then used as ho‘okupu in many ceremonies. Makahiki ceremonies at Mākua at least three or four other ceremonies around the State of Hawai‘i. Very sacred water coming from a very ancestral place.”
- Mike Nakachi and Kaikea Nakachi stated their family kuleana as Kahu Manō and connection to Papahānaumokuākea is more from a practitioner point of holomoana
- Mike Nakachi talked about their first trip to Midway with his dad and how his dad wanted to take pōhaku and ho‘okupu to place in the channel: “Upon arriving, we bumped into another young man from our moku, Lincoln Ahlo, who was a boat captain. Being malihini, we asked Lincoln permission before we entered and before we did anything improperly. We went there to look at the various biomass of manō there to get

that kilo of what was happening, whether it was white tips, whether it was Galapagos Sharks, whether it was gray reef sharks. Dad wanted to pule and also offer ho'okupu to any of the potential niuhi that were there. The introduction of ho'okupu did not have any animal parts, did not have any of those kinds of things that are kind of done on a daily basis on the North Shore of O'ahu today. Dad wanted me to go down, so I actually had to go down on scuba and take the ho'okupu with the rocks and everything. We did that even before we even did any dives there. He just wanted to make sure that we were coming from the right space, that we were doing things in honor of a place that we knew was of the highest reverence, and that we needed to pay a tribute and offer that to the ancestor spirits that have been there long before the arrival of man. And so that's what the intent was. So, I think that's was the starting piece of then us going twice in 1999."

- Kēhau Springer detailed a few practices: "We grounded ourselves in cultural protocol, including oli and mele; conducted kilo observations of the lani, honua and kai; participated in integrated research of our intertidal and coastal fisheries."

Voyaging

- "With my limited experience in Papahānaumokuākea, the seasonality of voyaging is typically from March until August. These summer months provide the best non-hurricane weather that we need to sail in consistent conditions to Papahānaumokuākea. For permitting purposes with wa'a kaulua, these are the seasons where we have the most need to practice navigation and ceremony there."
- Catherine Fuller: "The practice of voyaging and traditional navigation can happen in any season, weather permitting. The islands of Nihoa and Mokumanamana are valuable as small, visible targets that provide a manageable navigational challenge. Navigating and voyaging to Lalo and the islands beyond requires more skill and, for the safety of vessels and the ecosystem, modern navigational instruments as a backup."

Spiritual Practices

- "I think resources from a physical standpoint, that's the archaeology and the perfect guy to answer that question is Keks (Kekuewa Kikilo). He's done the most research. But because there is physical evidence of stacked stone there's clearly physical evidence or physical representation of practice. I think for the spiritual side, you have to look to the mele and oli and sort of the historical records that have been captured. But from a modern perspective when Halealoha and his crew reinterred iwi that was held at the Bishop Museum back to Nihoa, that's a modern example of mālama kūpuna. So, it

continues even to today. The very act of trying to protect the area, spiritually, is a reflection of our kūpuna pushing us at this time to provide these protections.”

Fishing

- Brad Ka‘aleleo Wong offered perspectives on fishing, and what should and should not be allowed: “While fishing is an important tradition for Hawaiians, and should be practiced with restraint in Papahānaumokuākea, it should not be the main purpose of our activities while there. Fishing should only be used to enhance one’s experience and to share in its abundance while also providing back to the place in some way. The action of fishing in Papahānaumokuākea should carry a certain mindset while doing so, and one that emphasizes reciprocity, respect, and kuleana to the place. As someone that enjoys fishing, too often we get carried away with the “sport” of it, and for some, the financial gain of it. That is not a knock on those types of activities in general, because I think they are important too. I just think there is a time and place for that to occur, and there is enough ocean for that close to the main Hawaiian Islands. I do believe Papahānaumokuākea can be a region that should feed us physically once again, at some time in the future. However, until that time I think it is important that we learn from the region and utilize that knowledge to better mālama our resources here in the main Hawaiian Islands so we may once again think sustainably.”
- Hōkū Pihana: “Also, I think it is important to clearly and concisely describe fishing practices for consumption and cultural purposes while in Papahānaumokuākea so there are minimal to no ambiguity in how these practices are defined.”
- Uncle Kepā and Aunty Onaona Maly referenced their 2003 “Volume I: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu (A History of Fishing Practices and Marine Fisheries of The Hawaiian Islands) Compiled From: Native Hawaiian Traditions, Historical Accounts, Government Communications, Kama‘āina Testimony and Ethnography” and “Volume II Oral History Interviews: Ka Hana Lawai‘a a me nā Ko‘a o nā Kai ‘Ewalu...”

De-occupation

- Uncle Paka Harp: Concerning details regarding cultural resources, practices, and/or beliefs that need to be included (e.g. location, seasonality, lifespan, etc.) in the CIA report so the project proponents and management team can mitigate or avoid impacts and make pono decisions regarding management, Uncle Paka Harp shared:
 - “Undeniable evidence exists that the United States does not possess sovereign jurisdiction over the Hawaiian Islands. The United States’ belligerent occupation of

the Hawaiian Kingdom must be documented in the record. This must no longer be ignored. De-occupation in addition to financial reparations for injuries inflicted on the Hawaiian Islands and on Hawaiian subjects regardless of race is the primary and truly appropriate mitigation that should be pursued.”

Stewardship Approaches and Frameworks


- An anonymous consultee wrote: “Details and specifics around cultural resources and practices are less important to note in a CIA than processes, organizational mechanisms, and governance that uplift knowledge and kuleana holders as primary decision-makers for all activities in and overall management of PMNM. Impacts cannot be mitigated and avoided through an inventory of words--it can only be mitigated and avoided through direct governance by knowledge and kuleana holders.”
- Nai‘a Lewis: “I think multiple disciplines, utilized within a cultural context, should inform management decision making.”
- Hōkū Pihana: “I think it is important to include language about sample gathering and repatriation practices to ensure pono research behavior.”
- Pelika Andrade: “We are connected and have responsibilities there... but do not live there so we must act accordingly. It is not our playground or pillaging site... but the “home” of our hulu kupuna... a place to tread softly, and respectfully. As we would a treasured kupuna. As that relationship is grown and deepened, our actions will too!”

Connections Between Papahānamokuākea and the Main Hawaiian Islands

The mana‘o in this section are in response to the following questions:

- Whether consultees consider Papahānaumokuākea and the main Hawaiian Islands connected
- If consultees believe Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands
- If consultees believe the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands

A third realm and layer of Hawaiian cultural resources affiliated with PMNM is consultees’ recognition of the entirety of the PMNM’s landscapes, oceanscapes, seascapes, and skiescapes as



an abundant and contiguous cultural resource and extension - culturally, spiritually, genealogically, ecologically, physically - of the Main Hawaiian Islands. As expressed by Uncle Paka Harp:

All islands in the Hawaiian archipelago are connected. Protecting Papahānaumokuākea from commercial fishing insures continued replenishment of declining fish stock in the main islands to the benefit of the many. The Hawaiian counter-current assists replenishment through larval distribution from the NWHI to the main Hawaiian Islands.¹² This area is the realm of Pō, so yes, it is definitely culturally and spiritually connected. Other than US military wrecks, contamination, and trash, commercial fishing wrecks and relics, objects and damages from past commercial exploitation, everything currently existing in the area are cultural resources.


Relatedly, another individual wrote:

The main Hawaiian Islands are heavily connected to Papahānaumokuākea. The main eight Hawaiian Islands are geologically, ecologically, socially, and culturally connected to these elder islands. The mele, oli, practices, heiau, and knowledge of animal and invertebrate species in Papahānaumokuākea alongside the dynamics of the main eight Hawaiian Islands emphasizes this important relationship.

An individual who wished to remain anonymous emphasized the need to approach and steward PMNM as a contiguous biocultural seascape:

We need to understand how to tend to these spaces as one pae‘āina. If we need to describe it as a biocultural seascape, then we can call it that. We have different pilina and knowledge associated with an intimate understanding of how these spaces function and what they need to be productive. Our kūpuna understood that Papahānaumokuākea has a different kapu and function in the Hawaiian Universe, so it is all connected. Just with different functions and relationships.

¹² Please see: <https://www.science.org/doi/10.1126/science.1059781>.




On whether the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands, an anonymous individual answered:

From my experience voyaging to Papahānaumokuākea, the ecosystems there are keystone to the ecosystems of the Hawaiian Islands. Similarly, like the wa'a traveling the sea roads to and from places like Nīhoa and Mokumanamana as my ancestors did, many species are migratory such as native seabirds, monk seal, 'opihi, shark, Ulua, reef fish, phytoplankton, coral reef etc. In fact, many populations of these species in the main Hawaiian Islands are reliant on their succession pathways in Papahānaumokuākea. The list is infinite in terms of the species connection between these places aside from the monument border are relative to one another at ecosystem levels. Moananuiākea and throughout (Pacific Ocean) the world is connected by our weather and ocean systems. The temperature of the ocean and atmosphere drive our weather and ecosystem health in the Hawaiian Islands. This is something we learn practicing navigation and as kānaka. Therefore, of course the health of Papahānaumokuākea not only affects the Hawaiian Islands but the entirety of our planet.

Concerning Papahānaumokuākea's cultural and spiritual connection to the main Hawaiian Islands, a consultee shared:

While I did not go on the island while voyaging to Papahānaumokuākea, some of our 'ohana wa'a have been to the navigational heiau on Mokumanamana and Nīhoa. With the expertise of Randy Kosaki, who was on the wa'a with us, we were directed to pay respect and observe the navigational heiau on the cliff areas as well as the remnants of terracing. Spiritually and culturally, this is where my connection as a navigation student and voyager is centered. Navigating to Nīhoa and Mokumanamana during Ke ala Polohiwa a Kāne and observing the past iterations of the Hawaiian star compass is a cultural and spiritual connection explicated in two different ways. The present and the physical of the canoe at these moku juxtaposed with the upright stones transcends time periods of kānaka continuing to visit and utilize these spaces for cultural and spiritual connection.



They asserted Hawaiian oral traditions convey a detailed understanding of Papahānaumokuākea’s cultural and spiritual connection to the Main Hawaiian Islands. They said:


‘Ōiwi practices and customs changed according to how our kūpuna understood the function of these realms and spaces - interconnected spiritually, physically, ecologically, etc. In all of our epic oral narratives and traditions, we see that Papahānaumokuākea represents a journey to Pō, the ‘Āina Akua, as an ultimate test of ancestral knowledge, mana, expertise, and so much more. It’s about the journey there and back. All these histories continue onto the Main Hawaiian Islands. There is no gap between these connections, though there is a major change of practice, customs, and values associated with Pō, Ao, and ‘Āina Akua.

Nai‘a Lewis commented: “The place also supports increased spiritual awareness and connection within Kānaka.” Another individual relatedly asserted Papahānaumokuākea is culturally and spiritually connected to the main Hawaiian Islands, stating: “It is evidenced within chants and ka‘ao that establish these connections through genealogy and migration.”

Kealoha Pisciotta discussed the ways in which Mauna Kea and Mokumanamana, including other places in Papahānaumokuākea, are connected to each other through Hawaiian cultural pō and ao relationships:

I did want to acknowledge that the pō and ao relationship exists from mo‘olelo, exists both vertically and horizontally. So, the two major places where we have entranceway to pō is Mauna Kea and in Papa. That’s an important connection that needs to be understood. This is our cosmology; this is our genealogical connection and where we sit within those cosmological structures is very important to knowing how to relate and perform practice or not. Enter or not. Things like that. Those cosmologies, governed by Kumulipo and other chants relating to our origins and things should be first and foremost.

Brad Ka‘aleleo Wong also shared mana‘o regarding the pō and ao relationship extant in Papahānaumokuākea:




Our kupuna created a foundation of pō/ao that spans the entire pae‘āina and our surrounding seascape. There are many mo‘olelo and accounts of the importance of pō, as a place where life comes from, and returns to upon passing. The things that one experiences in the region of Papahānaumokuākea validates these mo‘olelo and helps us understand why our kūpuna described this area the way they did.

Kealoha Pisciotta discussed how dualities - Hawaiian cultural concepts and values that constitute cultural resources - fuel the connection between Papahānaumokuākea and the pae ‘āina:

The concept of the male-female, which isn't gender based. Those other dualities come into play like heaven, earth, you know? Those things all come into play too. And let me add about percentages, as big as Papa is, it only makes up 3 to 5% of the marine protected areas on the planet. So, for example, regarding fishing, they're worried about this one area. But they have over 90% of the rest of the ocean. Another example, over 90% of all honu that we see, even on Moku o Keawe, were born out there and they made their way all the way over here. And people often don't understand that concept. So, on those islands, climate change is going to affect even the honu's ability to reproduce. So those kinds of things are so important to our ability, as kānaka, to understand fully what is going on out there and to put our mind towards how to figure out the change.

Echoing these sentiments, Catherine Fuller described Papahānaumokuākea as: "... a place that our kupuna inhabited and used for ceremonial and practical purposes. It is important to native Hawaiian spatial awareness because of ke ala polohiwa a Kāne, and the realms of ao and pō."

Kēhau Springer agreed on the connection between Papahānaumokuākea and the pae ‘āina: "Papahānaumokuākea is connected culturally and spiritually to the lower main Hawaiian Islands. Spiritually it is the cross between pō and ao for kanaka maoli and on a cultural and spiritual level it affects both kanaka and ‘āina kai because our lāhui can only be healthy when our ‘āina/kai are healthy as well."



Mike Nakachi agreed that Papahānaumokuākea and the main Hawaiian Islands are connected and that the health of Papahānaumokuākea’s ecosystems impacts the pae ‘āina. He shared:

Absolutely, there’s no doubt we’re connected, but we also feel the same connection whether we have lau‘īpala or we have kole all spawning here and that sperm and eggs gets released into that realm and six weeks later they’re fertilizing themselves and maybe ends up somewhere off of Hāna. Now, seeing what Kalani and them have done and everyone else has done to actually authenticate and go through nomenclature to give them their appropriate names of place. I think, it’s very distressing to know that our kumu and a lot of our other fish are depleting. And so that you hope that that realm of that same kind of fecundity there would allow the release of sperm and eggs, and then it gets blown with the current, and then that actually comes down with the Tradewinds to then help replenish the main Hawaiian Islands. I’m a true believer that that does happen. And we are only speculating, but I think deep down in our na‘au, we all know that does happen. And you know, especially understanding Moananuiākea has a very unusual thing that happens way out there, and you just don’t know whether it floats some different things that may bring in different things. Currents come in different directions. And especially now with things changing quite dramatically, I think that it may increase or it may decrease just depending on the way the weather patterns have changed.

All consultation participants strongly, emphatically agreed that Papahānaumokuākea and the pae ‘āina are connected culturally, spiritually, genealogically, ecologically, and physically. Many detailed a variety of other ways the Papahānaumokuākea and the pae ‘āina are pili [connected]. There was also widespread agreement that the health of Papahānaumokuākea and its ecosystems are connected to and affect the pae ‘āina.

Cultural resources, practices, features, and beliefs that will be lost or obliterated if the project proceeds

One third of consultees did not believe that any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds. Hōkū Pihana emphasized: “I believe we should

ensure they aren't regardless of designation. They should be the foundation for why expanded designations are important.”

Six consultees provided stewardship and management suggestions for the mitigation of potential impacts, all related to the integration of Hawaiian knowledge and inclusion of Hawaiian leaders in decision-making. Two individuals encouraged the mitigation of impacts through 'ōiwi leaders involved in decision-making roles.

Concerning any cultural resources, practices, features, and/or beliefs that will be lost or obliterated if the project proceeds, one consultee recommended ensuring Hawaiian agency and authority in the sanctuary designation process. They wrote:

I do not know enough about the entire process of sanctuary designation however, from what I do know with the resources provided to me, prevention of potential losses can be mitigated by including 'ōiwi leaders in the decision-making level for designation processes. From the one-page info on NOAA's website about sanctuary designation, it is unclear what potential losses there could be, it is mostly focused on communicating protections.

Relatedly, Nai'a Lewis commented: “Again, it's about how the designation is written and implemented. Native Hawaiians, with relevant expertise and access experience, should be involved in writing the designation and related documents.” One anonymous individual felt the mitigation of impacts could be achieved through how governance is structured. Another shared “Nothing will be lost or obliterated if allowances will be made for kanaka maoli to continue our traditional practices.” Another individual commented: “No, but there could be the potential for misinterpretation of cultural resources, or beliefs if consultation with cultural practitioners does not occur.” Lastly, an anonymous individual shared they are unsure that any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds, expanding “[b]ut don't imagine that our sites will be impacted. I would like to add, in addition to 'Ōiwi wahi pana [Hawaiian storied places], that I would love to see improvements to the care of currently neglected World War II sites, particularly on Midway.”

Areas critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities

The majority of consultees expressed that the entirety of Papahānaumokuākea - including its interconnected seascapes, oceanscapes, landscapes, and skyscapes - is critical for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities. As expressed by one individual: “All areas—including islands to the depths. A Kānaka perspective tells us that these are all critical because of their interconnectedness.” Kēhau Springer said: “Everywhere in Papahānaumokuākea, especially Mokumanamana.” Others relatedly shared:

- “All areas east to west, from beneath the sea floor to above the celestial dome.”
- “All of it inclusive of land and ocean especially the ocean pathways for our Kānaka and kinolau of Kanaloa (whales, turtles, fish, etc.) to journey there and back.”
- “The ocean, the islands, inclusive of its flora and fauna, and the skies.”
- “Mokumanamana (and Nihoa)- navigational and spiritual/ceremonial center, Kuaihelani- “backbone of heaven”, sacred site, storied area of akua visits, makaloa weaving, Kānemiloa‘i- association with Pele family, with Mano (sharks)... so much... each atoll/island has a different association and placement within Pō, ancestral realm, within ceremony, and gathering practices to the inhabited islands also make them the most likely to be used for gathering of resources.”

Hōkū Pihana emphasized:

All of the Native Hawaiian practices in and relationship with PMNM have existed long before any types of marine protection designations existed and should be sustained always under every important designation given to Papahānaumokuākea and should be the main purpose for why the spaces of our kūpuna islands are protected, cared for, and recognized as invaluable culturally, spiritually, and environmentally.

Specific places within the contiguous whole of Papahānaumokuākea’s interconnected seascapes, oceanscapes, landscapes, and skyscapes were also mentioned. Nai‘a Lewis stated: “The entire archipelago is important but islands and atolls like Nihoa and Mokumanamana and Holaniku are important in specific ways that have been documented. Research and new knowledge and cultural production by Hawaiians created for specific locations should be archived and referenced as needed.” Another individual shared: “Nihoa, Mokumanamana, Pihemanu – ceremonial. All islands, subsistence gathering.” Brad Ka‘aleleo Wong said: “The islands themselves, particularly Mokumanamana, however each location can be its own critical point of connection; including the ocean space being traveled.” Catherine Fuller wrote:

While all of the islands and reefs are significant because of their status as kupuna islands, the two most significant in terms of voyaging and navigation are Nihoa and Mokumanamana. It seems to me that these two are also the most culturally significant because of existing structures. Their proximity to the inhabited islands also makes them the most likely to be used for gathering of resources.

Uncle Paka Harp identified Mokumanamana and Nihoa as the primary critical areas for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities.

Oral Traditions Associated with Papahānaumokuākea -

Akua affiliated with Papahānaumokuākea

Another realm and layer of Hawaiian cultural resources affiliated with PMNM are oral traditions like mo‘olelo, inoa ‘āina, oli, mele, and ‘ōlelo no‘eau as well as the akua associated with the place. Oral traditions are vehicles for the transmission of ancestral knowledge, including scientific observations of the world edited through centuries and generations of keen observation as well as conduits of traditional and living cultural practices.

Some consultees identified a variety of traditional through contemporary oral traditions associated with Papahānaumokuākea. These included mele, mo‘olelo, oli, ka‘ao, and/or significant inoa ‘āina (place names) important in cultural understandings and interactions with the ‘āina and/or the relationship to the pae ‘āina. Interviewees repeatedly recognized the ongoing cultural practice of creating new oral traditions in and related to PMNM. Per Nai‘a Lewis: “I would add that the mele, mo‘olelo, oli, ka‘ao created in recent years by Hawaiian[s] (often on cultural accesses) should be uplifted and made known in appropriate ways for the community”. An anonymous individual listed several mele, ‘ōlelo no‘eau, mo‘olelo associated with Papahānaumokuākea:

Mele No Papahānaumokuākea Na Kainani Kahaunaele a me Halealoha Ayau (I also heard there was a hui that went to Papahānaumokuākea to create mele).
‘Ōlelo No‘eau #1924 Ku pākū ka pali o Nihoa i ka makani. The cliff of Nihoa stands as a resistance against the wind.
‘Ōlelo No‘eau #2311 Nihoa i ka moku

manu. Nihoa, island of birds. Ka‘ahumanu mā, Lili‘uokalani mā going to visit Nihoa. The naming of Papahānaumokuākea by Aunty Pualani Kanahele.

They continued:

I think there is something to be said about contemporary mele, mo‘olelo, oli, and inoa that are associated with PMNM. Besides names of each island—Kai‘anae, Hā‘ena, Kūkaehao (newer place names given to areas at Kuaihelani/Hōlanikū). Hāwane Rios also gave place names to certain areas on Hōlanikū during her time there. Names were given based on her observations and time spent there. She created a cool map that shows these place names. Hāwane has also created mele for this place. Names are a way that we can bring Papahānaumokuākea and its inhabitants to our people and the people across the globe, specifically, names in Hawaiian. This is how I started getting involved with the work at PMNM because of the ongoing effort to name places and species in Papahānaumokuākea. This represents a living language, culture, and people. To date, the Nomenclature Hui has given/repatriated a total of 63 names to species, places, and other activities in/from Papahānaumokuākea. The Nomenclature Hui has a growing list of naming requests mainly coming from the scientific community who also understands the important role that language and culture play in the conservation and protection of PMNM. This also represents the understanding of PMNM scientists/managers etc. of how important Hawaiian culture and language is to the mālama of that space.

Akoni Palacat-Nelsen discussed the story of Kawelo as an important Hawaiian cultural resource and oral tradition, a mo‘olelo, affiliated with Papahānaumokuākea:

One important mo‘olelo that captures me, because understanding the ‘aha season, which we’re coming up to right now. A lot of people call them the Kū season and the war season. But I disagree with the whole entirety of war being a season. But more of an ‘aha season, which is about unification and unifying chiefdoms and resources. The story of Kawelo and his rights of passage actually takes place up in the Northern islands and his ability to capture the ulua for the purpose of sacrifice and to gain the ability to manage resources so that he can have the ability to become the chief in charge of creating kapu for that particular area. We can learn from his ka‘ao about what akua’s that he tapped into which would help us understand how to sustain and maintain kapu today. Some of the

akua that could generally be affiliated, I'm thinking of the other ones is of course our goddess, Hina 'āko'ako'a, which is super important to the fisheries of Papahānaumokuākea. I think today we can probably name a few akua's that would probably want to stand up and appease these akua's to assist in maintaining our abundance and our life.

Brad Ka'aleleo Wong recommended several PMNM-related mo'olelo. He said:

Keaomelemele, Pele genealogy, stories of Keaumiki and Kaukā, Kaulu, Keaniniulaokalani, 'Aukelenuiaikū, Wākea, Umi, are a few that come to mind, and there are many others. I do also want to point out that I think our presence as kānaka in Papahānaumokuākea on huaka'i is highly important to not only remember these and other mo'olelo, but to experience what our kūpuna experienced, feel what they felt, and understand what they know. In this instance, we are also able to create new mo'olelo and forge new connections to this place.

One individual who wished to remain anonymous shared regarding significant inoa 'āina: "Ka papa kaha kua kea o Lono, Kuaihelani, Kānehunamoku, Kapou, Kahiki."

Many consultees considered all akua associated with Papahānaumokuākea. Uncle Paka Harp's statement best summarizes their sentiments: "All Akua are affiliated with the entirety of the Hawaiian archipelago. There are no known boundaries for Akua. Personally, I recognize Kanaloa is the primary Akua of the ocean realm." Relatedly, an anonymous individual shared:

All of the akua Hawai'i are affiliated with Papahānaumokuākea. The akua Hawai'i are elemental energies (the earth, the ocean, its currents, the sky, celestial bodies, lava, earthquakes, tsunamis, etc). Each play a role in shaping the islands of Papahānaumokuākea." She also named a few ka'ao and mo'olelo, "The ka'ao Pele and mo'olelo 'Umi.

Another individual commented and expanded:

All of the akua are in Papahānaumokuākea. Depends on who the practitioner calls upon." This community member continued about key cultural understandings and interactions, "Many of these knowledge resources have been gathered. Some are recently created. All are telling of cultural understandings and interactions. None are useful as words at the fingertips of the untrained or under-trained. If a 'key' is to be identified, it's a process that always lifts the truly

knowledgeable into positions of decision making and supports multiple schools of knowledge being brought to bear on decisions.

Pelika Andrade likewise commented: “All, Papa, and Wākea. Pele. Aukele, Ka wai a kāne. NāpaPaka Harphakuakeaolono. Moaniliha, etc.”

Some consultees listed specific akua and recommended additional resources. One anonymous individual listed “Pele, Kāne, Kānemiloha‘i, Kamahoali‘i, Kū, Hina, Kanaloa,” and recommended reviewing Kekuewa Kikiloī’s work. Another wrote: “Papa mā, Wākea mā, ‘Aukelenui‘aikū mā, Mo‘oinanea mā.” One consultee listed akua affiliated with Papahānaumokuākea as “Pele, Wākea, Keaomelemele, ‘Aukelenuiaikū, Mo‘oinanea, Keānini‘ulakalani, Kauluakalana,” and mentioned that all mele, mo‘olelo, oli, ka‘ao, inoa ‘āina about Papahānamokuākea are key to cultural understandings and interactions with ‘āina and relationship to the pae ‘āina. Another listed: “Kanaloa, Kū, Kāne, Wākea, Lono, Hina, Keaomelemele, Mo‘oinanea, Pele, Kūhaimoana, Kānehekili, Kamohoali‘i.” Brad Ka‘aleleo Wong commented about akua affiliated with Papahānaumokuākea: “The many elementals that are experienced there. For myself given my ocean background, I associate closely with Kanaloa and his many forms while on various holomoana.” Catherine Fuller listed “Pele, Kāne, Papa, Wākea.” Chadd Paishon shared that he associates Kāne and Kanaloa with Papahānaumokuākea, adding:


The practice of non-instrument navigation continues into Papahānaumokuākea specifically in my practice to Mokumanamana and understanding the movement of stars, moon, sun, waves, migration of whales, and movement of birds all of which happens in Papahānaumokuākea.

Regarding akua affiliated with Papahānaumokuākea Hōkū Pihana commented:

Kanaloa, Hina, Papa, and Wākea. And through Akua process, there are many more that help to mālama tall realms of the ocean and Papahānaumokuākea. Pīhemanu is a Pilina to me as I was able to be present in that space. Hā‘ena was a special place on Pīhemanu where I felt connect to my Papa. There are so many inoa Hawai‘i in Papahānaumokuākea that share the mo‘okū‘auhau of Hawai‘i. These are just two that resonated with me at this moment.

Nai‘a Lewis commented: “Akua like Kanaloa are known by many, but I feel others can speak to specific deities with greater authority.”


Other consultees offered extensive considerations and analysis of akua they associate with the PMNM. Akoni Palacat-Nelsen shared:



Everyone says Kāne, Lono, Kū, Kanaloa are the primary akua. But we also have female primary akua as well that our male domineering society today forgets to announce. So, we're looking at some female deities that are primary to Papahānaumokuākea, which I feel that would one the Pele families and maybe physically they did start off from the top of the island chain and came all the way down. Or metaphorically, those islands were born as Pele being the magma and the rest of her family metaphorically symbolized all the other entities that come with magma, returns back to its source. And so, them being the oldest island, perhaps Pele landed on those islands or brewed those islands first. Today, she's continuously doing that. So, I think the ka'ao can help give us insight as to how we can build our relationship as humans to the environmental cycles up in Papahānaumokuākea.

He continued:

The primary god that I learned within the last maybe 30 years is of course Kāne, being that region where it splits the ao and pō. Kāne is a primal god, not just primary but primal along with Kanaloa. You hear a lot of times that there's a Kanaloa-Kāne affiliation up in those areas. And every time we always think about Kāne through the Polohiwa a Kāne practices, that's the Kāne region. But when we look at Kāne being a region where we spring out of pō and into ao, Kāne is that entity that protrudes, it's that heat that protrudes out of pō. We see that happening at that Tropic of Cancer. Instead of looking at it as just why is it the Polohiwa, but we can also see that it's the heat that comes out of pō region. And the pō region is where all creation takes place. And that's through some of our mo'olelo or in ka'ao about our ancestors arriving to the pae 'āina. When they talk about our ancestors arriving to the pae 'āina, sometimes that means metaphorically they appear into the physical realm. Not necessarily they when jump on one canoe and they came from another island or something. Sometimes those ka'ao also discuss how they can appear. For example, Mauna Loa erupted recently and a lot of people was like, 'Oh, it has a different feel than Kīlauea.' Those ancestors probably went to sleep for a few thousand years and they just reawakened. We never know some of those akua's because it's been a thousand years since they appeared so they reappeared again. And similar to Papahānaumokuākea, I feel like those akua's out there would reveal themselves if



we're willing to accept their appearance and be able to recall and understand which of these akuas.

Kealoha Pisciotta offered additional insights:

Hina'ōpūhalako'a and we mustn't forget about Mahina playing a role in the life force of the ko'a. Also, Papa and Wākea, they play this vertical role of earth's mother, sky father and have all these other important aspects that come in the Kāne and Kanaloa, for sure. Even not dividing, but connecting our space from the South to the North so they almost set our kūkulu's. Also, the importance of the kai and the wai and the depths on the land and in the sea and in the heavens. Kanaloa has forms in the heavens as well. As Kāne does, also. Kanaloanuiakea, I think, it's the first four or five lines are basically describing the Polohiwas. And so those are also not only the sort of northern turnaround, but the motion of the sun. In the four Polohiwas and if you look at their names, you see the connections and the Kāne and Kanaloa connections too. Those are very important and they help us understand Kanaloa's bodily forms too as the he'e coming in and connecting all these things and being like the koru. The spiral effect that we see in the oceans on massive levels that are hard for our own perception to see from a human level. You can see it actually in the satellite photographs, for example, of the koru spiraling of icebergs way out there that you would never see. And then Lono, is also mentioned as some of the low-lying islands, the white papa. Some of our mo'ō wāhine come into play, too. They protect these kapu places.

Kaikea Nakachi shared 'ike and mana'ō about kahu manō and the mo'okū'auhau of manō ali'i. He stated:

Traditionally kahu manō and by extension/dissemination the larger communities intimately knew and understood the mo'okū'auhau of manō ali'i. Their names, genealogy, appearance/marks, behavior, demeanor, territory, and movements were studied. With western influence these practices were oppressed along with the language and the sharks themselves targeted and killed through disrespectful recreational sport/trophy fishing and savage culls. So, we have an exponential loss in manō populations and practices in the main Hawaiian Islands. In just a few short decades centuries of coexistence and understanding is nearly wiped out. Only through precious few oli and old documents do the names of some manō akua, 'aumākua, ali'i were preserved. We now live in a Hawaiian world


where the average Hawaiian could tell you the shark is their ‘aumākua, but not know the precious ‘ike kūpuna we once knew. How do we now differentiate between Niuhi and manō i‘a, manō kānaka, mano akua, mano ‘aumākua, and manō ali‘i? I wish I could tell you with certainty inoa and mo‘okū‘auhau, but we have not regained enough yet. And it is unlikely we will regain the ‘ike if we do not do more in Papa and the main Hawaiian Islands to protect manō and the practice of Kahu Manō. If we do, then with patience and lots of hard work we may one day be able to report inoa and mo‘okū‘auhau, and be able to kilo their movement between kahu and moku and papa.

Mike Nakachi described Kūhaimoana, whom he described as “probably the queen of all sharks,” and associates with the PMNM:

We know that her hale is there on the northwest flank of Ka‘ula Rock. We know that she was probably the queen of all sharks as mo‘olelo indicate. She was massive. You hear about the mo‘olelo of her going through the channels and then, auē, stuck on the bottom because the tide was too low. You hear the mo‘olelo of Kamohoali‘i being 12 fathoms long, ooh, I would love to see that manō at 72 feet. Certain things that fascinate me, Kaikea Nakachi, and our family about the kahiko mo‘olelo. But here’s the thing is that the kahiko mo‘olelo, we are authenticating that as modern-day practitioners, and we are going back to these spots. And what our ancestors knew was spot on! Was spot on. The mo‘olelo is authenticated kahiko through a modern day kānaka lens. And Kaikea Nakachi is a prime example of that.

Mike Nakachi also talked about the art form of asking permission:

Going to the realm of Kamohoali‘i, asking permission. Anytime we go anywhere, we try and reach out to whoever maybe have been the konohiki of that area. We checking in with everyone. I think that is something that is a lost art form. And here is something that is of the most humbling thing that I have ever learned, and that’s from dear Nainoa, is that he asked permission even to this day. So, from one kanaka to another, I’m trying to honor that same way of us, whether we’re holomoana on a wa‘a. Or if I’m on a wa‘a that is powered with horsepower on a motorboat, I want to have that same courtesy of asking. And of coming from a place of respect of those people and their wishes. That’s something that understanding about Kūhaimoana, we would not go there unless we did the



proper protocol, ask the right questions, take the right people that should go with us to then do things.

One anonymous individual offered a pan-Polynesian and beyond perspective on akua, mele, oli affiliated with Papahānaumokuākea:

Because it was experienced at many different times in successive waves of the precursors to Native Hawaiians, our Polynesian ancestors in general. I do think that there are many, many different stories and many, many different names and many, many different akua that have been assigned to the area at different times. I'm not aware of any specific ones that I would point out. I would just acknowledge all of them because they're all true.

The discussion below features an impact assessment of the proposed sanctuary designation to cultural resources - practices, features, and beliefs - identified through background research and consultation.

Background research uncovered Hawaiian oral traditions concerning the PMNM, including knowledge generated scientifically through centuries and generations of close observation and information transmission, that evince Papahānaumokuākea as a Hawaiian place and cultural, physical, spiritual, and ecological extension of the pae 'āina. It also yielded cultural resources associated with the PMNM: the ocean as a cultural seascape; Hawaiian oral traditions and knowledge streams that reference the PMNM and evince continued cultural memory, knowledge, and use of the place; wahi kūpuna and wahi pana that encapsulate and transmit Hawaiian cultural practices, beliefs, and ancestral knowledge of cultural features such as the physical environment. All the themes and cultural resources identified in background research support and affirm the mana'o shared by interviewees during consultation for this study, discussed below; the impacts to cultural resources by the proposed sanctuary designation recognized during consultation and detailed below therefore apply to the cultural resources identified in background research.


Potential impacts posed to cultural resources by the proposed sanctuary designation

The mana'o in this section are in response to the following questions:

- The potential effect of any proposed physical alteration on cultural resources, practices or beliefs;
- The potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and,
- The potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.

Many consultees associated an array of adverse impacts to cultural practices and resources stemming from efforts to declare Papahānaumokuākea a National Marine Sanctuary. One recognized navigating bureaucratic processes to gain cultural access as an adverse impact to cultural practices and resources, sharing: “Perhaps access by Kānaka for cultural purposes. I can imagine that an unregulated process might hinder or place too much red tape on projects/programs for Kānaka to continue our cultural practices and connections at these certain places.” Another expressed concern regarding the impacts of sanctuary designation on “‘ohana who were once able to enter the monument and practice, connect, learn, and continue their culture”. They stated:

Monument designation has uplifted Papahānaumokuākea into a highly protected and managed area, which I believe, raises the preservation and conservation goals that we typically have in western science approaches. While I do believe that protections are important and vital, especially for sacred areas in Papahānaumokuākea, the impacts of any MPA or sanctuary designation can have affect on ‘ohana who were once able to enter the monument and practice, connect, learn, and continue their culture. This is a negative impact because it has potential to disconnect practitioners, lineages, families and a whole culture from Papahānaumokuākea while being un-inclusive of "them" in conservation priorities and objectives. As many native Hawaiian people have already become disconnected from practice and lineage, this small pause to meet management or conservation goals can have lasting effects in long-term for cultural practitioners. I think these impacts are important to understand in future management decisions that are adaptive and inclusive of all stakeholders for considering sanctuary designation. Finding a balance with sanctuary designation and ability for 'ohana to visit and practice is a beautiful goal that future models can improve on. I think it would be important to include a regulatory clause or protection for processes allowing native Hawaiian practice (science, cultural ceremony,



voyaging, special harvesting permits etc.) in the language of sanctuary designations as management positions may change and policy makers shift over time.

One individual expressed concerns regarding the intersection of Hawaiian cultural fishing practices and fishing regulations within the PMNM. They said:

It depends on the Wespac (Western Pacific Regional Fishery Management Council) proposed fishing regulations and on the outcome of its pending review under the Sanctuary Designation process, it could definitely be harmful and negative in setting a dangerous precedent or loophole for exploitation and misinformed management decisions through the guise of cultural subsistence practices. If their proposed fishing regulations package is approved, it will definitely have adverse effects on the biocultural seascape of Papahānaumokuākea. It will change the relationship at a very basic level and will open up the flood gates to cultural subsistence being exploited through inaccurate information regarding cultural customs specific to Native Hawaiians. Our ‘Ōiwi kūpuna like Uncle Buzzy Agard and Uncle Kāwika Kapahulehua remind us that Papahānaumokuākea needs to be protected and the many conversations amongst the CWG led to the support for using the definition of sustenance (everything taken in the monument is consumed in the monument). Positive impacts would be if our cultural practices and ‘Ōiwi voice and position to support co-management of the Sanctuary through the CWG are protected in perpetuity.

One individual commented: “Sanctuary designation will strengthen existing protections in Papahānaumokuākea that stem from the current monument designation under the Antiquities Act which is vulnerable to alteration (i.e. reduced size of protected area), or removal by the president of the U.S.. Commercial activities being promoted as part of sanctuary designation. Lack of Hawaiian involvement with developing long term management plans. Positive impacts, prevent repeal of current designation under the Antiquities Act.” Another anonymous individual felt that it “[a]ll depends on how governance is structured.”

Mike Nakachi and Kaikea Nakachi discussed adverse impacts to cultural practices and resources from extractive and harmful research practices that are not in alignment with Hawaiian cultural beliefs or practices. Mike Nakachi worries for our culture, researchers, and the governing bodies of PMNM:

Researchers hide behind research because of funding and because of money. And they want to poke, test, or they want to get something too. I get that, you know. I'm all for certain things done in a non-intrusive way. But I think what happens is that the researchers have seemed to control the narrative ever since the monument was established. When you have a governing bodies that are all co-trustees and even though OHA is a trustee to a certain degree there at the table, it just sometimes seems three outweigh the one that represents the culture there. And, I don't think that that's weighted properly for the benefit of Papahānaumokuākea. People asking me why don't I come to French Frigate Shoals to talk about monk seals or culling manō. I say, 'No, I don't need to go there.' No one really needs to go there, and you don't need to cull any manō there.

Regarding the permitting process, Mike Nakachi commented:

The layer, upon layer, upon layer of bureaucracy or permits or process that don't benefit the lāhui in any way, shape, or form. And then don't allow people that who really should witness that. And that would be in the right mind, in the right space to go there, get deprived that privilege of going there. So that's the kind of stuff that I think would really would love to see change within the monument that it's more weighted evenly or waited in lāhui's favor for kānaka to engage in their place and space more so than the others that are at the table, now, currently. Kamehameha said, 'You ready to drink the bitter water?' And I don't think that federal government, I don't think the state government, no one wants to drink the bitter water, and we constantly are drinking the bitter water every day.

Mike Nakachi identified then expanded on a few impacts associated with the proposed sanctuary designation:

Impacts of a place that is supposed to be of the highest reverence. I think for all of us as kānaka or even as a human race, we have impact. So to places that are of the monument, they're dealing with the impact of the 'ōpala, right? They're dealing the impact of plastics. They're dealing with the impacts of global warming. But then we forget about things like noise pollution and I think that's one big one. And the only reason why I tie ourselves to that is because when we are underwater, sound travels four to five times as fast. So it's very intense. Motors, war games, all of those various things, you hope that they're staying outside of that 200 mile zone or what have you. But, if a blue whale or a humpback whale

song or blue whale and those low frequencies can be heard, whatever, 7,000 miles away, that's another thing that I think bothers me about an impact...sound.

He continued and talked about Midway Atoll being an emergency place for fueling and industrialized fishing:

Another big one, the fuel spills that could devastate the area. I can see the vital part on why maybe the federal government would want that there as an emergency. And I can see how important that is. You know, whether it's Aloha Airlines or Hawaiian Airlines or other people making emergency stops. The other impacts that would worry me is just impacts of our industrialized fishing, which is the biggest one. How in the world did we allow, even in the main Hawaiian Islands pae 'āina, a billion dollar industry to exist that really has relatively a low percentage of kānaka contact?! The 97% are probably the business that are involved with Westpac are probably foreign owned. And how is that to exist in Honolulu Harbor with 140 boats laying 30 miles of hooks on some of these boats. And then that gear. So then I think of Papa and I think of our pae 'āina, they can basically surround sections of our pae 'āina that then affect migratory patterns of fish stocks that then can create a smorgasbord of dead fish. And then they wonder why there's bycatch. So, I think that's one big one that I will continue to advocate. I think lawai'a, once you're a lawai'a and you're going for sustenance, that's one thing. That's one thing my dad always said, 'Catch what you can eat and that's it.' As a modern society, some people na'au have wavered or wandered because they have too many things on their plate that they financially need to secure funding for. Hence, then comes the greed that then impacts that area in our oceans. So, I think from an ocean perspective, those are kind of some of the bigger things.

Mike Nakachi also identified some negative impacts associated with research, including lack of oversight and respect for ocean life:

The researchers that go into Papahānaumokuākea that have no cultural oversight, zero. Maybe they get the approval from the cultural working group and they get to go in. I think we have to do the honorable thing as human beings to other human beings and then do the honorable things to all the forms of akua and kinolau that could be people's aumākua that the federal government, fish and

wildlife, and the state government allow people to do their practice and to do what is right by those forms of akua or ‘aumakua for many.

Mike Nakachi also identified negative impacts from light pollution to ocean creatures as a concern of sanctuary designation:


Light in our main pae ‘āina is just devastating to so many things, you know? And I just think of like ‘ōpe‘ape‘a, how that’s been affected by lights. I think of all the manu that are affected by lights and I think of all the other forms of ocean life that then get affected by light. And so, you know, it's like I'll tell you another story. You catch lau‘īpala (yellow tang fish) off of our reef here and you put it in a tank and then it goes to Boston and the person leaves the light on. What do you think happens to that lau‘īpala over time? Make. Why? Because lau‘īpala isn't used to that light all the time. We need to be sensitive enough, have that kind of lens, that kind of optic of being very sensitive. But I think that you have to put yourself in that perspective of that particular kinolau that needs the cloak of darkness. They need to be, whether it's a Hilo moon or whatever they need that ‘ele‘ele, black. They need it dark.

Mike Nakachi also identified negative impacts from extractive scientific research that does nothing for the support, betterment, or protection of the PMNM:

I wish that the tables could churn through the cultural impact assessment, that it was a little bit more slighted differently for people of place and people of host culture to then go there as a practitioner. Or go there as a scientist. Or go there as legal advice that have the necessary mo‘okū‘auhau of place. What I'm getting at is you just want to be careful that it just seems like it's for the benefit of others instead of for the benefit of kānaka. Researchers stand on the back of Papahānaumokuākea for a lot of their scientific justification, and it's not in the best interest of the place. So those are the kind of things that I would be a little bit more concerned around those impacts that could negatively impact Papa. And that's just coming from more of a cultural lens.

Kealoha Pisciotta expressed concern over the impacts of sanctuary designation on cultural perspectives and stewardship approaches in the PMNM. She commented:

I support maximum protections for Papa, we need to maintain some of the jurisdiction. Sanctuary designation needs to have like a federal overlay to protect




it against some crazy president just overturning all of those protections with an executive order. I support the maximum protections for Papa, but I support them not just because there's a federal entity. We need to make sure that the protection is coming from a culturally based focus. And the federal entity has a few misunderstandings about who we are as kānaka and their legal obligations to us as kānaka. It's more than just our Constitutional rights. It's tied in with the Admissions Act and the compact between the United States and Hawai'i. And so why am I saying yes when I'm supporting greater protections, but I'm also saying it could negatively impact certain cultural perspectives being kind of run over by the fed's lack of understanding and we're working on it.

Akoni Palacat-Nelsen mentioned the Paoakalani Declaration of Hawaiian intellectual property rights and need for foundational 'ike kūpuna and kānaka mana'o and philosophies to inform the stewardship of PMNM:

I want to mahalo those who convened to create the Paoakalani Declaration which provides us an avenue to assert and also protect intellectual property rights which include 'ike kūpuna. The ability to utilize 'ike kūpuna to develop data that would then develop policy. That would develop our stewardship construct. And so, I agree with Kealoha Pisciotta that I'm not against effectuating some sort of protection over Papahānaumokuākea. But I do wanna make sure that the foundation of that comes from the kānaka, or at least the perspective of kānaka and the philosophies. Particularly in that region that should be protected.

He continued:

I was going to bring up the fact that it could negatively impact the implications of Paoakalani Declaration would protect intellectual property rights. Given the advocacy efforts for Native Hawaiians today, we understand that there are many rights out there. But to protect the practices as well as our position in society. It's important that we maintain control of how data is processed and which data is being processed. I feel that for decades, the way how policy is developed, which governs our resources, is based on data and who's providing that data. And so, the omission of 'ike kūpuna, and the ability to utilize so not just protecting our intellectual property rights, but being able to, if the project can harness that properly this is where I think we're trying to affect, even our agency, the Office of




Hawaiian Affairs in maintaining the kānaka positions in society, not just in Hawai‘i, but on this planet.

Kealoha Pisciotta talked about Indigenous Traditional Ecological Knowledge (ITEK):

This is a vitally important opportunity to get ‘ike in, but it’s a little lacking on how to protect that ‘ike. Like the feds want to integrate it, which is a really good thing, but how is it protected? That’s why the Paoakalani Declaration is vitally important. As is the UNDRIP, the United Nations Declaration on the Rights of Indigenous People, regarding our traditional lands that includes seascape and landscape. I mean, we are ocean people. What is our traditional so-called landscape, seascape, right? That’s what needs to be upheld, in particular talking about Papa. Kekuewa has done a lot of good research on all of this and written all this really important stuff about our ali‘i’s role too. It’s also our genealogical connections and things like this that are connected to that indigenous knowledge. The fact that the ITEK is rising to the surface, gives us an opportunity to address exactly what’s Akoni Palacat-Nelsen is talking about. How do we protect the ‘ike kūpuna while putting it into a place where we can use it on a global level?! We’re a part of humanity and we played a major role in humanity, even though they continue to sort of treat us as invisible. The truth of the matter is we’re not really invisible, but they still need to keep us in that frame and scope. But this executive order is helping all the federal agencies, forcing them to have to reach out and gather that kind of information. And we just need to make sure that that information is gathered and used properly as well and protected because we do have rights, but with those rights are the responsibility. It’s connected to our being and our genealogy and things like that. That’s something that really needs to be addressed at some point. We might as well start now, because we’re dealing with the feds, right?

Brad Ka‘aleleo Wong similarly expressed concern about how Hawaiian values and traditions will be upheld in the management structure of the proposed sanctuary. He said:

An indirect impact of Sanctuary designation that creates some level uneasiness is how the potential new Sanctuary will uphold Hawaiian values and traditions within its management structure. And additionally, how it will incorporate the perspectives of the Cultural Working Group, whose members have provided a wealth of knowledge and experience to environmental and cultural management.



Some individuals recognized a mixture of benefits as well as impacts to cultural resources from the proposed sanctuary designation. Uncle Paka Harp stated the following regarding impacts (direct, indirect, accumulated through time) he believes sanctuary designation will have on cultural resources, practices, and/or beliefs he associates with Papahānaumokuākea and the surrounding vicinity:

Sanctuary designation provides a stabler platform for protections compared to Presidential proclamations under the Antiquities Act, which are subject to legal challenges. The caveat is that I have great concern over the differences between Monument and Sanctuary designations. Typically, under a Monument designation everything is prohibited unless specifically allowed. In comparison, under a Sanctuary designation everything is allowed unless specifically prohibited.

When questioned about adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary, Uncle Paka Harp stated that “[o]ther than perpetuating the occupying government’s control over Hawaiian Kingdom assets, there are no additional adverse impacts that come to mind.” He also noted that “[p]ositive impacts are yet to be determined.” Chadd Paishon commented:

I think the impact on Papahanaumokuakea will be both positive and negative due to time and the changing environment which has continued from wa kahiko and that will continue past us but is exactly why we need to continue our cultural practices. The positive is the continued recognition and practice to care for this very important area and the negative is that in access to this fragile environment, we will continue to see the progression of time and the process of erosion and others impact the area.

Other consultees did not identify adverse impacts of the proposed sanctuary designation, although some individuals shared reservations. Uncle Kepā and Aunty Onaona Maly wrote:

We do not know of any current impacts but suggest that preservation and protection of the “Papahānaumokuākea” region should not exclude the right of Hawaiians to exercise/engage in traditional cultural practices. Protection/preservation does not mean exclusive access for science purposes only. Too often the protection has led to denying access and perpetuation of practices that have time-depth in native history. Take the example of fencing off forest regions to protect rare species (good plan, poorly executed), and finding

that acts of sabotage occur, and the fences are cut open. Continue building stewardship initiatives and cultural practitioner partnerships. Done properly with actual respect and honor for native Hawaiian traditional and customary practices will enhance the long-term stewardship of “Papahānaumokuākea.


Hōkū Pihana wrote:

Positive, (1) more protection and support of PMNM. (2) increased food resources. (3) improved health and wellness of PMNM and MHI. If the sanctuary designation is grounded in Kānaka ‘Ōiwi practice and worldview with the intent to further protect the mo‘okū‘auhau of Hawai‘i nei through genuine and transparent relationships with all involved partners then I don’t see any major adverse effects from this designation.

One anonymous individual commented: “I think an additional layer of protection are necessary. Another individual stated: “I believe that sanctuary designation will have a positive impact on cultural resources however native practitioners should have a say on how the sanctuary is managed.” An anonymous individual shared: “It is my hope that sanctuary designation will protect our cultural resources and practices from commercial and nontraditional purposes and allow for kanaka maoli practitioners to continue our traditional practices.” Another person stated:

I can’t think of any negative outcomes. I can think of only positive outcomes. So, with the designation and eventually adoption of a National Marine Sanctuary comes the protections that are associated with the National Marine Sanctuaries Act. The promulgation of rules. The implementation of fines. The sort of recognized structure of a federal agency as opposed to executive orders or executive proclamations. The additional recognition and hopefully increase in budget, which will increase protections. And then having the National Marine Sanctuary implores other federal agencies such as the Coast Guard, the military, other agencies to contribute at an increased level because of the designation.” They further explained: “The protections of any future actions could not be reduced below the ‘floor’ that was set by a Presidential Proclamation. Protections such as those suggested in future regulations could only be made stronger.

Brad Ka‘aleleo Wong noted: “A positive impact is that it will provide additional protections for the region while hopefully providing necessary recognition to the importance of indigenous and



cultural knowledge.” Catherine Fuller likewise discussed the benefits she perceives from sanctuary designation:

Increased protection would be beneficial for the marine resources to eliminate any illegal fishing and gathering in the monument. Increased interagency consultation would continue to be a benefit, following in the model of the current use agreement, with multiple constituents continuing to create and provide commentary on protections as well as educational material for the public. With the continuing progress of climate change, it will be increasingly important to monitor and document the health of the marine and terrestrial ecosystems. I think that the impacts would continue to be positive and important as a model of indigenous leadership in the protection of cultural, environmental and spiritual resources.

Kēhau Springer stated: “I believe there will be positive impacts to allow for cultural practices to continue within Papahānaumokuākea.”

Several consultees expressed concerns or provided recommendations regarding the preservation and management of Papahānaumokuākea. The majority of their comments focused on the research permitting process. Consultees expressed a desire for greater scrutiny of scientific research permit requests and the prioritization of what’s culturally appropriate and best for Papahānaumokuākea. Akoni Palacat-Nelsen and Kealoha Pisciotta shared mana‘o regarding negatives, positives, and possible improvements to the permit review committee processes:

Along with OHA Ka Pouhana, Dr. Sylvia Hussey, Kealoha and myself, we do have some ideas about how this works out. We also do respect the policies that the federal government have been working with. They do some due diligence on a legal side. But they could include a little bit more cultural views as well in the process. For example, I don’t agree with just any willy-nilly researcher to come out and say, ‘My white paper is on sharks, so I need to come to Papahānaumokuākea.’ Maybe Papa doesn’t need research on sharks. Maybe it doesn’t need research on certain things. But they’re doing this and it’s creating data that’s affecting the existing policies. So next thing you know, we’re prohibiting things that could negatively impact the Native Hawaiian community or our genealogical connection to the place. That’s the negative side.


The positive side to the permitting process is that there’s a lot of discussion that takes place, and it’s a learning curve for everyone on the committee itself. And

again, the committee does not make the decision. We make recommendations to the managing board, which is the MMB, and they make decisions. But I've seen a few times where they kicked the decision making back to the permitting committee to review some things, especially when I fought against National Geographic bringing in community scientists just for funding sources for more research to be done. I did not agree with something like that. And the reason for that is because it was not providing support for cultural and natural resources. I saw nothing to that. I just saw a big party on a boat.”

Just to be aware of how the process is a researcher will apply. They pull all the facts to the permit, and then we make recommendations. In that same process, OHA has a subsidiary process which we need to actually improve on. Kealoha and I were just talking with our Ka Pouhana for the past few months on how we can improve our advisory group, the CWG, into the permitting process. How can OHA improve on our process in ensuring that permits are commented appropriately. Both Kealoha and I try our best to include cultural viewpoints. As you know, OHA's position is actually on a legal basis. So, we chime in based on traditional customary rights, UNDRIPS, the United Nations Indigenous Rights. A few other federal policies that we can use to help impose cultural viewpoints or at least broaden enough cultural viewpoints or allow cultural viewpoints to be included in the consulting process. The thing that the permitting committee doesn't like is stalling the process. Most of the time I try my best to take my time because we need the advice from the kānaka's. A lot of times researchers who are requesting permits are on a grant and have a deadline. They need to know if the permit's going to be approved or not or whatever, based on their funding sources as well. And so, I don't want to be an impediment on that, but at the same time I am not into compromising stewardship of our culture and natural resources. My priority is pretty adamant and straightforward and sometimes not well taken and received by the rest of my committee members.

Kealoha Pisciotta commented about the lack of scrutiny and quality control regarding scientific permit requests:

Akoni and myself have really had to deal with some of the scientific permits that come forward that are generally not scrutinized tightly enough. And in a way, OHA, the MMB operates sort of in a consensus way. And we've had to chime in these certain ways to say, 'Wait, hold on.' For example, one permit was wanting



to record seascape sounds of whales but we said, ‘We think you might not be getting the science you're looking for since you're trying to collect whale songs when it's not whale season.’ They voluntarily withdrew their permit to reassess and realign what they're trying to do. But this is the value of both having the Cultural Working Group and OHA to be able to advance these certain aspects. When agencies or scientist are talking about functioning in Papa and affecting our kinolau, then we do need to know. We're not trying to add more work for them, but they have to be cognizant of the fact that if they want to do something with the mōlī, they need to let us know. Because the Cultural Working Group should have a say. They want to do work on honu. We need to know about that. These entities that they're referring to are kinolau and we're connected to them. They're part of our family.

Akoni Palacat-Nelsen stated: “For me it's about kuleana of the resources. This is the realm of Kāne. You don't mess around in this realm.” An individual who wished to remain anonymous relatedly commented:

I strongly believe that access opportunities should be given to practitioners to grow in their understandings of this ancestral realm and was something I advocated for strongly in my assessment of visitation on Midway. I'm not sure how sanctuary designation might affect this.

Regarding preservation and management concerns, Kaikea Nakachi recommended a multi-pronged approach to protect the sacredness of Papahānaumokuākea:

If this is how we have allowed the ali'i of the sea, the kinolau of Kanaloa, our own 'ohana as 'aumakua to be treated in the sacred realm of pō, then how easy it is to continue to desecrate further. How easy it is to allow foreign industry to exploit fishing and other very dangerous practices in and around Papa and the Main Hawaiian Islands. We must simultaneously do a top down and bottom-up approach to restoring that what is sacred to actually be treated like it is sacred. And for the top-down approach we must advocate for these cultural practices of mālama manō and stop harmful practices of insensitive catching/killing manō. Then we must stop the killing of other kinolau/'aumākua such as honu, palaoa, Nai'a Lewis, and again more manō from long liners whose miles of lines have effectively encircled and ensnared our islands. I don't mean to be cynical but our Main Hawaiian Islands are covered in sacred places that are no longer treated

sacred. And it has led to the decline of biocultural resources and our own identity as these places are replaced by colonizers. We cannot allow the same to be done of the ONLY remaining place that has some semblance of the health of biocultural resources under Hawaiian practices and proper treatment of sacred spaces. Moving forward with the monument and rules, I believe everything should focus on not just minimizing impact but replacing any and all permitted activities that would cause any impact with cultural ones that give. Once we do that for sacred Papa then maybe we have a chance at doing the same here in the Main Hawaiian Islands too. I think we should protect Papa to the greatest extent we can. If that is the maximum 200-mile EEZ then we need to do that and enforce it. I agree with my dad, if can do more, then absolutely let's do more. If it means international cooperation, I think aloha and mālama can be gifts to the rest of the world where Hawai'i can lead by example. Things like Marae Moana and the Ross Sea Region MPA are great just like PMNM, but we will need to do more and protect more. And on to the very last section I agree that not only should we not take anything back from Papa other than marine debris, but we also should not be going if we aren't giving something of value to Papa like ho'okupu, aloha, voice, mālama.

Whether consultees support, oppose, or have concerns about the proposed National Marine Sanctuary designation

All consultees support the National Marine Sanctuary Designation for Papahānaumokuākea, with some individuals sharing concerns regarding restricted access to the PMNM for cultural practices, as well as culturally appropriate application and stewardship of Hawaiian cultural intellectual property. Three anonymous individuals expressed their support for the marine sanctuary designation, with one anonymous individual underscoring their strong support.

Other consultees expressed support for the marine sanctuary designation alongside an array of concerns, mostly regarding the role, agency, and authority of Native Hawaiians in the management of PMNM and their right to access and continued cultural practices within the sanctuary. One shared:

Having sat on the Humpback Whale National Marine Sanctuary and working at Mokupāpapa, I do know that there are benefits to the Monument designation and to the multi-org board that runs it with OHA (the Office of Hawaiian Affairs), NOAA (National Oceanic and Atmospheric Administration) FWS, and DLNR (Department of Land and Natural Resources) as ‘equal’ partners. NOAA’s main competency is not in managing cultural and historic sites.

Another commented:

Yes, I do support the designation. My biggest concern is ensuring that Kānaka voices are at the foundation and the forefront of National Marine Sanctuary designation from planning to implementation. However, I know that there are many Kānaka who are in these spaces doing just that. For this reason, I do support it.

One individual encouraged modeling the sanctuary’s mission after the Kaho‘olawe Island Reserve. They wrote:

I support designation and encourage the Office of National Marine Sanctuaries to consider adopting a similar mission as the Kaho‘olawe Island Reserve Commission to ‘manage the sanctuary in trust until such time and circumstances as a sovereign native Hawaiian entity is recognized by the federal and state governments.

One person stated: “I support with concerns of government regulations that may restrict cultural access.” Another commented: “I support additional layers of protection provided through this sanctuary process to protect our ‘Āina Akua from those who wish to exploit or devalue its existence and our genealogy.” Another wrote: “Support, as long as it maintains or enhances Native Hawaiian governance mechanisms.” A community member talked about a primary concern - “[t]he maintenance and enhancement of Native Hawaiian governance of Papahānaumokuākea,” and outlined what they felt would be the best governance regime for Papahānaumokuākea:

When Native Hawaiians are self-governing, I would greatly prefer that Papahānaumokuākea were governed entirely and holistically under a Native Hawaiian government with continued U.S. financial support. The total of financial resources that the U.S. spends on the management of

Papahānaumokuākea would effect all-around more positive outcomes under Native Hawaiian governance.

Both Kealoha Pisciotta and Akoni Palacat-Nelsen support the project with maximum protections. Akoni Palacat-Nelsen shared: “I’d say we have comments.” Kealoha Pisciotta added: “We support the maximum protections, and if sanctuary designation helps provide greater protections, we support that. However, the federal agency needs to be responsible to us, our knowledge, and our ‘ike and our kūpuna’s ‘ike.” Brad Ka‘aleleo Wong commented:

In general, I support the protection of the place as an ‘āina akua. Whether that is through a Sanctuary, Monument, Reserve, or other, is not my biggest concern, as it has been shown that each has provided protection and a level of elevation of cultural knowledge. If NOAA has decided that a Sanctuary is what they need to provide the necessary resources to help protect the place, then it is agreeable if they continue to give reverence to Native Hawaiian interests.

Catherine Fuller commented: “I support it as long as it continues to be a collaboration between governmental agencies and native Hawaiian constituents.” Hōkū Pihana commented: “I support and want to ensure that the Kanaka ‘Ōiwi gathering rights aren’t exploited or misinterpreted by other parties whose intent is to exploit the resources of Papahānaumokuākea for capital gains.” Kēhau Springer wrote: “I support the proposed Marine Sanctuary designation, so it can be permanently safeguarded as a place where kanaka maoli can connect spiritually and culturally to Papahānaumokuākea.” Mike Nakachi stated that he wished the designation was bigger. He said:

I’m grateful there is a monument. Grateful that sanctuary is trying to designate things to expand it. A little bit bigger. I think the only ones who keep pushing back is our other friends at Wespac. So, that just tells us something. And I think that’s wrong. I think the people cannot take that anymore. You know, how is it that a marred company or a federal government agency supports a multi, whatever, \$976 million industry to then extract fish from around our pae ‘āina.

Regarding OHA as a trustee, Mike Nakachi said “Having a larger voice. I believe that they should be treated of the utmost reverence if that’s the agency that is there to represent Kānaka.” Nai‘a Lewis stated: “At this time, no. However, it really depends upon what is in the final designation, which also means the process leading up to formal designation MUST include the voices of people who have long standing ties or have accessed the region, preferably (but not solely) Native Hawaiians.” Pelika Andrade wrote: “Have concerns. Ensure Native Hawaiian influence and agency.”

Which of the proposed sanctuary boundaries do consultees support or their suggestions for other sanctuary boundaries

Four consultees expressed support for the current proposed sanctuary boundaries. An anonymous individual commented that they support the current boundaries including the proposed PMNM sanctuary designation of the marine portion of the existing monument. An anonymous individual stated their support for the proposed marine sanctuary boundaries staying within the same current boundaries. They added “I also want to ensure the moana [ocean] is protected from mining.” Catherine Fuller shared that she supports maintaining the 2016 boundaries. Nai‘a Lewis shared that the boundaries should match the expanded boundaries of the existing monument.

Two individuals expressed preference for the sanctuary designation to encompass the largest area possible. Regarding sanctuary boundaries, one anonymous individual stated: “[t]he bigger the better.” Another shared that they prefer boundaries that include the maximum area possible, “[i]ncluding land areas, and any jurisdictions within that area. It is better to reduce or even do away with the patchwork of jurisdictions and rules in favor of a unified approach under a single jurisdiction. The patchwork of jurisdictions creates unnecessary work and challenges.”

Two anonymous individuals mentioned the Middle Bank in conjunction with sanctuary boundaries. One stated:

Middle Bank needs to be addressed at some point down the line. There are those on the Reserve Advisory Council who want to close off all of Middle Bank when the initial agreement to get fishermen support for the Expanded Area of PMNM was to let half of it stay open for Native Hawaiian fishing.

An individual who wished to remain anonymous asserted:

The full sanctuary out to 200 miles that does not change the sort of the pimple in the southwestern side that splits Middle Bank. I think that that boundary should remain the same because it allows fishermen mostly from Kaua‘i to fish an area that they have fished for many, many years. And I suspect that pre-contact folks that went up to Nihoa and Mokumanamana also fished that area because it’s on

the way and it's so convenient. So, if you're looking for lunch, you are going to stop there because you can tell always going to have birds in that area, you're always going to have upwelling. Grab one quick mahi, or ono or shibi or aku, and then you have food to sustain yourself during that trip.

Brad Ka'aleleo Wong identified instances he would not support. He said:

As long as the Sanctuary stays within or ONLY encompasses what is already protected under the Antiquities Act, then that is maika'i. I would not support any expansion outside of current Monument boundaries towards the main Hawaiian Islands, as that would erode trust within various Native Hawaiian communities and practitioners.

Three consultees identified alternative preferred boundaries. Uncle Kepā and Aunty Onaona Maly stated: "Boundaries and scope described by elder kama'āina – po'e lawai'a in Maly & Maly 2003." Pelika Andrade shared: "Expansion. Ensuring that Native Hawaiian influence and agency remains intact."

Recommendations

Using 'ike and mana'o drawn from background research and consultation, this CIA concludes with discussions of:

- Recommended mitigation commitments and alternative recommendations;
- Short and long-term stewardship WKS recommendations for Papahānaumokuākea
- Desired policies for the appropriate cultural management and stewardship of Papahānaumokuākea,
- Any additional mana'o consultees wished to share, and,

Recommended Mitigation Commitments and Alternative Recommendations

Two consultees preferred or desired mitigation measures relative to the impacts proposed by the sanctuary designation. One desired that cultural resources should be applied to other resources along with archaeological sites such as resources that are used for ho'okupu and Hawaiian cultural arts (i.e. feathers for kahili, 'iwi manō for weaponry)." Brad Ka'aleleo Wong stated: "[O]ne way to ensure Hawaiian knowledge and values are used as the baseline for management,

is to lean on the expertise of folks such as the Cultural Working Group to provide foundational knowledge for any new management plan.”

Preferred Alternatives to the Proposed Action - National Marine Sanctuary Designation for Papahānaumokuākea

Four consultees identified preferred alternatives to the proposed action. Uncle Paka Harp’s stated preferred alternative to the proposed action – sanctuary designation for Papahānaumokuākea – was: “United States de-occupation of the Hawaiian Kingdom in addition to reparations to the injured State and Hawaiian Kingdom subjects regardless of race is my much preferred alternative.” He also identified de-occupation as a preferred or desired mitigation measure. Uncle Kepā and Aunty Onaona Maly commented:

Support. Kūpuna have described the MokuManamana/MokuPapapa as the rookery/nursery for species in the Main Hawaiian Islands. Do not make economic value the focus of management efforts in the region “Kill” the maximum sustainable yield B.S., as we have seen the results of poor science rooted in building economic revenue. (See oral History interviews with elder kama‘āina – po‘e lawai‘a, in Vol. II, Maly & Maly 2003).

An anonymous individual advised: “Explore the idea of special area designations to allow for cultural practitioners to access Papahānaumokuākea for specific ceremonial, stewardship, and subsistence gathering practices.”

One consultee commented that they preferred the sanctuary designation. Regarding any preferred alternatives to the proposed action of sanctuary designation, Nai‘a Lewis stated: “No, I think Sanctuary Designation would prove stronger protections for the long term and give greater leadership from ONMS, which also strengthens the overall network of national marine sanctuaries.”

Short and Long-term Stewardship WKS Recommendations for Papahānaumokuākea Drawn from Consultation:

Restoring cultural practices and knowledge, and growing a presence for stewardship

- Kaikea Nakachi shared additional mana‘o about appropriate ways to steward and interact with Papahānaumokuākea, emphasizing that disrespectful practices need to be replaced with restored “cultural practices of mālama first and non-invasive kilo second.” He stated:

Since its formal formation the monument has mostly been host to permitted activities of take. Whether it was recreational fishing, research, or even Western management. Taking data, taking samples, taking fish, taking matters into their own hands to cull/engineer/build/etc. The question should be, what is it that we can give to Papahānaumokuākea? More trips need to be for kānaka to visit the realm of pō, to visit the ancestors, to visit kinolau, to conduct ceremony, to teach the next generation of the place and practices of place. Those are cultural practices that give to both Lahui and to Papa. Those same people in turn should be in turn listened to. The CWG (Cultural Working Group) needs to have more than just an advisory role. If any proposed activity/research is not wanted/needed by Lahui and only takes without giving, then there is no reason for that permit to be approved. Assigning a token Hawaiian to a cruise that is made up of malihini to play god in sacred Papa is not pono, and should not be allowed to continue. Our ‘ohana has only had a few individuals go a few times.

And we gave our aloha, voice, and ho‘okupu to Papa with a main focus on honoring the manō. However, nearly every year a team of scientists go up to this sacred area and lay hundreds of baited hooks to catch and tag sharks. Only recently they were caught with many, many more hooks in the water than their permit allowed and they were in the water for longer than their permit allowed and they were caught with a dead shark on one of their hooks. Who knows how many other sharks have been killed both inadvertently or even purposefully by researchers who don’t see Papa as a sacred place, and don’t view the manō as kinolau or ‘aumākua, but as potential data for their academic careers to be made off of. Yet we allow these researchers to go back year after year. It is time to end those

disrespectful practices and restore cultural practices of mālama first and non-invasive kilo second. We have much to atone for and to make right in Papa, or we run the risk of eroding Papa just like we have in the Main Hawaiian Islands.

Supporting and Growing Hawaiian Agency and Authority in the Management of the PMNM

- Akoni Palacat-Nelsen: “I think the most important thing today, looking at Papahānaumokuākea and the ideology of how it was named. I know aunty Pua Kanahele provided the name Papahānaumokuākea and the meaning behind of it which I resonate to. But I think there’s a little bit more region specific as to how spiritually Papahanaumokuākea can relate to our families in South Kona. On a personal level, today, the cultural practices and the cultural resources that are aligned to some of the possibility of ceremonial things that took place up at Papahānaumokuākea is the ability for us to recall some of the spiritual practices through accessing Papahānaumokuākea. So, I think the important part about this is that providing access for spiritual practices is important. I feel like that process falls into a stringent process and also funding a support for cultural practitioners to continue recalling whatever their specific spiritual needs would be affiliated with. So, as far as I’m concerned how do we continue the cultural alliances through because we have the ko‘ihonua, we have the ka‘ao, we have all of the pule. We have those things, but how do we continue the physical connection so that there is a continual connection between the northern and the southern islands. That’s kind of where I feel that, I don’t know if it's answering the questions, but I feel like those are the things that we can improve on as far as the kānaka presence and providing kanaka ideology in the process of decision makers at Papahānaumokuākea. We need to have our presence and we need to do our pule. Sort of like Kaho‘oawe. If the PKO is not on the island, things going be out of balance, you know. Somebody has to restore and maintain those practices and the akua cycles on those islands or in that region.”

Preservation and Management Concerns and Recommendations


The following mana‘o was in response to the question: How can cultural practices be integrated into resource management and/or restoration today?

Consultees identified varied processes and approaches for the integration of Hawaiian cultural practices into current Papahānaumokuākea resource management and restoration initiatives. Prevalent themes included Hawaiian agency and authority in the stewardship of PMNM, and the careful, considered implementation of Hawaiian cultural concepts and practices (konohiki system, kapu, etc.). Speaking to how cultural practices can be integrated into resource management and/or restoration today, Pelika Andrade wrote: “Purposefully! Respectfully! And deeply, not surface.”

Approximately one third of consultees recommended the integration of cultural practices and Hawaiian agency and authority into resource management and protection at PMNM. Uncle Kepā and Aunty Onaona Maly advised: “[m]ake Hawaiian beliefs, practices, and traditions an equal partner in the long-term resource management/restoration/stabilization decision making and hands-on programs.” Hōkū Pihana recommended: “These cultural practices should be interwoven into all aspects of how we care for and engage with Papahānaumokuākea most importantly how we weave our sciences and knowledge systems in research, stewardship, and sustainability.” An anonymous individual stated: “Traditional cultural beliefs and practices should inform modern resource management and restoration efforts. Our kūpuna knew how to live sustainably and thrive in these islands, who better to inform and guide us in management and restoration?” Another individual who wished to remain anonymous stated:

The fact that there’s a Native Hawaiian Cultural Working Group that helps to analyze the applications of permits both Native Hawaiian and others is a very, very important way of making sure that the activities that occur presently are in alignment with resource protection and cultural resource protection. You know, having slept in a bomb crater on Mokumanamana was one of the most surreal things that I have ever experienced because here’s a sacred ‘āina that, because it was, I don’t think we were ready at the time as Hawaiians because it wasn’t recognized or we didn’t have the knowledge to push for protections. Having the island used as a bombing range is sad, but good. Because now we know what happened and now we have kuleana to make sure it doesn’t happen again.

Relatedly, Uncle Paka Harp stated that ensuring continuance of the existing Cultural Advisory Council to advise management is a way to integrate cultural practices into resource management and/or restoration today. Kēhau Springer commented: “Share with the next generation and



continue to have Native Hawaiians at the table for discussions about management and restoration.” One anonymous individual shared “By allowing cultural practitioners to be a big part of the process.” An anonymous individual shared: “Easy. Just get proper access, follow proper cultural and science protocols and practice.” Catherine Fuller shared: “We can continue to speak them, recognize them, include them in protocols and public education.” Chadd Paishon wrote: “Continued observation within Papahānaumokuākea of these people allows us to be prepared for change.”

Specific suggestions and recommendations were also offered for the integration of cultural practices and Hawaiian agency and authority into resource management and protection at Papahānaumokuākea. An individual who wished to remain anonymous encouraged “[f]inding alternatives to federal and State-based management regimes like designating konohiki who can restore and maintain cultural resources in Papahānaumokuākea.” Kealoha Pisciotta advocated for Hawaiian agency and authority in the implementation of kapu as a PMNM stewardship measure. She said:

Kapu as sacred. Kapu is a socio-religious understanding but seen as a limitation. Actually, it’s a protection for abundance and to maintain the reverence of place, land, and area. Basically, it’s within the construct of our sacred ways. We don’t need the State to call the kapu. We call it. We need them to enforce it. These areas we’re calling on that protection because it’s a protection that connects us. It protects the whole world actually. When we protect the biodiversity on the smallest level, it helps the biodiversity on the grand level as well. But we just need more of it. Our kūpuna, our konohiki, and some of our leadership are the three most important parts that could call those things in the past. When they have kuleana, when they have ‘ike kūpuna, and when they have this kilo, power of observation, that’s how it needs to be done. Not just some State agency doing it because they can’t do it. They don’t understand it.

Brad Ka‘aleleo Wong recommended additional resources to consult:

Much of the cultural background of Papahānaumokuākea was worked into the development of *Mai Ka Pō Mai*. Its integration into the new management plan would be a good first step in recognizing cultural knowledge, practices and values into management. Another important effort would be to ensure that Native Hawaiians have a meaningful role within management so that cultural knowledge can be advocated for, where appropriate.

Nai‘a Lewis noted:

There have been substantive cultural activities which were documented; they should continue and new activities designed across the life of management in the region. I would add that all activities need to be packaged and shared in ways that allow them to be referenced and built upon as needed. We need more cultural collaboration to innovate on what has come before.

An anonymous individual shared:

Specifically with how naming can support management, but to reaffirm the point, naming something (especially with a Hawaiian name grounded in a traditional naming process/practice) is a way to make these species and places real and relevant to the world. The reality is that most people of the world will not see any of these species in real life; nor will most people be able to witness the true human impact (plastic, waste, invasive species etc.) on Papahānaumokuākea; nor will most people ever see the decline and extinction of a species; nor will most people ever see an eroding island return to the sea—most people in the world will never have that experience, but cultural practices demand spiritual connection. Thus, by doing these practices, creating and saying these new names, listen to mele, read mo‘olelo, these people who will never have a chance to ‘ike maka PMNM will be instantly transported there—helping to increase the important and priority these cultural resources.

Another stated:

Cultural Working Group (CWG) Nomenclature process, leading the way we articulate what inoa wahi mean to us, wahi pana, mo‘olelo, mele, oli in building, maintaining, and strengthening pilina to these places. Also being able to adapt and know that knowledge and pilina drive practices, so we know that names can evolve over generations. We have to be careful that our cultural practices are not distilled or white-washed into resource management and restoration today. The goal needs to be clear: ‘Āina Momona, healthy and thriving communities of people and place. Different places served different functions formed through generations of intimate pilina, so how do we learn how to listen to the needs of our ‘āina to thrive, and also re-adjust our behaviors to support productive places for our communities.

Another anonymous individual suggested:

Practitioners as scientists, longer term or recurring opportunities for Hawai‘i peoples to do seasonal kilo (observational practice) and to build pilina to place, that are potentially independent of jumping on a research cruise or marine debris removal effort but elevating this relationship building and kilo as research that is valued in its own right.


Short or Long-term Concerns Regarding the Project

Several consultees shared short and long-term concerns related to sanctuary designation related to sovereignty, Wespac, and funding. Uncle Paka Harp’s short and long-term concerns regarding the project are “that the United States is in violation of the norms of international laws of occupation and the norms of international human rights laws. Truth be known, there was no annexation of the Hawaiian Kingdom, ever.” Uncle Paka Harp commented: “I support Sanctuary designation with concerns that are presented in my previous responses.” Nai‘a Lewis described her short and long-term concerns regarding the project: “At this time, only Wespac shenanigans.” An anonymous individual expressed their funding concerns: “Securing funding needed to employ sanctuary staff positions in ways that don’t adversely impact current PMNM staff.” Relatedly, Brad Ka‘aleleo Wong commented:

In regards to cultural concerns, I do not, beyond what I have shared already. However, given the world we live in, sustainable funding issues are always a pressing concern, both short and long-term. Access is not cheap; how will we continue to fund the important work in the region, while also protecting the resources there?

Two consultees identified an approach that would assuage their concerns. Uncle Kepā and Aunty Onaona Maly wrote: “Considering earlier comments and giving equal weight to ‘ike kūpuna in the long-term stewardship of ‘Papahānaumokuākea’ would eliminate concerns.”

Roles Envisioned to Mālama Papahānaumokuākea and the Proposed National Marine Sanctuary designation



Consultees envisioned their mālama of Papahānaumokuākea and the proposed National Marine Sanctuary designation through actions involving access, cultural practices, advocacy, involvement, and stewardship. Seven consultees described their role to mālama the PMNM through continued cultural use and the application of ancestral knowledge, cultural practices, and frameworks. One anonymous individual pledged:

I embrace a forever kuleana to continue supporting ‘Ōiwi voice, practices, research, and self-determination in guiding the co-management from agency, state, and community partnerships. One way or another, I know I will continue to stay active in the Sanctuary designation process and beyond. This is our generational work to keep opening doors and pushing boundaries - re-claiming spaces and our voice to self-articulate as much as possible.

Another described how they envision their mālama of Papahānaumokuākea:

To help apply Native Hawaiian, cultural practitioner, and innovation lenses to planning and plan implementation with multiple specialties including socio-organizational systems change and systems dynamics.

An individual who wished to remain anonymous shared: “Keeping mo‘olelo alive and advocating for the building of pilina to these sites, particularly to Kuaihelani.” Another described their role to mālama Papahānaumokuākea:

A resource to support continued access for Hawaiians to Papahānaumokuākea. I can give my perspectives as a former employee in the Sanctuaries program and help with developing education materials focused on cultural resources in PMNM.

Brad Ka‘aleleo Wong shared:

As a former employee of a managing agency, I see my role as continuing to advocate for Native Hawaiian interests within Papahānaumokuākea in however ways possible by using my experiences from a management role perspective to ensure continued protections. Additionally, as a practitioner of wa‘a, I believe it is important to provide those experiences from the ocean as well and to ensure those traditions continue within that space.

Two individuals connected their roles to voyaging. Catherine Fuller stated:

As a voyager and a Native Hawaiian, any time I spend within Papahānaumokuākea would be conducted with the utmost respect for the protocols and rules necessary to protect the area. Having been there, it is my kuleana to represent my experience appropriately to the significance of the area as well as to educate others as to the area's value.

Chadd Paishon stated: “To continue to access Papahānaumokuākea via the cultural practice of voyaging with our wa‘a.”

Consultees also mentioned serving to mālama Papahānaumokuākea as advisors and advocates. An anonymous individual shared they see their role to mālama as an outside advisor: “Perhaps when they get back on the RAC, if need be. Will certainly be an advisory council to NOAA and Fish and Wildlife Service should the sanctuary designation be approved. Also advocating in educating.” Kēhau Springer stated: “I will continue to be an advocate for the protection of Papahānaumokuākea. As time and opportunity allows, I would also give back and mālama by providing research experience or other needs that may arise.” Hōkū Pihana shared: “My role is to be present in the conversation for our Kūpuna Islands. To listen and stand firm for our kūpuna and our keiki to ensure Papahānaumokuākea is always cared for and sustained throughout generations. And to ensure our Kānaka‘Ōiwi voices are always present.” Nai‘a Lewis described her kuleana: “[t]o leverage my experience working for ONMS-PMNM in support of protecting this sacred region with aloha.” Uncle Kepā and Aunty Onaona Maly Maly see their roles as ethnographers to mālama Papahānaumokuākea.

Continued involvement is another way those interviewed envisioned their mālama of Papahānaumokuākea. Uncle Paka Harp responded: “Trying my best to stay involved...” and Pelika Andrade mentioned she'll continue what she's been doing.

Traditional or Local Strategies Recommended for the Resource Management of Papahānaumokuākea and the Proposed National Marine Sanctuary Designation

Interviewees recommended a broad range of traditional/local strategies and approaches for resource management and stewardship of Papahānaumokuākea. The mana‘o they supplied is grouped by theme and presented in its entirety below:

‘Ike Kūpuna

- Uncle Kepā and Aunty Onaona Maly encouraged reference of their 2003 Maly & Maly, oral history interviews with elder kama‘āina – po‘e lawai‘a, in Vol. II.

Increased Hawaiian Authority, Management, and Involvement

- Traditional or local strategies recommended by Uncle Paka Harp for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation were “that only patriotic Hawaiian Kingdom subjects be in charge of management. These individuals should be elected by patriotic Hawaiian Kingdom subjects to management positions rather than being appointed by the occupying government.”
- Kēhau Springer recommended: “Kanaka maoli need to be present in the space to maintain pilina and connection and to offer management strategies. Sometimes kapu are needed especially on endangered and threatened species.”
- Mike Nakachi and Kaikea Nakachi recommended: “Expansion of what we talked about within the OHA culture working group. A great process to then engage the State and engage others. And I think that the State is also in the same position of trying to expand their divisions of whatever, DAR and others to within the DLNR to include more Hawaiian. And I think that that is going to be a big changing point, whether even at NOAA or Fish and Wildlife Service also do the same. I believe that all four of those agencies need to collaborate on looking at more host culture people of place to then help influence the decision on what’s best for Papahānaumokuākea, the sanctuary or the monument.”
- Pelika Andrade recommended: “Continue to partner, collaborate, and grow traditional and local relationships.”
- One person recommended: “Getting more Hawaiians to work, study, visit, practice within Papahānaumokuākea,” for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation. They added, “I think OHA (the Office of Hawaiian Affairs) and the Papahānaumokuākea group are doing a good job. I would rely on their responses.”
- An anonymous individual shared: “I am a language person, and I have always been interested in the ‘ōlelo Hawai‘i aspect of every area I have ever been involved in. I want to make sure that ‘ōlelo Hawai‘i and the unique perspective it offers is always incorporated into the management and protection of PMNM. Language is one of the

ways we can ensure that it remains a Hawaiian place and a Hawaiian space offering more layers of cultural analysis and protection. Thus, anyway that ‘ōlelo Hawai‘i is a part of the designation is the role that I will assume (naming, research in Hawaiian language resources etc.”

They also recommended: “See *Mai Ka Pō Mai* document; land management perspectives in *Native Land and Foreign Desires* (Kame‘eleihiwa), in *Moku System* (Winter et al), & in *No Mākou ka Mana* (Beamer); *Naming Practices in Hānau Ka Palihoa* (Pihana & Lorenzo-Elarco).”

- An anonymous individual stated: “Another HUGE process question that starts with the governance framework--strategies are best designed with this context in mind. If this type of discussion is wanted, I’d love to kōkua to figure out how to approach and facilitate the discussion, as well as offer my mana‘o in that discussion.”
- Nai‘a Lewis recommended: “I think others will have shared details about specific activities. I would add that it is critical that management continues to engage the public, to support the NHCWG (Native Hawaiian Cultural Working Group), to support innovations like *Mai Ka Po Mai*, and to uplift cultural research and processes designed by Native Hawaiians.”

Continued Access and Stewardship

- One person responded: “Mālama ‘āina.”
- An anonymous individual recommended: “Allowing opportunities for subsistence harvest by lawai‘a and other cultural practitioners to perpetuate tangible experiences and arts with younger generations.”
- Catherine Fuller: “Continue to gather commentary and ‘ike from a variety of constituencies to advocate for PMNM, educate about it and manage it safely. Ensure that those constituencies have access to the area to continue their relationship with it as kia‘i.”
- Chadd Paishon: “E ho‘omau.”
- Hōkū Pihana: “I feel that by using our Native Hawaiian tools, science, language, and knowledge systems in ocean stewardship throughout our pae ‘āina such as wa‘a, kilo, and wahi pana we will contribute to the health and wellness of Papahānaumokuākea.”

Continued Protection and Outreach

- An anonymous individual recommended: “Continue bringing the place to the people and not the people to the place. Continue to be maka‘ala for other federal advisory agencies like Wespac with their continued incursions to weaken protections that have been so hard fought for over the last 20 plus years.”

Elevating Indigenous Science as its Own Research Category

- One individual referred back to their earlier answers on kilo and pilina: “Being elevated as Indigenous science that is supported within its own category instead of tagged on to other research efforts as it is now.”

Removing Western Frameworks and Motivations

- Kealoha Pisciotta: “We are being confronted with a Western way and being forced to look in a Western way. Because Papa is a significant player. Uncle Paka Harp has some papers relating to this that are important about, for example, that Papa is like a nursery that helps to feed the main Hawaiian Islands also because the numbers don’t add up. The abundance, right? To fish, to extract per se. And then in the modern construct, there is an idea of because something is open to fish, that we should go in and take as much as we can because someone else is going to take it. This kind of adapted Western mana‘o is frustrating the situation. First of all, because of Papa’s sacred nature, we need to view Papa from that construct first. Then you look at where the k anaka’s place in that construct is. Or in that cosmology. And from that place, I support the positions that, no, we don’t want to open it up. We don’t want to allow commercial extraction in any way, shape, or form. And anyways it’s not really permitted, as it is. But there is this movement to try to push Native Hawaiian rights as the excuse for Wespac to do that. That’s just not on. We’re having to adjust to their response, but they’re advisory only. Wespac is an advisory body.”
- Kealoha Pisciotta: “We need to move based upon our k anaka worldview. What comes first, sources (not resources) because Papa is a source of our existence, our life, and that of pae ‘ aina. So, if we start from there, then everything else will follow. I do support subsistence for our people, but we still need to sort of self-regulate. And we’ve been being forced to self-regulate just to deal with the onslaught of the western consumption and kind of destructive ways of being. It forces us to have to go, wait a minute. If we were more in self-determined and in control, we would be coming from that place. Not having to just react to that place. And so that’s why I think we have to keep going back to source and, subtext resource because resource assumes exploitation. Source changes that

paradigm so that we're actually looking at it as our guideposts to our life and lifeways and cultural ways and ways of being in on earth. And interacting with earth's mother, sky father, through the heavenly relationships and lewa lani's and all of those things."

- Akoni Palacat-Nelsen talked about not weaponizing Hawaiian rights: "For their agendas or their purposes. The right to put in place for kānaka to live, not for others to weaponize and profit off of them."
- Kealoha Pisciotta added mana'ō from uncle Walter Ritte: "He said, 'We're being forced to jump through all these hoops, State, Federal, County. Hoops just to practice, make our loko i'a flourish. But the rules are not for us because we already have a history of sustainability. We already have a history of creating abundance. The regulation is not for us. It's for them.' They keep applying it to us and forcing us to have to adapt to what they want to do. But what they want to do is contrary to our life way, our cultural way, our cultural practice, our cosmological understanding of the worldview and in understanding of the universe. You know, it's kind of fundamental."

Additional Mana'ō

Consultees shared an array of additional mana'ō regarding the impact of the proposed National Marine Sanctuary Designation on cultural resources, defined as practices and features. Their mana'ō in its entirety is grouped thematically and shared below:

Regarding Bringing Back Any Type of Resources from Papahānaumokuākea to the Pae 'Āina

- An anonymous individual shared: "We do, some of the early uncles that influenced the process with regards to consumable resources as part of the first conditions of the original Emergency Proclamation made it such that any i'a or any consumables be consumed while in the Monument and not brought back. Later, there were culturally appropriate items like feathers, seabird feathers, some shells, and some other not consumable. And when I say not consumable, not consumable for sustenance in the human body. They were negotiated with Fish and Wildlife Service through OHA. So those items could be brought back to be used by Native Hawaiians in restoring or creating culturally appropriate products."

They continued: “I’m going to add one thing very, very clear. The mana‘o was never, ever contemplated or envisioned to include the Western Pacific Fisheries Management Council’s proposed rules described as non-commercial cultural exchange. Bartering from a cultural perspective is something that was never considered pono by the kūpuna who initially advised. There’s a distinction, a real distinction that needs to be made that the ‘āina up there really was not managed under an ahupua‘a system because there were no ahupua‘a that we are aware of up there right now. So, things like the Ka Pa‘akai analysis to be done with a different lens and a different philosophy. The philosophy when that area was set up for protection was it is fragile. It is pristine. Bring the place to the people and not the people to the place. So, keep those things in mind as you begin to analyze and identify what is appropriate culturally and under the guise of the different statutes and administrative rules that cover the area.”

They shared about uncle Kawika Kapahulehua: “The kūpuna talked about going, especially Kawika. He talked about his tūtū’s going to a white sandy area, which likely is French Frigate Shoals. But not for the purpose of catching ulua and turtles to bring back. The purpose of sustaining themselves and then some were brought back because you not going pohō. Salt it and shared with family. But it was not like, we’re going to go up there and we’re going to catch 10 turtles and we’re going to come back and we go and barter those 10 turtles for, you know, 500 pounds of kalo. The mindset was never, ever like that. The intent was never ever like that. So yes, there has to be a new framework by which natural resources and cultural practices and how they get applied to this area.”

- Akoni Palacat-Nelsen stated: “On a practical level, I say subsistence meaning for those families who would provide subsistence and these would be family members probably living towards the Northern Islands versus families from Moku o Keawe would interact with that subsistence. But I can share with you that if there is a particular species that migrates to Papahānaumokuākea and then all the way down to Moku o Keawe waters, I think that we’re looking at the seasonal kapu’s that may need to be imposed if that happens. As far as lawai‘a is concerned, going up physically and fishing in the area, I feel that for practical reasons, it should be available for subsistence.”

He continued: “As far as commercial is concerned I think we have a lot of fish outside of that jurisdiction that can be used for commercial. But I do have super huge concerns about extractive industries like large fisheries participating in the area. I’ll be open about it. This is my personal opinion. I’m not too fond about Westpac’s focus on how to open

up fisheries for Papahānaumokuākea without consulting or without taking into consideration the cultural dynamics, as well as the ko‘ihonua of the area.”

- Mike Nakachi said: “The only thing we should bring back is memories and if you had the ability to go to Papahānaumokuākea, that should be enough. I don’t think that we need to look at any type of resource extraction at all from that area. Zero! I just don’t see anything in any way, shape, or form being commercially driven on extracting a resource of any kind out of there for financial gain.”

Proposed Regulations for Fishing Within PMNM

- Mike Nakachi mentioned he opposes any type of commercial fishing in the PMNM: “I would be adamantly against any type of commercial fishing. Period. I know that a multimillion or even a billion-dollar industry is probably lobbying to try and change certain things. I think it’s wrong on the way that they’re going about things by trying to say, ‘Oh, you can go up there, you can recoup your gas and you can get \$15,000.’ No! That was never the intent. Even Uncle Sol from Lāna‘i cannot even go, and he has been one of the biggest people trying to protect that realm. I think I have to honor all of those kūpuna that have come way before me to kind of be at that same like-minded mindset and say no to fishing there. If you are traversing and you’re in the realm of holomoana, and maybe you hanapa‘a an aku and you eat that aku then. Or Kanaloa provides that to you somehow. And I know Kanaloa is not a fishing god. But if that happened, then you enjoy that opportunity, but it’s not something to think about it from a financial or commercial perspective at all.”

Sanctuary Designation and Hawaiian Land and Decision-making Authority

- Akoni Palacat-Nelsen talked about not weaponizing Hawaiian rights “[f]or their agendas or their purposes. The right to put in place for kānaka to live, not for others to weaponize and profit off of them.”
- Kealoha Pisciotta mentioned mana‘o from uncle Walter Ritte: “He said, ‘We’re being forced to jump through all these hoops, State, Federal, County. Hoops just to practice, make our loko i‘a flourish. But the rules are not for us because we already have a history of sustainability. We already have a history of creating abundance. The regulation is not for us. It’s for them.’ They keep applying it to us and forcing us to have to adapt to what they want to do. But what they want to do is contrary to our life way, our cultural way, our cultural practice, our cosmological understanding of the worldview and in understanding of the universe. You know, it’s kind of fundamental.”

- Kealoha Pisciotta stated: “Papa is a part of our traditional land base too. Putting a federal overlay should not affect our land base is what I’m trying to say, and our right to co-manage our land base. OHA is a co-manager because the State cannot speak for us. There are three parties in the original compact in 1959, the Admissions Act, and we’re the first one. Because the newly created State couldn’t be created without the land and we are inherently connected to the land. So, our people and our land has become the land base of the State. But, they’re also responsible for the proper use of that land base as well. So I guess we could say we’re watching very carefully.”
- Brad Ka‘aleleo Wong added: “I do want to best advocate for Hawaiian interests within Papahānaumokuākea, and if there are opportunities to advance things like Hawaiian involvement, knowledge, or management role or other, within this Sanctuary process, I think we should look into all those options.”

Sanctuary Designation and Foundational Hawaiian Wahi Kūpuna Stewardship Approaches

- Akoni Palacat-Nelsen wrote: “To ensure that, again, the foundation of stewardship should come from ‘ike kūpuna. That’s my lifetime advocacy effort, whether it’s professional, personal, that’s something that I live and breathe. That decisions should come from that level. But also maintaining the evolution of our culture is important as well, so that we’re relevant to our society today. So, we can look at cultural practices from the past. As we all know, a lot of our cultural practices today are not exactly the same as it was 200 or 300 years ago, but it’s built upon those practices, which I think we can start doing up at Papahānaumokuākea to provide a foundation of stewardship in the area. I think that that’s something I would advocate which to me is the most important thing, is creating that foundation, which would then have a triple effect on protection and also utilization of the area. That would resonate more with our community.”
- Brad Ka‘aleleo Wong wrote: “I do want to best advocate for Hawaiian interests within Papahānaumokuākea, and if there are opportunities to advance things like Hawaiian involvement, knowledge, or management role or other, within this Sanctuary process, I think we should look into all those options.”

Regarding Additional Recommended Protections

- An anonymous individual added: “I also want to ensure the moana [ocean] is protected from mining.” They further stated that the “[p]rotections of everything within the monument is essential to cultural integrity throughout the pae ‘āina.

Impact of Native Hawaiian Visitation and Research

- One person shared: “There be Native Hawaiian permits for continued research and in that research the experience because this place speaks to you. This place calls for your commitment for when you return to what is called the main Hawaiian Island, now, to start protecting it and protecting its resources. The allowance for certain, I think, I would say certain young Hawaiians and Hawaiian friends to experience a place and to be inoculated and then to come home and then to start programs in their ahupua‘a is one of the positive things that results from visiting. Their voices on the wind. There are fish and birds that can communicate with you with just looking at you. There’s so much hō‘ailona up there, if you’re open for it. And along with that hō‘ailona comes ‘ike and so there’s a lot of ‘ike that remains there to be shared then to be implemented back home.”

Recognizing Previous Efforts

- An anonymous individual emphasized the need to recognize previous efforts to protect they PMNM. They said: “Many of the kūpuna are no longer with us at this time but their words and mana‘o lives on. Presidential Proclamations are on the floor so in this process the Marine Sanctuary designation, even NOAA, cannot propose rules that provide any less protections of the areas. The one area is the Monument Expansion Area which will be included in the Sanctuary, the only thing still open in the rulemaking that the agencies can promulgate.”
- Additional mana‘o Uncle Paka Harp wished to share is that “[i]t is very sad that the primary individuals involved in securing protections for the area in December 2000 have all but been ignored. These individuals should not be ignored but recognized and honored for overcoming obstacles such as Wespac’s political influences to secure protections in 2000: Victoria Holt-Takamine, Stephanie Fried, Dave Raney, Cha Smith, and the late Louis ‘Uncle Buzzy’ Agard, Jr.”

Best Management Practices Considerations for Wahi Kūpuna Stewardship (WKS) at PMNM


Background research and consultation attest to the perseverance of traditional and living Hawaiian cultural resources affiliated with Papahānaumokuākea, and to the PMNM as a contiguous cultural land, sky, and seascape. In order to ensure the cultural, spiritual, and ecological health and well-being of Hawaiian cultural resources at PMNM, these best management considerations have been compiled and synthesized from consultation and research:

- Adopting management policies and structures in the PMNM that integrate Native Hawaiian traditional and cultural values for wahi kūpuna stewardship (WKS) approaches:
 - Supporting consistent, continued, repeat Hawaiian access to and stewardship of the PMNM
 - Adopt Hawaiian approaches to resource stewardship that center Hawaiian agency, authority and ‘ike kūpuna while prioritizing what’s best for the integrated cultural, spiritual, and ecological health of Papahānaumokuākea over extractive research and industry. This should include:
 - Monitoring and enforcing research permit standards
 - Mandating researchers avoid harm to living things (e.g. hooking or ripping the mouths of shark pups unnecessarily) and physical places
 - Mandate research programs and researchers give to Papahānaumokuākea more than they take from Papahānaumokuākea
 - Recognize that in Hawaiian spaces and places, Western scientific research is not a first priority or a necessity
 - Restoring cultural practices and knowledge by committing to growing a presence for Hawaiian stewardship and stewards that includes a streamlined cultural use permitting process and supports enhanced Hawaiian visitation and the cultivation of relationships
- In support of the mana‘o shared by Kealoha Pisciotta during consultation, it is highly recommended DAR-DLNR and all PMNM management agency partners recognize,

endorse and uphold the *Paoakalani Declaration* regarding Hawaiian cultural intellectual property (‘Āina Momona 2023)

- Respect and protect Hawaiian cultural intellectual property according to the values and processes identified in the *Paoakalani Declaration*
- In support of the mana‘o shared by Kealoha Pisciotta during consultation, it is highly recommended DAR-DLNR and all PMNM management agency partners recognize, endorse and uphold the United Nations Declaration on the Rights of Indigenous People, and especially the component stating that traditional lands that include both seascapes and landscapes (United Nations 2023).
- Providing enhanced recognition that may correlate to enhanced protection of the Hawaiian cultural importance of the PMNM by designating Papahānaumokuākea as a Traditional Cultural Property (TCP) and cultural land, sea, and sky scape on the Hawai‘i and National Registers of Historic Places (HRHP and NRHP, respectively). Consultees identified this as desirable, but were unclear on the benefits. From Nohopapa Hawai‘i’s perspective as cultural practitioners, WKS, and historic preservation specialists, benefits to listing Papahānaumokuākea include:
 - TCP is an underused designation within historic preservation and environmental compliance and is currently the most culturally appropriate label for the reality of contiguous, expansive, dynamic Hawaiian cultural land, sea, and skylscapes
 - State and federal recognition that could correlate to enhanced awareness and protection
 - Establishment of Papahānaumokuākea’s Hawaii Register of Historic Places (HRHP) and National Register of Historic Places (NRHP) listing eligibility should mean any future change to or proposed actions within the PMNM must take its eligibility into consideration

Nohopapa Hawai‘i offers a final Recommendation. Based on our experience from previous and current research as well as during this consultation process, we would like PMNM managers to deeply consider future research and consultation to develop management procedures, rules and/or regulations for PMNM that are driven by Native Hawaiian traditional customary values around the practice of lawai‘a. Specifically, any rules or regulations that pertain to fishing and fishing access within a potentially expanded PMNM.



Lawai‘a (here used to mean *fishing, fisherperson, a layered and nuanced cultural practice and marine resource management system for abundance*) came up in research and consultation during this (current) study. However, this study is a Cultural Impact Assessment (CIA) and as such is limited in scale and scope to assess the impact(s) of the *proposed* action: PMNM sanctuary designation of the marine portion of the existing monument. This CIA cannot be used to develop management rules or regulations as these items are not included in the proposed action.

Therefore, it is critical for readers and managers to be aware that no Native Hawaiian consultation or research has been conducted to date to assess potential cultural impacts of fishing rules or regulations, as none have been developed. To reiterate, it is not possible for a cultural impact assessment to assess impacts to a proposed action(s) that has not yet been established, let alone proposed.

It seems important to point out that the management agencies did **not** develop draft fishing rules for the proposed Papahānaumokuākea Marine Sanctuary designation effort *prior* to the initiation of this EIS/CIA. It is very likely that management rules and regulations for fishing will be developed after the approval of the current proposed PMNM sanctuary designation of the marine portion of the existing monument, CIA and EIS, therefore;

The Nohopapa Hawai‘i CIA team and our legal experts strongly recommend an in-depth ethnographic study and legal analysis, sponsored by managing agencies, focused on the Native Hawaiian traditional customary values and practices surrounding lawai‘a.


Our recommendations are for a lawai‘a study to support the development of any rules and regulations for fishing management in PMNM. Given the fact that:

- It would be inadequate for a study to merely assess rules developed without a Native Hawaiian voice and without Native Hawaiian values driving their development.
- Based on our scholarship and research Nohopapa Hawaii has found that there are limited accounts regarding lawai‘a *specific* to Papahānaumokuākea; however, there is extensive scholarship, research, continued practice, and practitioners that can inform a



study of Hawaiian lawai‘a values and practice more generally (e.g., Johnson and Mahelona 1975:142, 143; Maly and Maly 2003a and 2003b).

- Native Hawaiian traditional customary values and practices surrounding lawai‘a do not need to be specific to PMNM to be implemented in PMNM, as specific accounts are limited.
- Lawai‘a is a multi-faceted and layered cultural practice that is often misunderstood and misappropriated. Centuries and generations of Native Hawaiian experiences have shaped sustainable subsistence fishing practices in order to cultivated abundance. A comprehensive, focused lawai‘a ethnography and legal analysis are necessary in order to fully understand and generate legitimate, informed management policy from the cultural practice. For context, a previous lawai‘a study was multi-volume, over 1,000 pages long, and a good foundational starting point for needed additional research.
- Such a study should be focused and geared specifically towards generating management policy for the required sanctuary designation management plan, a purview beyond the focus of this CIA and LA. With this study, community consultation should be conducted specifically for Hawaiian values, concepts and applications of the sustainable, communal traditional cultural practice of lawai‘a in Papahānaumokuākea and community management recommendations.
- A lawai‘a-focused study should include ethnography, involving extensive community consultation specific to the development of management. The ethnography must contextualize the Native Hawaiian traditional customary values surrounding the practice of lawai‘a.
- It should also identify appropriate, pathways respectful human behavior and engagement at Papahānaumokuākea as a in the marine refuge, a listed United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Listed site, a National Marine Monument, and nominated National Marine Sanctuary of the PMNM, especially in regards to lawai‘a and marine life.



In closing, in order to understand lawai‘a (Native Hawaiian lawai‘a) in support of culturally-informed policies, it is recommended that managing agencies need a synthesis of culturally-grounded, evidence-based, lawai‘a (not ‘fishing’) focused research and recommendations, and considerations state and federal agencies can utilize in planning, management, rule and policy frameworks and decisions associated with their efforts to designate the PMNM as a National Marine Sanctuary, and its continued management as a marine refuge and UNESCO World Heritage-listed site.

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Appendix A: Community Consultation Letter

Welina mai me ke aloha,

On behalf of the National Marine Sanctuary Foundation (NMSF), and in partnership with the State of Hawai'i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR), Nohopapa Hawai'i, LLC, is conducting a Cultural Impact Assessment (CIA) and Legal Analysis, inclusive of but not limited to a Ka Pa'akai Analysis (Figure 2). With this letter, Nohopapa Hawai'i, LLC invites your consultation on the CIA and Legal Analysis.

The studies are part of a joint federal/state Environmental Impact Statement (EIS), parallel to the National Historic Preservation Act (NHPA) Section 106 consultation process, to designate the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary (Figure 1). DLNR-DAR and the National Oceanic and Atmospheric Administration-Office of National Marine Sanctuaries (NOAA-ONMS) are leading this effort.

The Proposed Project

The proposed project is purely an administrative action, no developments are proposed. The goal of the project is to designate the marine portions of PMNM as a National Marine Sanctuary to enhance protection of the Papahānaumokuākea kūpuna islands and oceanscape through an additional layer of sanctuary regulations. These include:

- Increased resource protection and regulatory compliance (under the National Marine Sanctuaries Act 16 U.S.C. 1431 *et seq.*),
- Ensured enforceability of protections, the provision of natural resource damage assessment authorities, and
- Facilitation of interagency consultation.

Note, the oceanscape is the primary focus, even though oceanscapes, landscapes, and skyscapes are all connected. The establishment of a national marine sanctuary would ensure strong and lasting protection for the marine waters of the monument, but would not technically include any terrestrial areas; Nohopapa Hawai'i



recognizes the interconnected nature of the kūpuna islands' oceanscapes, landscapes, and skyscapes and invites mana'o and 'ike on all of them.

The project area is the 582,578 square mile biocultural oceanscapes, landscapes, and skyscapes that currently constitute the PMNM (Figure 1). It is jointly administered by four co-trustees – the Department of Commerce, the Department of the Interior, the State of Hawai'i, and the Office of Hawaiian Affairs (OHA) - via a seven-member management board. The day-to-day management of the Monument is overseen by two sub-agencies of each co-trustee (NOAA-ONMS and National Marine Fisheries Service, U.S. Fish and Wildlife Service [USFWS] – Ecological Services and Refuges, DLNR-DAR and DLNR-Division of Forestry and Wildlife), and OHA. Coordinated administration of all the Federal and State lands and waters within the boundaries of the Monument is facilitated by a 2006 Memorandum of Agreement.

The CIA study and Legal Analysis are triggered by requirements set forth in the Hawai'i Environmental Policy Act (HEPA), Hawai'i Revised Statutes (HRS) §343, the corresponding Hawai'i Administrative Rules (HAR) §11-200.1, and the Environmental Council's 1997 Guidelines for Assessing Cultural Impacts.

CIA Study and Legal Analysis Purposes and Goals

The CIA and Legal Analysis purposes and goals, in the context of the sanctuary designation effort, are interrelated. Consultation for the CIA and Legal Analysis are also integrated, to the extent possible, with NOAA-ONMS' in-progress Section 106 of the NHPA consultation efforts. The CIA study will assess the potential impacts (positive and/or negative) of the proposed project on cultural resources, defined as cultural practices and features.

The Legal Analysis will construct a comprehensive legal review framework and apply the framework in the analysis of the impacts of sanctuary designation to the cultural resources of the area in order to effectuate the State's obligation to protect Native Hawaiian traditional and customary practices. The Legal Analysis will be a component of the CIA study. The Ka Pa'akai Analysis segment of the Legal Analysis will independently assess the impacts of the proposed project on religious, traditional, and customary practices of Native Hawaiians, assess whether the DAR, with the proposed project, will adequately meet their duties to preserve and protect traditional and customary Native Hawaiian rights, and identify corrective feasible actions, inclusive of the following factors:

1. The identity and scope of 'valued cultural historical, or natural resources' in the petition area, including the extent to which traditional customary Native Hawaiian rights are exercised in the petition area;

2. The extent to which those resources-including traditional and customary Native Hawaiian rights-will be affected or impaired by the proposed action; and,
3. The feasible action, if any, to be taken by government entities to reasonably protect native Hawaiian rights if they are found to exist (Ka Pa‘akai, 94 Haw. at 47, 7 P.3d at 1084).

Invitation to Consultation

We would like to engage with individuals, ‘ohana, and organizations who have connection to and knowledge of the cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina. In particular, we would like to gather information related to:

- » **Mo‘okū‘auhau, Mo‘okū‘auhau ‘Āina, ‘Ohana, Wahi Kūpuna (Family History and Ties, Genealogy of the Land/Ocean, Cultural Landscapes, Resources, Uses, and Practices)**
- » **‘Āina Maui Ola, Loina Kūpuna (Natural Landscapes, Customary Practices, Resources, and Uses)**
- » **Mo‘olelo, Inoa ‘Āina, Mele, Oli, ‘Ōlelo No‘eau, Hula**
- » **Pāpahānaumokuākea including the relationships and significances to people and places throughout the pae ‘āina**
- » **Preservation and management concerns and recommendations**

Please let us know if you are interested and available to participate in consultation for this important project. You can participate via a virtual or in-person interview, group interviews, online survey ([link](#)), or by filling out the attached questionnaire.

We look forward to collaborating with you to document your mana‘o and recommendations to assess any cultural impacts that might stem from a National Marine Sanctuary Designation for the Papahānaumokuākea Marine National Monument.

Me ka ha‘aha‘a,



Momi Wheeler

Nohopapa Hawai‘i

(808) 430-2557

momi@nohopapa.com

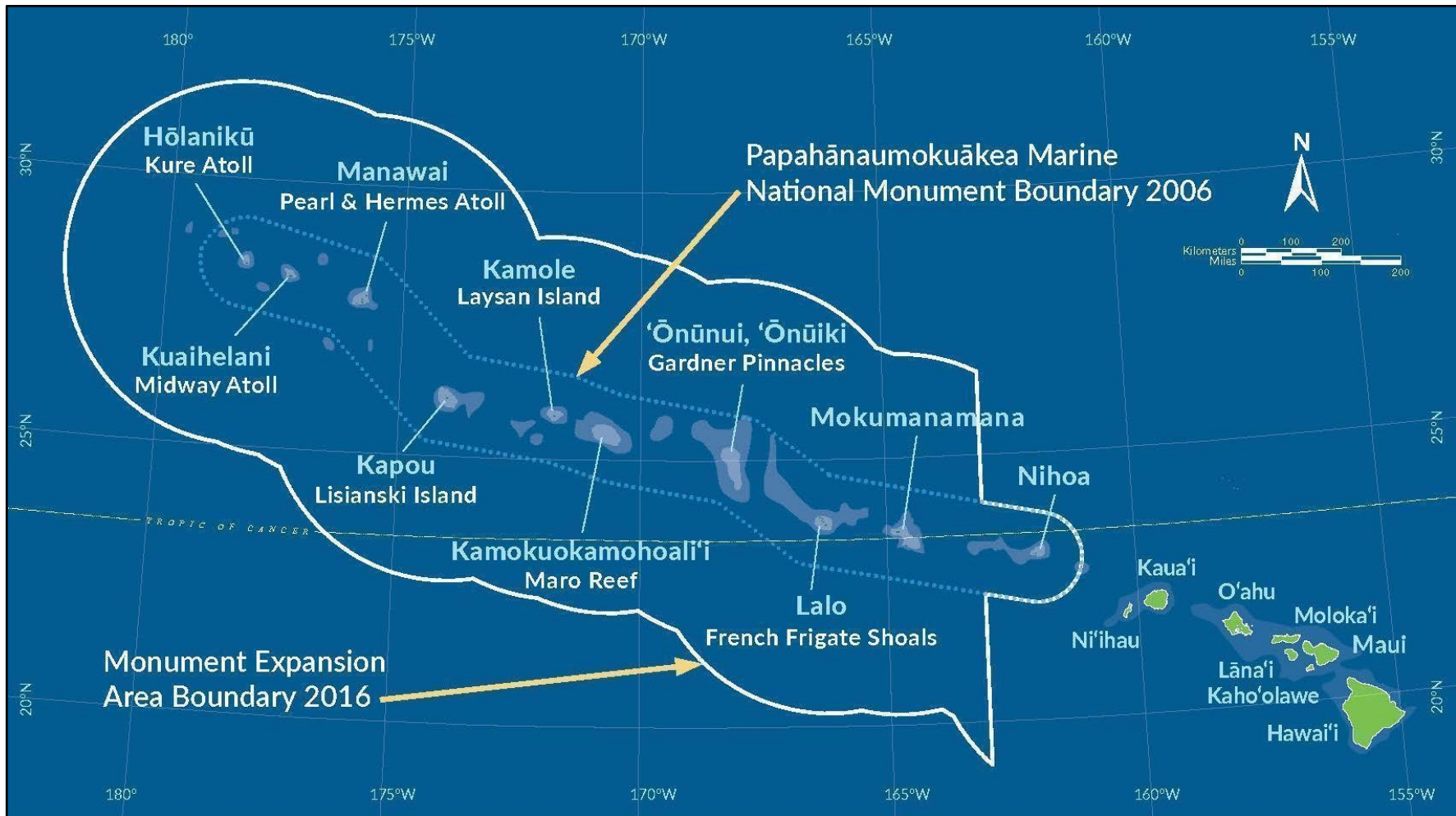


Figure 1. Map of the Hawaiian Archipelago and Papahānaumokuākea Marine National Monument (PMNM), including the original and expanded boundaries. The proposed National Marine Sanctuary Designation will consider the marine portions of the PMNM (Courtesy of NOAA) extending to the Monument Expansion Area Boundary 2016 (NOAA-ONMS).

**For more information on this project, visit the NOAA website at <https://sanctuaries.noaa.gov/papahanaumokuakea/>*

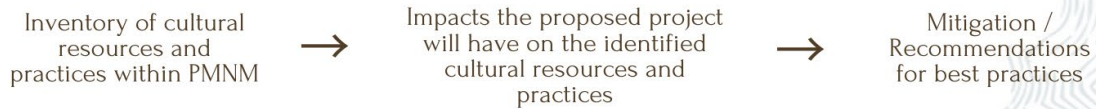


Proposed Papahānaumokuākea National Marine Sanctuary Designation

CULTURAL IMPACT ASSESSMENT & LEGAL ANALYSIS

Nohopapa Hawai'i, LLC is conducting a Cultural Impact Assessment (CIA) and Legal Analysis as part of a joint federal/state Environmental Impact Statement assessing the cultural impacts of the proposed designation of the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary.

Nohopapa's Approach



CIA & Legal Analysis Goals

Develop a framework to provide an adequate foundation for legitimizing customs within Papahānaumokuākea, a place of Wao Akua and Realm of Pō.

To gather mana’o and mo’olelo from Native Hawaiian community members with pilina to Papahānaumokuākea to inform future state and federal agency management of Papahānaumokuākea in accordance with indigenous knowledge.

Emphasize in our assessment that we are a living culture who relies on our mo’olelo, oli, mele, and connection to place, to perpetuate our ancestral knowledge and cultural connections.

How You Can Be Involved

- Volunteer as a cultural informant and participate in the consultation process.
- Share your mana’o to help us understand the Hawaiian customs within Papahānaumokuākea through your beliefs and origin stories.
- Share your ancestral, ecological, and spiritual knowledge of and connection to Papahānaumokuākea.
- Share any mo’olelo, oli, and/or mele that provide the underlying principles key to understanding Native Hawaiian connections to Papahānaumokuākea and its cultural significance.



Courtesy of Momi Wheeler

Focus Groups/Interviews Areas of Practice

- Kilo/Observation, Huli ‘Ia Data Collection
- Voyaging & Wayfinding
- Spiritual Sustenance, Religious Ceremonies and Protocol
- Sustenance/Subsistence Fishing
- Feather Gathering (‘Aha ‘Ula)
- Pilina to Papahānaumokuākea
- Other (we appreciate all mana’o)

If you are interested in participating, please reach out to Nohopapa with your contact information at momi@nohopapa.com or via our website at www.nohopapa.com. Mahalo nui!

Figure 2. A briefing sheet with an overview of proposed project

Appendix B: Interview Themes and Questions

Papahānaumokuākea Cultural Impact Assessment and Legal Analysis Questionnaire

Purpose:

On behalf of the National Marine Sanctuary Foundation (NMSF), and in partnership with the State of Hawai‘i Department of Land and Natural Resources Division of Aquatic Resources (DLNR-DAR), Nohopapa Hawai‘i, LLC, is conducting a Cultural Impact Assessment (CIA) and Legal Analysis, inclusive of but not limited to a Ka Pa‘akai Analysis ([briefing sheet](#)).

The studies are part of a joint federal/state Environmental Impact Statement (EIS), parallel to the National Historic Preservation Act (NHPA) Section 106 consultation process, to designate the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary. DLNR-DAR and the National Oceanic and Atmospheric Administration-Office of National Marine Sanctuaries (NOAA-ONMS) are leading this effort.

The CIA study and Legal Analysis are triggered by requirements set forth in the Hawai‘i Environmental Policy Act (HEPA), Hawai‘i Revised Statutes (HRS) §343, the corresponding Hawai‘i Administrative Rules (HAR) §11-200.1, and the Environmental Council’s 1997 Guidelines for Assessing Cultural Impacts.

Project Proponent Goal:

To secure a National Marine Sanctuary Designation for the PMNM to enhance protection of the Papahānaumokuākea kūpuna islands, landscapes, skylscapes, and oceanscapes through an additional layer of protections that include increased resource protection and regulatory compliance (under the National Marine Sanctuaries Act 16 U.S.C. 1431 et seq.) ensured enforceability of protections, the provision of natural resource damage assessment authorities, and facilitation of interagency consultation.

Nohopapa Hawai‘i, LLC recognizes the interconnected nature of the kūpuna islands’ oceanscapes, landscapes, and skylscapes and we invite your mana‘o and ‘ike on all of them.

Informed Consent:

Nohopapa Hawai‘i, LLC appreciates your generosity and willingness to share your knowledge and expertise on the types of cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea including the relationships and significances to people and places throughout the pae ‘āina. Your mana‘o and recommendations will inform efforts to secure a National Marine Sanctuary Designation for the Papahānaumokuākea Marine National Monument.

For your protection, we need your written confirmation that (*circle yes or no*):

1. Do you consent to the use of the complete transcript and/or interview quotes for the purposes of this study, including the eventual release into the public record? Yes No
2. If your intellectual property becomes part of the public record, would you prefer to remain anonymous? Yes No
3. If a photograph is taken during the interview, you consent to the photograph being included in this study. Yes No

I, _____, (*verbal consent or please print your name + the date*) agree to the procedures outlined above and, by my signature, give my consent and release of this interview and/or photograph to be used as specified.

**Note, answering the following questions is optional.*

**Due date to complete this questionnaire: January 30, 2023*

Mo‘okū‘auhau

Name:	
Affiliation:	
What is your connection to Papahānaumokuākea?	

<i>(e.g. Professional, Personal, Other)</i>	
What access kuleana do you have within PMNM? <i>(e.g. Marine resource management, Lawai‘a, Ceremony, Education, Resource gathering, Special Use, Research, etc)</i>	

Mo‘okū‘auhau, Mo‘okū‘auhau ‘Āina, Wahi Kūpuna

(Family History and Ties, Genealogy of the Land/Ocean, Cultural Landscapes, Resources, Uses, and Practices)

Do you have a historical or genealogical relationship to Papahānaumokuākea?	
Have you, your kūpuna, or members of your ‘ohana been to Papahānaumokuākea?	
If yes, which practices do you, your ‘ohana, and/or kūpuna do in Papahānaumokuākea?	

‘Āina Maui Ola, Loīna Kūpuna

(Natural Landscapes, Customary Practices, Resources, and Uses)

Are Papahānaumokuākea and the main Hawaiian Islands connected? - Does the health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Islands? - Is Papahanāumokuākea culturally and spiritually connected to the main Hawaiian Islands?	
What cultural resources, practices, and/or beliefs do you associate with Papahānaumokuākea and the surrounding vicinity?	

<p>Are there details regarding cultural resources, practices, and/or beliefs that need to be included (e.g. location, seasonality, lifespan, etc.) in the CIA report so the project proponents and management team can mitigate or avoid impacts and make pono decisions regarding management?</p> <p><i>*Mitigation = actions that avoid, minimize, rectify, or reduce impacts of a project.</i></p>	
<p>What impacts (direct, indirect, accumulated through time), if any, do you believe sanctuary designation will have on cultural resources, practices, and/or beliefs you associate with Papahānaumokuākea and the surrounding vicinity?</p> <p><i>*Impacts can be positive and/or negative.</i></p>	
<p>Are there any cultural resources, practices, beliefs, and/or features that will be lost or obliterated if the project proceeds? Please explain.</p> <p><i>*Feature = non-portable element of a site which is part of the site's history but cannot be moved e.g. trails, enclosure, rock wall, etc.</i></p>	
<p>What areas are critical in Papahānaumokuākea for Native Hawaiian traditional subsistence, spiritual, religious, and/or ceremonial activities?</p>	

Mo‘olelo, Inoa ‘Āina, Mele, Oli, ‘Ōlelo No‘eau

What Akua are affiliated with Papahānaumokuākea?	
Any mele, mo'olelo, oli, ka'ao or significant inoa 'āina (place names) about Papahānaumokuākea that are key to cultural understandings and interactions with the 'āina and/or the relationship to the pae 'āina?	
How can these cultural practices be integrated into resource management and/or restoration today?	

Preservation, Management Concerns, and Recommendations

Can you think of any adverse impacts to cultural resources, practices, or features as a result of the efforts to declare Papahānaumokuākea a National Marine Sanctuary? *Within Papahānaumokuākea? *Beyond Papahānaumokuākea? *Positive impacts?	
Do you support, oppose, or have concerns about the proposed National Marine Sanctuary designation? Please explain.	
Do you have any preferred alternatives to the proposed action - sanctuary designation for Papahānaumokuākea? Please explain.	
Which of the proposed sanctuary boundaries would you support?	

Or do you propose other sanctuary boundaries? (<i>Map of the Area of Potential Effect</i>) Please explain.	
Do you wish to share any preferred or desired mitigation measures relative to the impacts proposed by the sanctuary designation? *Mitigation = actions that avoid, minimize, rectify, or reduce impacts of a project.	
Do you have any short or long-term concerns regarding the project? Please explain.	
What do you see your role being to mālama Papahānaumokuākea and the proposed National Marine Sanctuary designation?	
What traditional or local strategies do you recommend for the resource management of Papahānaumokuākea and the proposed National Marine Sanctuary designation?	
Any other mana‘o you’d like to share?	

Contact Information & Referrals

You will be given an opportunity to review your interview summary and make any additions, deletions, or corrections as you wish. What is the best way to send you the transcribed interview? (<i>Email or Mail</i>) *What is your mailing address to receive a makana for sharing your valued mana‘o?	
--	--



Do you have referrals to other individuals or organizations we should talk to?	
Are there any parts of this interview you do not want publicly disclosed?	

Appendix C: informed consent form

INFORMED CONSENT FORM

Aloha mai, Nohopapa Hawai'i, LLC appreciates your generosity and willingness to share your knowledge and expertise on the types of cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea including the relationships and significances to people and places throughout the pae 'āina. Your mana'o and recommendations will be used to help assess any cultural impacts that might stem from a National Marine Sanctuary Designation for the Papahānaumokuākea Marine National Monument.

Nohopapa Hawai'i, LLC understands our responsibility in respecting the wishes, concerns, and intellectual property of the interviewees participating in this study. Here are the procedures we promise to follow:

1. The interview will not be recorded without your knowledge and explicit permission.
2. You will have the opportunity to review the written transcript and summary of your interview. At that time, you may make any additions, deletions or corrections you wish.
3. You will be given a copy of the interview transcript and/or summary for your records.
4. You will be given a copy of this release form for your records.
5. You will be given a copy of any photographs taken of you during the interview.

For your protection, we need your written confirmation that (check yes or no):

1. Do you consent to the use of the complete transcript and/or interview quotes for the purposes of this study, including the eventual release into the public record? Yes
No

2. If your intellectual property becomes part of the public record, would you prefer to remain anonymous? Yes No

3. If a photograph is taken during the interview, you consent to the photograph being included in this study. Yes No

I, _____, agree to the procedures outlined above and,

(Please print your name here)

by my signature, give my consent and release of this interview and/or photograph to be used as specified.

(Signature)

(Date)

Appendix D: Guidelines for Assessing Cultural Impacts

INTRODUCTION


It is the policy of the State of Hawai'i under Chapter 343, HRS, to alert decision makers, through the environmental assessment process, about significant environmental effects which may result from the implementation of certain actions. An environmental assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, and promotes responsible decision making.

Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a proposed project.

The Environmental Council encourages preparers of environmental assessments and environmental impact statements to analyze the impact of a proposed action on cultural practices and features associated with the project area. The Council provides the following methodology and content protocol as guidance for any assessment of a project that may significantly affect cultural resources.

BACKGROUND

Prior to the arrival of westerners and the ideas of private land ownership, Hawaiians freely accessed and gathered resources of the land and seas to fulfill their community responsibilities. During the Māhele of 1848, large tracts of land were divided and control was given to private individuals. When King Kamehameha the III was forced to set up this new system of land ownership, he reserved the right of access to privately owned lands for Native Hawaiian ahupua'a tenants. However, with the later emergence of the western concept of land ownership, many Hawaiians were denied access to previously available traditional resources.




In 1978, the Hawaii constitution was amended to protect and preserve traditional and customary rights of Native Hawaiians. Then in 1995 the Hawaii Supreme Court confirmed that Native Hawaiians have rights to access undeveloped and under- developed private lands. Recently, state lawmakers clarified that government agencies and private developers must assess the impacts of their development on the traditional practices of Native Hawaiians as well as the cultural resources of all people of Hawaii. These Hawaii laws, and the National Historic Preservation Act, clearly mandate federal agencies in Hawaii, including the military, to evaluate the impacts of their actions on traditional practices and cultural resources.

If you own or control undeveloped or under-developed lands in Hawaii, here are some hints as to whether traditional practices are occurring or may have occurred on your lands. If there is a trail on your property, that may be an indication of traditional practices or customary usage. Other clues include streams, caves and native plants. Another important point to remember is that, although traditional practices may have been interrupted for many years, these customary practices cannot be denied in the future.

These traditional practices of Native Hawaiians were primarily for subsistence, medicinal, religious, and cultural purposes. Examples of traditional subsistence practices include fishing, picking opihi and collecting limu or seaweed. The collection of herbs to cure the sick is an example of a traditional medicinal practice. The underlying purpose for conducting these traditional practices is to fulfill one's community responsibilities, such as feeding people or healing the sick.

As it is the responsibility of Native Hawaiians to conduct these traditional practices, government agencies and private developers also have a responsibility to follow the law and assess the impacts of their actions on traditional and cultural resources.

The State Environmental Council has prepared guidelines for assessing cultural resources and has compiled a directory of cultural consultants who can conduct such studies. The State Historic Preservation Division has drafted guidelines on how to conduct ethnographic inventory surveys. And the Office of Planning has recently completed a case study on traditional gathering rights on Kaua'i.



The most important element of preparing Cultural Impact Assessments is consulting with community groups, especially with expert and responsible cultural practitioners within the ahupua‘a of the project site. Conducting the appropriate documentary research should then follow the interviews with the experts. Documentary research should include analysis of Māhele and land records and review of transcripts of previous ethnographic interviews. Once all the information has been collected, and verified by the community experts, the assessment can then be used to protect and preserve these valuable traditional practices.


Native Hawaiians performed these traditional and customary practices out of a sense of responsibility: to feed their families, cure the sick, nurture the land, and honor their ancestors. As stewards of this sacred land, we too have a responsibility to preserve, protect and restore these cultural resources for future generations.

CULTURAL IMPACT ASSESSMENT METHODOLOGY

Cultural impacts differ from other types of impacts assessed in environmental assessments or environmental impact statements. A cultural impact assessment includes information relating to the practices and beliefs of a particular cultural or ethnic group or groups.

Such information may be obtained through scoping, community meetings, ethnographic interviews and oral histories. Information provided by knowledgeable informants, including traditional cultural practitioners, can be applied to the analysis of cultural impacts in conjunction with information concerning cultural practices and features obtained through consultation and from documentary research.

In scoping the cultural portion of an environmental assessment, the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place. This is to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment. Thus, for example, a proposed action that may not physically alter gathering practices, but may affect access to gathering areas would be included in the assessment. An ahupua‘a is usually the appropriate geographical unit to begin an assessment of cultural impacts of a proposed action, particularly if it includes all of the types of cultural practices associated with the project area. In



some cases, cultural practices are likely to extend beyond the ahupua‘a and the geographical extent of the study area should take into account those cultural practices.


The historical period studied in a cultural impact assessment should commence with the initial presence in the area of the particular group whose cultural practices and features are being assessed. The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs.

The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man-made and natural, including submerged cultural resources, which support such cultural practices and beliefs.

The Environmental Council recommends that preparers of assessments analyzing cultural impacts adopt the following protocol:

1. Identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua‘a;
2. Identify and consult with individuals and organizations with knowledge of the area potentially affected by the proposed action;
3. Receive information from or conduct ethnographic interviews and oral histories with persons having knowledge of the potentially affected area;
4. Conduct ethnographic, historical, anthropological, sociological, and other culturally related documentary research;
5. Identify and describe the cultural resources, practices and beliefs located within the potentially affected area; and
6. Assess the impact of the proposed action, alternatives to the proposed action, and mitigation measures, on the cultural resources, practices and beliefs identified.

Interviews and oral histories with knowledgeable individuals may be recorded, if consent is given, and field visits by preparers accompanied by informants are encouraged. Persons interviewed should be afforded an opportunity to review the record of the interview, and consent to publish the record should be obtained whenever possible. For example, the precise




location of human burials are likely to be withheld from a cultural impact assessment, but it is important that the document identify the impact a project would have on the burials. At times an informant may provide information only on the condition that it remain in confidence. The wishes of the informant should be respected.

Primary source materials reviewed and analyzed may include, as appropriate: Māhele, land court, census and tax records, including testimonies; vital statistics records; family histories and genealogies; previously published or recorded ethnographic interviews and oral histories; community studies, old maps and photographs; and other archival documents, including correspondence, newspaper or almanac articles, and visitor journals. Secondary source materials such as historical, sociological, and anthropological texts, manuscripts, and similar materials, published and unpublished, should also be consulted. Other materials which should be examined include prior land use proposals, decisions, and rulings which pertain to the study area.

CULTURAL IMPACT ASSESSMENT CONTENTS

In addition to the content requirements for environmental assessments and environmental impact statements, which are set out in HAR §§ 11-200-10 and 16 through 18, the portion of the assessment concerning cultural impacts should address, but not necessarily be limited to, the following matters:

1. A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.
2. A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.
3. Ethnographic and oral history interview procedures, including the circumstances, under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.
4. Biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or



interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.

5. A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken. This discussion should include, if appropriate, the particular perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.
6. A discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site.
7. A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, affected directly or indirectly by the proposed project.
8. An explanation of confidential information that has been withheld from public disclosure in the assessment.
9. A discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.
10. An analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.
11. A bibliography of references, and attached records of interviews which were allowed to be disclosed.

The inclusion of this information will help make environmental assessments and environmental impact statements complete and meet the requirements of Chapter 343, HRS. If you have any questions, please call 586-4185.

Appendix E: Act 50 [State of Hawai‘i 2000]

Act 50 [State of Hawai‘i 2000]. H.B. NO. 2895 H.D.1 was passed by the 20th Legislature and approved by the Governor on April 26, 2000 as Act 50. The following excerpts illustrate the intent and mandates of this Act:


The legislature also finds that native Hawaiian culture plays a vital role in preserving and advancing the unique quality of life and the “aloha spirit” in Hawai‘i. Articles IX and XII of the State constitution, other State laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

Moreover, the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture.

The purpose of this Act is to: (1) Require that environmental impact statements include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amend the definition of “significant effect” to include adverse effects on cultural practices.

SECTION 2. Section 343-2, Hawai‘i Revised Statutes, is amended by amending the definitions of “environmental impact statement” or “statement” and “significant effect”, to read as follows:

“Environmental impact statement” or “statement” means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic [and] welfare, social welfare, and cultural practices of the community and State, effects of the




economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effect.

Appendix E: PMNM Native Hawaiian Practices Permit Application

Papahānaumokuākea Marine National Monument

NATIVE HAWAIIAN PRACTICES Permit Application



NOTE: *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.



INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:

NOAA/Inouye Regional Center

NOS/ONMS/PMNM/Attn: Permit Coordinator

1845 Wasp Blvd, Building 176

Honolulu, HI 96818

nwhipermit@noaa.gov

PHONE: (808) 725-5800 FAX: (808) 455-3093

**SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT
REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE
LAST PAGE.**





Papahānaumokuākea Marine National Monument

Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information



Applicant Name:

Affiliation:

Permit Category: Native Hawaiian Practices

Proposed Activity Dates:

Proposed Method of Entry (Vessel/Plane):

Proposed Locations:

Estimated number of individuals (including Applicant) to be covered under this permit:

Estimated number of days in the Monument:

Description of proposed activities: (complete these sentences):

- **The proposed activity would...**

- **To accomplish this activity we would**



- **This activity would help the Monument by ...**

Other information or background:





Section A - Applicant Information

1. Applicant

Name (last, first, middle initial):

Title:

1a. Intended field Principal Investigator (See instructions for more information):



2. Mailing address (street/P.O. box, city, state, country, zip):

Phone:

Fax:

Email:

For students, major professor's name, telephone and email address:

3. Affiliation (institution/agency/organization directly related to the proposed project):



4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Diver):



Section B: Project Information

5a. Project location(s):

Ocean Based

- | | | | |
|---|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Nihoa Island | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Necker Island (Mokumanamana) | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> French Frigate Shoals | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Gardner Pinnacles | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Maro Reef | | | |
| <input type="checkbox"/> Laysan Island | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Lisianski Island, Neva Shoal | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Pearl and Hermes Atoll | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Midway Atoll | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Kure Atoll | <input type="checkbox"/> Land-based | <input type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water |
| <input type="checkbox"/> Monument Expansion Area | | | |
| <input type="checkbox"/> Other | | | |

NOTE: Shallow water is defined by water less than 100 meters in depth.

Remaining ashore on any island or atoll (with the exception of Sand Island at Midway Atoll and field camp staff on other islands/atolls) between sunset and sunrise.

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- Anchoring a vessel
- Deserting a vessel aground, at anchor, or adrift
- Discharging or depositing any material or matter into the Monument
- Touching coral, living or dead
- Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- Attracting any living Monument resource
- Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- Subsistence fishing (State waters only)
- Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6. Purpose/Need/Scope *State purpose of proposed activities:*

*Considering the purpose of the proposed activities, do you intend to film / photograph federally protected species beyond the protocols provided in PMNM Best Management Practices (<https://www.papahanaumokuakea.gov/permit/bestmanagement.html>)? Yes

No

If so, please list the species you specifically intend to target.



For a list of terrestrial species protected under the Endangered Species Act visit:

<http://www.fws.gov/endangered/>

For a list of marine species protected under the Endangered Species Act visit:

<http://www.nmfs.noaa.gov/pr/species/esa/>


For information about species protected under the Marine Mammal Protection Act visit:

<http://www.nmfs.noaa.gov/pr/laws/mmpa/>

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:


a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?



b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?




e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.


i. Has your vessel been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?



j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

ADDITIONAL FINDINGS FOR PROPOSED NATIVE HAWAIIAN PRACTICES

k. Explain how the activity is non-commercial and will not involve the sale of any organism or material collected.



l. Explain how the purpose and intent of the activity is appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice and its associated values and protocols.

m. Explain how the activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community.

n. Explain how the activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands.

o. Will all Monument resources harvested in the Monument be consumed in the Monument? If not, explain why not.

8. Procedures/Methods:

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:



Scientific name:

Hawaiian name:

& size of specimens:

Collection location:

Whole Organism Partial Organism

9b. What will be done with the specimens after the project has ended?

9c. Will the organisms be kept alive after collection? Yes No



- General site/location for collections:

- Is it an open or closed system? Open Closed

- Is there an outfall? Yes No

- Will these organisms be housed with other organisms? If so, what are the other organisms?

- Will organisms be released?

10. If applicable, how will the collected samples or specimens be transported out of the Monument?

11. Describe any fixed or semi-permanent structures or installations, or cultural offerings you plan to leave in the Monument:

12. List all specialized gear and materials to be used in the proposed activities:

13. List all Hazardous Materials you propose to take to and use within the Monument:

14. Describe collaborative activities to share samples, cultural research and/or knowledge gained in the Monument:

15a. Will you produce any publications, educational materials or other deliverables?

Yes No

15b. Provide a time line for write-up and publication of information or production of materials:



16. If applicable, list all Applicant's publications directly related to the proposed project:

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

Signature

Date



**SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT
OFFICE BELOW:**

NOAA/Inouye Regional Center
NOS/ONMS/PMNM/Attn: Permit Coordinator
1845 Wasp Blvd, Building 176
Honolulu, HI 96818
FAX: (808) 455-3093

DID YOU INCLUDE THESE?

- Applicant CV/Resume/Biography
- Intended field Principal Investigator CV/Resume/Biography
- Electronic and Hard Copy of Application with Signature
- Statement of information you wish to be kept confidential
- Material Safety Data Sheets for Hazardous Materials



PART II

Legal & Ka Pa‘akai Analysis for the Nomination of the Papahānaumokuākea National Monument as a National Marine Sanctuary

I. INTRODUCTION AND CONTEXT FOR LEGAL ASSESSMENT

1.1 Project Background and Purpose of Legal Analysis

•

1.2 Timeline of Protections for Papahānaumokuākea

1.3 Current Management Structure

1.4 Regulatory Context for Sanctuary Designation Proposal

1.4.1 Applicable Laws Requiring Review

1.4.2 The National Environmental Policy Act

1.4.3 The Hawai‘i Environmental Policy Act

1.4.4 The National Historic Preservation Act

1.4.5 Enhancing the Cultural Impact Assessment with Relevant Laws and Jurisprudence Protecting Native Hawaiian Rights and the Public Trust

II. METHODS AND APPROACHES, GENERAL RESULTS

2.1 Background Research

•



2.2 Consultation Process

•

III. OVERVIEW OF NATIVE HAWAIIAN RIGHTS LAW AND THE PUBLIC TRUST

3.1 The Kumulipo and Hawaiian Cosmogonic Origins Determine Cultural Practices and Native Customary Norms

3.2 The Codification of Cultural Practices and Customs into Kingdom and Contemporary Native Hawaiian Law

3.2.1 Ahupua‘a Fisheries: Hoa‘āina and Konohiki Conservation Practices and the Ancient Kapu System; Codification of Customary Fishery Laws During the Kingdom Period; and Remnants of this System Today

3.4.2 Considerations for Understanding Appropriate Fishing Practices at Papahānaumokuākea Based on Kānaka ‘Ōiwi Rights, Beliefs, and Practices

3.3 Current Public Trust Protections also Trace their Origin to the Kumulipo, Ancient Custom, and Kingdom Law

3.4 As Custom is Determinative of Native Hawaiian Law, How is Custom Determined?

3.4.1 What Criteria is Generally Applied to Establish an Adequate Foundation for Proof of the Validity of a Purported Customary Practice?

3.4.2 What Criteria Should Be Applied for Establishing an Adequate Foundation for Proof of the Validity of Purported Customary Practices at Papahānaumokuākea given its Unique Status as Wao Akua and in the Realm of Pō?

3.5 Operationalizing and Fulfilling the Constitutional Mandate to Affirmatively Protect Native Hawaiian Rights and Practices, and by Extension, the Public Trust Obligations to Native Hawaiians, via the Ka Pa‘akai Legal Framework

I. APPLICATION OF NATIVE HAWAIIAN RIGHTS, THE PUBLIC TRUST WITHIN THE KA PA‘AKAI LEGAL FRAMEWORK OF ANALYSIS AS TO AN INVENTORY OF VALUED CULTURAL, HISTORICAL, AND NATURAL

II. CONCLUSION

I. INTRODUCTION AND CONTEXT FOR LEGAL ASSESSMENT



1.1 Project Background and Purpose of Legal Analysis

The Papahānaumokuākea Marine National Monument encompasses 582,578 square miles of land and sea in the Pacific Ocean at the northwestern end of the Hawaiian Archipelago.¹³ Papahānaumokuākea is a highly protected area through state, federal, and international legal mandates. The multiple jurisdictions of management have created a complex environment to ensure the area is protected and the natural, archaeological, and cultural significance of the area is maintained.


The Department of Land and Natural Resources Division of Aquatic Resources (“DLNR-DAR”) in partnership with the National Oceanic and Atmospheric Administration Office of National Marine Sanctuaries (“NOAA-ONMS”) are proposing to designate the marine portions of Papahānaumokuākea Marine National Monument (“PMNM”) as a National Marine Sanctuary. Nohopapa Hawai‘i completed this Legal Analysis, inclusive of but not limited to an assessment under the Ka Pa‘akai¹⁴ legal framework, on behalf of the National Marine Sanctuary

¹³ Office of Hawaiian Affairs et. al, *Mai Ka Pō Mai: A Guidance Document for Papahānaumokuākea Marine National Monument* at 17 (2021).

¹⁴ *Ka Pa‘akai O Ka ‘Aina v. Land Use Comm’n*, 94 Haw. 31, 7 P.3d 1068, 1083-84 (2000) (providing a three-part test for the affirmative protection of native Hawaiian rights afforded by the state constitution; namely that

Foundation, and in partnership with the State of Hawai‘i Department of Land and Natural Resources Division of Aquatic Resources.

The legal analysis aims to provide a complete legal framework of Native Hawaiian Law and its evolution in Hawai‘i, inclusive of a Ka Pa‘akai Analysis, to ensure the protection of Papahānaunokuākea including its oceanscape, landscape, and skyscape. Specifically, the comprehensive legal review framework presented below will analyze the impacts the proposed sanctuary designation may have to the cultural resources and practices of the area and mitigation recommendations, in order to effectuate the State’s obligation to protect Native Hawaiian traditional and customary practices.




1.2 Timeline of Protections for Papahānaumokuākea


One of Papahānaumokuākea’s first protections was through Executive Order 1019, which created the Hawaiian Islands Bird Reservation from Nihoa to Kure Atoll. In 1940, Presidential Proclamation 2416 changed the name to the Hawaiian Islands National Wildlife Refuge and broadened the refuge's purposes to protect all wildlife. In 1993, the State of Hawai‘i designated the Kure Atoll State Wildlife Sanctuary. Shortly thereafter, in 2000 and 2001, through Executive Orders 13178 and 13196, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve was established to include areas adjacent to state waters extending seaward to approximately 50 nautical miles.

NWHI Marine National Monument Designation - Presidential Proclamation 8031

agencies independently assess “(A) the identity and scope of ‘valued cultural, historical, or natural resources’ in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (B) the extent to which those resoure – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the agency to reasonably protect native Hawaiian rihts if they are found to exist.”).



On June 15, 2006, President George W. Bush established the Northwestern Hawaiian Islands Marine National Monument through Presidential Proclamation 8031 under the authority of the Antiquities Act¹⁵ “for the care and management of the historic and scientific objects therein.”¹⁶ The Proclamation recognized that the area has “great cultural significance to Native Hawaiians and a connection to early Polynesian culture worthy of protection and understanding.”¹⁷ The Proclamation allowed for Native Hawaiian practices to occur within the Monument if a permit is issued.¹⁸ The Secretary will issue a Native Hawaiian Practice Permit if:



The activity is non-commercial and will not involve the sale of any organism or material collected; the purpose and intent of the activity are appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono) and demonstrate an understanding of, and background in, the traditional practice, and its associated values and protocols; the activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community; the activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands; and any monument resource harvested from the monument will be consumed in the monument.¹⁹


¹⁵ Section 2 of the Antiquities Act authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected. 34 Stat. 225, 16 U.S.C. 431.

¹⁶ Presidential Proclamation 8031, 67 (2006).

¹⁷ *Id.* at 67.


¹⁸ *Id.* at 73.

¹⁹ *Id.* at 73-74. “Native Hawaiian Practices” is defined in the Proclamation to mean “cultural activities conducted for the purposes of perpetuating traditional knowledge, caring for and protecting the environment, and strengthening cultural and spiritual connections to the Northwestern Hawaiian Islands that have demonstrable benefits to the Native Hawaiian community. This may include, but is not limited to, the noncommercial use of monument resources for direct personal consumption while in the monument.” *Id.* at 77.



On February 28, 2007, Presidential Proclamation 8112 amended Proclamation 8031 (establishing the Northwestern Hawaiian Islands Marine National Monument) to change the name of the Monument to its Native Hawaiian name of Papahānaumokuākea Marine National Monument.²⁰

On August 26, 2016, President Barack Obama created the Papahānaumokuākea Marine National Monument Expansion (hereinafter “Monument Expansion”) through Presidential Proclamation 9478, extending the boundaries of the Monument out to the United States Exclusive Economic Zone (hereinafter “EEZ”). In the Proclamation, President Obama recognized:



The ocean will always be seen as an integral part of cultural identity for the Native Hawaiian community. The deep sea, the ocean surface, the sky, and all the living things in the area adjacent to the Monument are important to this culture and are deeply rooted in creation and settlement stories. Native Hawaiian culture considers the Monument and the adjacent area a sacred place. This place contains the boundary between Ao, the world of light and the living, and Pō, the world of the gods and spirits from which all life is born and to which all ancestors return after death. Long-distance voyaging is one of the most unique and valuable traditional practices that the Native Hawaiian community has developed and continues to advance. Once on the verge of cultural extinction, new double-hulled sailing canoes, beginning with the Hōkūle‘a in the 1970s, are bringing voyaging and wayfinding to new generations. This traditional practice relies on celestial, biological, and natural signs, such as winds, waves, currents and the presence of birds and marine life. The open ocean ecosystem and its natural resources in the adjacent area play an important role within the cultural voyaging seascape within the Hawaiian Archipelago.²¹

The Proclamation also suggested that the Secretary of Commerce consider initiating the process under the National Marine Sanctuaries Act (16 U.S.C. 1431 et. seq.) to designate the Monument Expansion area and the Original Monument as National Marine Sanctuary to further protect the area. Again, this Proclamation allowed for Native Hawaiian practices, including the


²⁰ 121 Stat. 2702, Proclamation 8112, Feb. 28, 2007, at 2702.

²¹ *Id.* at 233.

exercise of traditional, customary, cultural, subsistence, spiritual, and religious practices within the Monument Expansion.

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UNESCO World Heritage Site




On July 30, 2010, the Papahānaumokuākea Marine National Monument was inscribed as the only mixed World Heritage Site in the United States by the United Nations Educational, Scientific, and Cultural Organization (“UNESCO”). PMNM earned this mixed designation because it represents one of the best examples of both the world’s cultural as well as natural heritage. In becoming a World Heritage Site, PMNM was acknowledged for meeting several criteria demonstrating it as a place representing a unique, most significant, or best example of the world’s cultural and/or natural heritage.

1.3 Current Management Structure


The overall management of the Monument is the responsibility of four co-trustee agencies: the United States (“U.S.”) Department of Commerce, the U.S. Department of the Interior, the State of Hawai‘i, and the Office of Hawaiian Affairs (“OHA”).²²

²² OHA was not officially named a co-trustee of Papahānaumokuākea Marine National Monument until January 17, 2017 “rightfully places the Native Hawaiian voice at the highest levels of decision making for this culturally and spiritually significant wahi pana (sacred place) and will help advance our people’s understanding of the deep connection of our entire pae ‘āina (archipelago).” Papahānaumokuākea Marine National Monument, Office of Hawaiian Affairs officially names as 4th Co-Trustee of Papahānaumokuākea, [https://www.papahanaumokuakea.gov/news/oha-cotruster.html#:~:text=Office%20of%20Hawaiian%20Affairs%20officially,th%20Co%2DTrustee%20of%](https://www.papahanaumokuakea.gov/news/oha-cotruster.html#:~:text=Office%20of%20Hawaiian%20Affairs%20officially,th%20Co%2DTrustee%20of%20)



The organizational structure for the Monument under the Co-Trustees consists of:

(1) A Senior Executive Board composed of a designated senior policy official for each party that is directly responsible for carrying out the agreement and for providing policy direction for the Monument. The Senior Executive Board is composed of the State of Hawai‘i Department of Land and Natural Resources (hereinafter “DLNR”), Department of the Interior U.S. Fish and Wildlife Service (hereinafter “FWS”), Department of Commerce NOAA, and OHA.



(2) A Monument Management Board (that reports to the Senior Executive Board) composed of representatives from the federal and state agency offices that carry out the day-to-day management and coordination of Monument activities. The Monument Management Board (“MMB”) is comprised of DLNR Division of Aquatic Resources (“DAR”), DLNR Division of Forestry and Wildlife (“DOFAW”), FWS National Wildlife Refuge System, FWS Ecological Services, NOAA National Ocean Service Office of Marine Sanctuaries (“OMNS”), NOAA National Marine Fisheries Service (“NMFS”), and OHA.

(3) An Interagency Coordinating Committee representing other state and federal agencies as appropriate to assist in the implementation of Monument management activities. This committee includes the U.S. Environmental Protection Agency, U.S. Coast Guard 14th District Prevention and Response, U.S. Geological Survey, U.S. Department of Defense, and others.

The Co-Trustees and Co-Managers are guided by the Papahānaumokuākea Marine National Monument Management Plan (hereinafter “PMNM MMP”). The PMNM MMP was finalized in 2008 and is a comprehensive document guiding the management of PMNM for 15 years. In addition to the PMNM MMP, OHA created Mai Ka Pō Mai, a Native Hawaiian Guidance Document for the Management of PMNM. The Mai Ka Pō Mai guidance document “is representative of a community of practitioners who have constructed a foundation for the Co-Trustees to appropriately acknowledge and incorporate various aspects of Native Hawaiian culture into different areas of management in ways that are more collaborative, meaningful, and

[20Papah%20National%20Monument](#) (Jan. 12, 2017).

holistic.” Mai Ka Pō Mai: A Guidance Document for Papahānaumokuākea.²³ The purpose of Mai Ka Pō Mai is “to establish a collaborative management framework that guides Co-Trustee agencies towards integrating traditional Hawaiian knowledge systems, values, and practices into management.”²⁴

The Native Hawaiian Cultural Working Group (hereinafter “CWG”) is composed of Native Hawaiian cultural experts, including kūpuna and practitioners who provide advice and guidance on all Monument actions affecting Native Hawaiian practices and cultural resources within PMNM.²⁵ In addition, the CWG assists in the proper naming of places, new species, and animals without known Hawaiian names within PMNM using their ‘ike, kilo, and perspectives. The CWG also works with OHA to review all Native Hawaiian access permit applications and either recommend approval or denial of the permits.



1.4 Regulatory Context for Sanctuary Designation Proposal

1.4.1 Applicable Laws Requiring Review


The proposed designation of the marine portions of Papahānaumokuākea Marine National Monument (PMNM) as a National Marine Sanctuary triggers several Federal and State laws for environmental review and community consultation:

1. National Environmental Protection Act (NEPA);
2. Hawai‘i Environmental Protection Act (HEPA); and
3. National Historic Preservation Act (NHPA).

²³ Office of Hawaiian Affairs et. al, Mai Ka Pō Mai: A Guidance Document for Papahānaumokuākea Marine National Monument, 4 (2021).

²⁴ *Id.*


²⁵ The MMP states “the MMB [Monument Management Board], through OHA, will formally establish a cultural working group, expanding the previously established working group, to ensure a strong cultural link in the planning and management of the Monument.” Monument Management Plan.



The NHPA and NEPA are two separate laws requiring federal agencies to “stop, look, and listen” before making decisions that impact historic properties and the human environment. Specifically for the purposes of the CIA and Legal Analysis, HEPA is the controlling law requiring cultural review and analysis. NOAA and the State of Hawai‘i are preparing a joint Environmental Impact Statement (hereinafter “EIS”) under the NEPA for a proposed National Marine Sanctuary within Papahānaumokuākea.

The following sections will go more in depth about each of the laws.

1.4.2 The National Environmental Policy Act



The National Environmental Policy Act (“NEPA”) requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions and provide opportunities for public review and comment.²⁶ Under NEPA, agencies are required to evaluate the environmental and related social and economic effects of their proposed actions. This is done through preparation of an Environmental Assessment (“EA”) or Environmental Impact Statement (“EIS”).


The NEPA process begins when a federal agency develops a proposal to take a major federal action significantly affecting the quality of the human environment.²⁷ A Major Federal Action is defined as “an activity or decision subject to Federal control and responsibility,” such as:

- Projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies;
- New or revised agency rules, regulations, policies, or procedures; and
- Approval of specific projects, such as construction or management activities located in a defined geographic area, including actions approved by permit or other regulatory decision as well as Federal and federally assisted activities.²⁸

²⁶ See generally National Environmental Policy Act of 1969, 42 U.S.C. 4321 et seq. (1969).


²⁷ See 40 CFR § 1508.1(a)(4); 40 CFR section 1502.3.

²⁸ *Id.* at § 1508.1.



Here, the NEPA process is triggered by the action of proposing a sanctuary designation under the National Marine Sanctuary Act (hereinafter “NMSA”) which stipulates the preparation of an EIS. The National Oceanic and Atmospheric Association (“NOAA”) as the co-managing agency is leading the preparation of the joint federal state EIS.

1.4.3 The Hawai‘i Environmental Policy Act



The Hawai‘i State companion law to NEPA is the Hawai‘i Environmental Policy Act (“HEPA”), reflected under Hawai‘i Revised Statutes (“HRS”) Chapter 343 and Hawai‘i Administrative Rules (“HAR”) 11-200.1. HEPA is the State of Hawai‘i’s policy to alert decision makers through the environmental assessment process about significant effects which may result from the implementation of certain actions.

The triggers for environmental review under Chapter 343, HRS for this project include:


- Propose the use of state or county lands or the use of state or county funds;
- Propose any use within any land classified as a conservation district;
- Propose any use within a shoreline area;
- Propose any use within any historic site as designated in the National Register or Hawai‘i Register.²⁹

NOAA as the co-managing agency is leading the preparation of the joint federal/state EIS.


In February 2012, the State Department of Health’s Office of Environmental Quality Control (OEQC) published an updated Guide to the Implementation and Practice of the Hawai‘i Environmental Policy Act containing specific guidelines and methodology for its practice and implementation.³⁰

²⁹ HRS § 343 5(a).

³⁰ See *generally* State of Hawai‘i Office of Environmental Quality Control, Guide to the Implementation and Practice of the Hawaii Environmental Policy Act (2012).



Under HEPA, the State of Hawai‘i also requires the preparation of a Cultural Impact Assessment. Recognizing that “the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture[,]” the Hawai‘i State Legislature passed Act 50, SLH 2000, “to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawai‘i’s culture, and traditional and customary rights” to uphold the State’s constitutional and statutory duty to protect Native Hawaiian traditional and customary practices and resources.³¹ Act 50 amended HRS Chapter 343 to:

- 
1. Require that environmental impact statements include the disclosure of effects of a proposed action on the cultural practices of the community and State; and
 2. Amend the definition of ‘significant effect’ to include adverse effects on cultural practices.


CIAAs are a useful way for agencies charged with reviewing and accepting environmental assessments to fulfill their obligation to protect Native Hawaiian traditional and customary practices. The State of Hawai‘i Environmental Council adopted Guidelines for Assessing Cultural Impacts.³² This guidance document provides a cultural impact assessment methodology that the Environmental Council recommends preparers of assessments follow when analyzing cultural impacts in an effort to promote responsible decision making.³³

HEPA requires that the EIS address other Federal, State, and local regulations and permits as applicable, including the National Historic Preservation Act, 54 U.S.C. 300101 et seq., Hawai‘i Historic Preservation Review, HRS Chapter 6E-8 and HAR Chapter 13-275. The HEPA process requires an assessment of cultural resources and an analysis of the impacts, if any, the proposed action may have on cultural practices and features within the project area.

³¹ Act 50, SLH 2000.


³² *See generally* State of Hawaii Environmental Council, Guidelines for Assessing Cultural Impacts (1997).

³³ *See generally* State of Hawaii Environmental Council, Guidelines for Assessing Cultural Impacts (1997).



The legal analysis will evaluate the legality of the proposed project in respect to Native Hawaiian traditional and customary practices and resources as protected by the law and interpreted by the courts in Hawai‘i.

1.4.4 The National Historic Preservation Act




Alongside the joint federal/state EIS review process (NEPA/HEPA), there is also a parallel Section 106 consultation process occurring under the National Historic Preservation Act (“NHPA”). The NHPA is the general Federal policy regarding Historic Properties, which creates the National Register of Historic Places, the position of State Historic Preservation Officer to inventory and manage historic properties, and the Advisory Council on Historic Preservation (“ACHP”), and mandates that Federal decision makers consider historic properties during project planning.³⁴

Section 106 of the NHPA requires federal agencies to consider the impact of their actions on historic properties and provide the ACHP and the public an opportunity to comment on projects before implementation. This process holds agencies responsible for their actions on historic properties and allows the agencies to be held publicly accountable for their decisions. Here, more specifically, the Section 106 process also mandates consultation with Native Hawaiians and Native Hawaiian Organizations (“NHOs”) of proposed federal undertakings such as the proposal to designate Papahānaumokuākea a National Marine Sanctuary. The NHPA specifies that federal agencies (in this respect, NOAA) consult with Native Hawaiians and NHOs in a manner such that they are given “a reasonable opportunity to identify [their] concerns about historic properties, including those of traditional religious and cultural importance . . . ; articulate [their] views on the undertaking’s effects on such properties; and participate in the resolution of adverse effects.”³⁵


Memorandum on Indigenous Traditional Ecological Knowledge and Federal Decision Making

³⁴ See generally National Historic Preservation Act, 16 U.S.C. 470.

³⁵ 36 C.F.R. § 800.2(c)(2).



As a best practice, it is also important to factor into federal executive policies and decision-making the incorporation of Traditional Ecological Knowledge (“TEK”); and particularly here, within the Section 106 consultation process with Native Hawaiians and NHOs. Traditional Ecological Knowledge (“TEK”) is “the on-going accumulation of knowledge, practice and belief about relationships between living beings in a specific ecosystem that is acquired by indigenous people over hundreds or thousands of years through direct contact with the environment, handed down through generations, and used for life-sustaining ways. This knowledge includes the relationships between people, plants, animals, natural phenomena, landscapes, and timing of events for activities such as hunting, fishing, trapping, agriculture, and forestry. It encompasses the worldview of a people, which includes ecology, spirituality, human and animal relationships, and more.”³⁶



On November 15, 2021, the White House Office of Science & Technology Policy (“OSTP”) and Council on Environmental Quality (“CEQ”) released a first-of-its-kind memorandum committing to integrate Indigenous Traditional Ecological Knowledge (“ITEK”) into federal scientific and policy processes.³⁷ Recognizing President Biden’s priority to strengthen the relationship between the federal government and Tribal Nations, this memorandum marks the government’s commitment to include Native Hawaiians and other indigenous peoples in the development of federal research, policies, and decisions.³⁸

“ITEK is a body of observations, oral and written knowledge, practices, and beliefs that promote environmental sustainability and the responsible stewardship of natural resources through relationships between humans and environmental systems.”³⁹ OSTP and CEQ are currently developing government-wide guidance for Federal agencies on ITEK which will be shaped by the input of Tribal Nations, including Native Hawaiians.⁴⁰


³⁶ *Overview of TEK*, National Park Service (August 5, 2020), <https://www.nps.gov/subjects/tek/description.htm>.

³⁷ Memorandum on Indigenous Traditional Ecological Knowledge and Federal Decision Making, Office of Science and Technology Policy & Council on Environmental Quality (Nov. 15, 2021).

³⁸ *Id.*


³⁹ *Id.* at 2.

⁴⁰ *Id.*



Mai Ka Pō Mai is a landmark document which shows how ITEK can inform management decisions to protect important sites across the country and pave a sustainable path forward for future generations.⁴¹ In the same spirit that Mai Ka Pō Mai was drafted, Nohopapa aligned its consultation process for the CIA and Legal Analysis to ensure native voices, their pilina with and traditional knowledge of Papahānaumokuākea informed our assessment of the sanctuary proposal and that their recommendations were documented with care and deference. Indeed, one of our interviewees, Kealoha Pisciotta, emphasized the need to incorporate TEK into the consultation process and overall management regime of Papahānaumokuākea as it exists now as a National Marine Monument and as it is newly envisioned as a National Marine Sanctuary.

Paoakalani Declaration



Kealoha Pisciotta further recommended that care be also taken in respecting indigenous intellectual property belonging to Kānaka Maoli. Information of what this encompasses can be found in the Paoakalani Declaration.⁴² Of particular note within the Declaration is an acknowledgement of the need to protect traditional knowledge and cultural expressions. In our consultation process for the CIA, Nohopapa engaged in protocols to maintain anonymity for our consultees requesting privacy and requesting that certain information not be shared within this document. This approach is also recommended for NOAA in the course of its consultation and reporting requirements under Section 106 of the NHPA.

Integrating the United Nations Declaration on the Rights of Indigenous Peoples and Free Prior and Informed Consent into Section 106 Consultation

The ACHP has encouraged participants in the Section 106 process to incorporate the precepts found in the United Nations Declaration on the Rights of Indigenous Peoples

⁴¹ See generally Office of Hawaiian Affairs et. al, *Mai Ka Pō Mai: A Guidance Document for Papahānaumokuākea Marine National Monument* (2021).

⁴² *Paoakalani Declaration*, Kanaka Maoli of Ka Pae ‘Āina Hawai‘i, Ka ‘Aha Pono – Native Hawaiian Intellectual Property rights Conference (October 3-5, 2003), <https://www.oha.org/wp-content/uploads/Paoakalani-Declaration.pdf>

(UNDRIP) which was signed by President Obama in 2010.⁴³ The ACHP underscores Article 18 of UNDRIP which reads as follows:

“Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions.”⁴⁴

The United Nations, with 143 nations as signatories, adopted the Declaration on the Rights of Indigenous Peoples (UNDRIP) in September 2007.⁴⁵ In 2010, U.S. President Barack Obama signed the Declaration and issued an official statement qualifying the United State’s position on UNDRIP as non-binding. However, the U.S. position statement provides that America is continuing to meet the spirit of the UN Resolution through its ongoing work on protecting the rights of America’s indigenous peoples and strengthening government to government relations with recognized American Indian tribes.⁴⁶ The UNDRIP has been nearly universally adopted across the globe and “represent[s] the dynamic development of international legal norms and reflect[s] the commitment of [nations] to move in certain directions, abiding by certain principles.”⁴⁷

Some relevant provisions of UNDRIP include:

Article 26. Indigenous peoples have the **right to the lands, territories and**

⁴³ ADVISORY COUNCIL ON HISTORIC PRESERVATION, *Sec. 106 & the U.N. Declaration on the Rights of Indigenous Peoples: Intersections & Common Issues: Article 18 & Sec. 106* (2013), <https://www.achp.gov/sites/default/files/guidance/2018-06/Section106andtheUNDRIPIntersectionsandCommonIssuesArticle18andSection10622Nov2013.pdf>

⁴⁴ *Id.*

⁴⁵ *United Nations Declaration on the Rights of Indigenous Peoples*, G.A. Res. 61/295, U.N. Doc. A/RES/61/295 (Sept. 13, 2007), 46 I.L.M. 1013 (2007) [*hereinafter* UNDRIP].

⁴⁶ *Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples: Initiatives to Promote the Government-to-Government Relationship & Improve Lives of Indigenous Peoples*, <https://2009-2017.state.gov/documents/organization/184099.pdf>.

⁴⁷ *Indigenous Peoples, Indigenous Voices, Frequently Asked Questions, Declaration on the Rights of Indigenous Peoples*, (<https://www.un.org/esa/socdev/unpfii/documents/FAQsindigenousdeclaration.pdf>).

resources which they have traditionally owned, occupied or otherwise used or acquired...[and] have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.

Article 11. indigenous peoples have the **right to...maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites ...**

Article 19. States shall consult and cooperate in good faith with the indigenous peoples concerned...in order to obtain their **free, prior and informed consent** before adopting and implementing legislative or administrative measures that may affect them.

Article 29. Indigenous peoples have the **right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources...**


Article 32. States shall consult and cooperate in good faith with the indigenous peoples concerned...in order to obtain their **free, prior and informed consent** prior to the approval of any project affecting their land or territories and other resources ...⁴⁸
(Emphases added).

Informed consent lays out the framework for indigenous peoples to make fully informed decisions in accordance with their own “customary decision-making processes”⁴⁹ It requires governmental entities, corporations, developers, and other public and private entities to negotiate with indigenous peoples with the intent of reaching consensus **prior** to implementation of a proposed action. Indigenous peoples also have the **freedom** to consent to or reject a proposal which may affect their ancestral lands that they own, occupy, access, and/or use.⁵⁰ (Emphases added).

⁴⁸ UNDRIP, *supra* note 33.


⁴⁹ Free Prior and Informed Consent Manual for Project Practitioners, Food and Agriculture Organization of the United Nations (2016).

⁵⁰ *Id.*



In preparation of the CIA and legal analysis, Nohopapa Hawai‘i has also adopted the approaches outlined in the UNDRIP for consultation.

“Federal agencies’ statutory obligations under NEPA and NHPA are independent, but integrating the processes creates efficiencies, promotes transparency and accountability, and supports a broad discussion of effects to the human environment.”⁵¹ The NHPA regulations require agencies to “integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays in the process, and to head off potential conflicts.”⁵² Further, integrating the two procedures facilitates a comprehensive environmental review schedule, saves time and expense, eases potential duplication for consultees, promoting more informed and better decision making.⁵³



Nohopapa Hawai‘i collaborated closely with NOAA as it underwent the Section 106 consultation process in efforts to avoid duplication and to maximize opportunities for public and consulting party involvement. Much of the interviewees we consulted with were also part of the Section 106 consultation process with NOAA. The NHPA Section 106 consultation process is also similar to HEPA’s requirement for Cultural Impact Assessments (“CIA”).


1.4.5 Enhancing the Cultural Impact Assessment with Relevant Laws and Jurisprudence Protecting Native Hawaiian Rights and the Public Trust

An analysis of Native Hawaiian rights comprised of key statutes, constitutional provisions, and relevant jurisprudence enhances HEPA’s CIA process, as well as complements federal obligations to Native Hawaiians and NHOs under Section 106 of the NHPA. Further, Nohopapa’s specific scope of work entails analysis within the “Ka Pa‘akai” legal framework, a

⁵¹ Advisory Council on Historic Preservation, A Brief Explanation of NEPA and Section 106 Reviews (last visited Apr. 17, 2023) https://www.achp.gov/integrating_nepa_106.

⁵² 40 C.F.R. § 1501.2.

⁵³ Council on Environmental Quality et. al, NEPA and NHPA: A Handbook for Integrating NEPA and Section 106 7 (Mar. 2013).



seminal case that operationalizes the State of Hawai‘i’s constitutional mandate to “affirmatively protect” Native Hawaiian rights and practices.⁵⁴ Hawai‘i’s constitution requires government agencies to “conserve and protect Hawai‘i’s natural beauty” as a public trust on behalf of and “[f]or the benefit of present and future generations ...”⁵⁵ Co-extensive with State public trust protections are also federal requirements to protect the public trust with respect to lands that were ceded from the Hawaiian Kingdom from both the Main Hawaiian Islands (“MHI”) and the Northwest Hawaiian Islands (“NWHI”)/Papahānaumokuākea during the transition of Hawai‘i as a U.S. territory to America’s 50th State per the Admissions Act in 1959.⁵⁶

Sections III and IV provide in greater detail the relevant laws and jurisprudence protecting Native Hawaiian rights and the public trust and what they mean when applied to the proposed sanctuary designation for Papahānaumokuākea.



II. METHODS AND APPROACHES, GENERAL RESULTS

Both the CIA (Part I) and Legal Analysis here (Part II) utilized a combination of targeted background research and consultation to identify and assess cultural impacts and provide recommendations and considerations.


2.1 Background Research

Our legal team’s approach to the legal analysis focused on gathering background information used to provide a foundational context drawn from the Hawai‘i Constitution, statutory laws, case law, law review articles, previous cultural impact assessments, Papahānaumokuākea management plans, including the *Mai Ka Pō Mai* plan jointly authored by OHA, NOAA, FWS, and the State of Hawai‘i, relevant published and unpublished resources

⁵⁴ *Ka Pa‘akai O Ka ‘Aina v. Land Use Comm’n*, 94 Haw. 31, 7 P.3d 1068, 1083-84 (2000).

⁵⁵ HAW. CONST. art. XI, § 1 (1978)


⁵⁶ Hawaii Admission Act, Pub.L. No. 8603, 73 Stat. 5 (1959).



(Master’s theses and PhD dissertations, essays, etc.) journal publications and law review articles, and legal documents.

Background research was used to inform:

- The current management structure of Papahānaumokuākea,
- Past and present Native Hawaiian practices, beliefs, and resources occurring within the monument,
- Native Hawaiian origin stories and significance of Papahānaumokuākea to Native Hawaiian identity and culture,
- Land use and resource management practices,
- Legal protections of Native Hawaiian traditional, customary, and religious beliefs and practices, including how the courts have interpreted such laws,
- Development of a framework for providing an adequate foundation for proving customary practices in Papahānaumokuākea.




Background research yielded an abundance of Hawaiian oral traditions, including knowledge generated scientifically through centuries and generations of close observation and information transmission, that evince Papahānaumokuākea as a Hawaiian place and cultural, physical, spiritual, and ecological extension of the pae ‘āina. This information was thoroughly covered in Part I, the Cultural Impact Assessment. The legal team has synthesized here portions of the CIA relevant to the Native Hawaiian rights, public trust, and Ka Pa‘akai analyses.


2.2 Consultation Process

Nohopapa Hawai‘i’s legal analysis approach also included consultation in collaboration with NOAA as the co-managing agency leading the preparation of the joint federal/state EIS, specifically parallel to the NHPA Section 106 consultation process. Through the consultation process the legal team was able to complete the three-part Ka Pa‘akai Analysis.

Both studies also utilized consultation in order to: (1) identify impacts the proposed project will have on any identified Papahānaumokuākea cultural resources and practices, and (2) identify appropriate mitigation commitments and recommendations for best practices.



Consultation efforts focused on engagement with individuals, ‘ohana, and organizations who have connection to and knowledge of the cultural resources, practices, and beliefs found within the broad geographical area of Papahānaumokuākea, including the relationships to people and places throughout the pae ‘āina. In particular, Nohopapa focused consultation on gathering information related to:


- 
- Mo‘okū‘auhau, Mo‘okū‘auhau ‘Āina, ‘Ohana, Wahi Kūpuna (Family History and Ties, Genealogy of the Land/Ocean, Cultural Landscapes, Resources, Uses, and Practices)
 - ‘Āina Maui Ola, Loina Kūpuna (Natural Landscapes, Customary Practices, Resources, and Uses)
 - Mo‘olelo, Inoa ‘Āina, Mele, Oli, ‘Ōlelo No‘eau, Hula (Legends, Place Names, Songs, Chances, Proverbs, Hula)
 - Pāpahānaumokuākea including the relationships and significances to people and places throughout the pae ‘āina
 - Preservation and management concerns and recommendations
 - Any other mana‘o consultees wished to share

Joint CIA and LA consultation inclusive of questionnaire distribution, email exchanges, presentations, and individual and group interviews, with individuals knowledgeable of and/or having cultural connections to Papahānaumokuākea was performed.

During community consultation for this study, interviewees identified an array of layered, intertwined, living, and dynamic Hawaiian cultural resources within or associated with Papahānaumokuākea, including explanations of their nature and significance. The Hawaiian cultural practices, beliefs, and features mentioned by those interviewed are featured in great detail in Part I of this document.


Many consultees associated an array of adverse impacts to cultural practices and resources stemming from efforts to declare Papahānaumokuākea a National Marine Sanctuary. This discussion is featured in Part I of this report, with Part II touching upon certain key aspects relevant to the legal analysis.

Consultees shared a variety of detailed, contextualized, and nuanced recommendations regarding National Marine Sanctuary designation for Papahānaumokuākea. Their remarks are



shared in detail in the CIA (Part I). Included is the ‘ike and mana‘o regarding the following Nohopapa-designated consultation sub-categories:

- How can cultural practices be integrated into resource management and/or restoration today?
- Short or Long-term Concerns Regarding the Project
- Role(s) Envisioned to Mālama Papahānaumokuākea and the Proposed National Marine Sanctuary designation
- Traditional or Local Strategies Recommended for the Resource Management of Papahānaumokuākea and the Proposed National Marine Sanctuary Designation
- ‘Ike Kūpuna
- Continued Access and Stewardship
- Continued Protection and Outreach
- Elevating Indigenous Science as its Own Research Category
- Removing Western Frameworks and Motivations



Consultations offered additional mana‘o regarding the following:

- Regarding Bringing Back Any Type of Resources from Papahānaumokuākea to the Pae ‘Āina
- Proposed Regulations for Fishing Within PMNM
- Sanctuary Designation and Hawaiian Land and Decision-making Authority
- Sanctuary Designation and Foundational Hawaiian Wahi Kūpuna Stewardship Approaches
- Regarding Additional Recommended Protections
- Impact of Native Hawaiian Visitation and Research
- Recognizing Previous Efforts

The recommendations and considerations discussed in the CIA, Part I is synthesized here in Part II and incorporated as part of the Ka Pa‘akai legal framework in terms of identifying cultural resources, practices, beliefs, and features associated with the project area and vicinity; identified cultural impacts; recommendations and additional mana‘o; and considerations/next steps.

III. OVERVIEW OF NATIVE HAWAIIAN RIGHTS LAW AND THE PUBLIC TRUST

This section describes the basic legal foundation for Native Hawaiian rights law relevant to the cultural impact analysis for the Papahānaumokuākea sanctuary designation proposal. It describes constitutional and statutory provisions, as well as jurisprudence, that inform the state and its co-trustees on how best to determine appropriate cultural, traditional, and religious practices at Papahānaumokuākea and the legal framework by which to affirmatively protect them.

3.1 The Kumulipo and Hawaiian Cosmogonic Origins Determine Cultural Practices and Native Customary Norms

Much of the law around Native Hawaiian rights are grounded in the understanding of the ‘ohana. The late kumu hula John Ka‘imikaua stated that “the whole culture of our ancestors was based upon the ‘ohana” in the manner that the land was cared for.⁵⁷ He adds that this truth can be found “from the beginning of time in our mo‘olelo that tells of the creation of our islands ... with the union of earth and sky.”⁵⁸ As an example, he shares the story of the birth of an island, Moloka‘i:

⁵⁷ *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Moloka‘i*, (Nālani Minton and Nā Maka O Ka ‘Aīna 2000).

⁵⁸ *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Moloka‘i* (Nālani Minton and Nā Maka O Ka ‘Aīna 2000).

In the traditions of Moloka‘i, we believe that earth mother Hina and sky father Wākea came together as man and wife and Hina became pregnant and gave birth to an island, her child ... In [an] ancient chant[] of Moloka‘i, it says ... Found was Hina, a wife for Wākea ... Wākea slept with Hina in the deep void ... Born was Moloka‘i an island ... In this very passage, from the beginning of creation [and] time, it teaches us ... that even from the foundation of the creation of our island, it was because of the union between a male and female, ... [and with] their offspring ... the first ‘ohana [was established] ... [I]t teaches us that the very core of our being [and] ... culture [is] based upon the family unit.⁵⁹

Kanaka anthropologist and Hawaiian Studies professor Dr. Kekuewa Kikiloi describes Papahānaumoku and Wākea as the “most prominent ancestors” of Kānaka ‘Ōiwi:

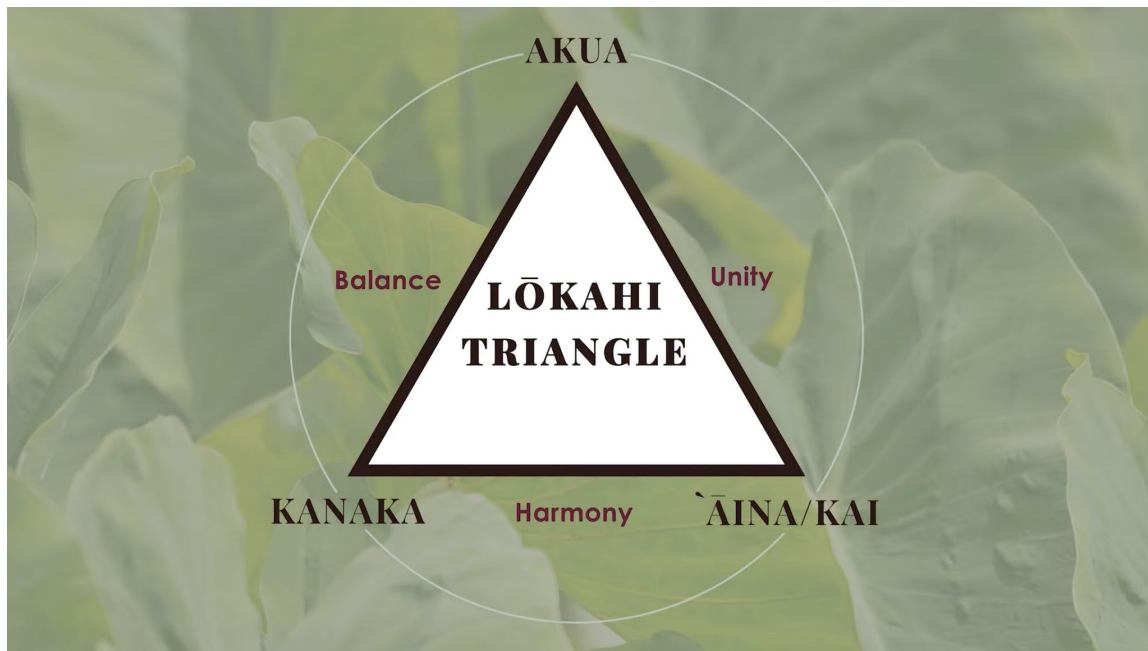
Their story takes place during a pivotal point in our native cosmology ... [which] define[s] our collective values and way of life ... The union of this couple results in not just the ‘birthing’ of the archipelago but also the ‘birthing’ of a unified Hawaiian consciousness—a common ancestral lineage that forges links between the genealogies of both land and people.⁶⁰

Kuleana (Rights, Privileges, and Responsibilities) to ‘Āina and the Ordering of Hawaiian Society Stems from ‘Ōiwi Cosmology and a Deeper Understanding of ‘Ohana as Inclusive of the Natural World

The Lōkahi Triangle below aptly captures the essence of what Dr. Kikiloi states above:

⁵⁹ *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Moloka‘i* (Nālani Minton and Nā Maka O Ka ‘Āina 2000).

⁶⁰ Kekuewa Kikiloi, *Rebirth of an archipelago: sustaining a Hawaiian cultural identity for people and homeland*, 6 Hūlili: Multidisciplinary Research on Hawaiian Well-Being 76 (2010).



Video interview of Dean Wilhelm, Ho‘okua‘āina, see website:

<https://hookuaaina.org/find-a-program/resources/hawaiian-values-based-lessons/>


Kumu John Ka‘imikaua describes lōkahi as “balance between the land, the people that lived upon the land, and the akua,” which results in “pono, the spiritual balance in all things.”⁶¹ From these relationships stem kuleana, the responsibility to advance spiritually with the akua, to engage meaningfully with our fellow kānaka, and to foster right relationship with ‘āina, the land and sea which the “kūpuna [knew to be] living beings.”⁶²

Inherent in this understanding is the ‘ōlelo no‘eau, “He Ali‘i Ka ‘Āina, He Kauwā Ke Kanaka” – the land is chief, the people are its servants.⁶³ The mo‘okū‘auhau of Kānaka ‘Ōiwi teaches that ‘ohana encompasses the natural world, that there is no separation between the people and the land. From this comes kuleana, of which the highest responsibility fell to the ali‘i, who served as intermediaries facilitating the “destructive-reproductive forces of the unseen


⁶¹ *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Moloka‘i* (Nalani Minton and Nā Maka O Ka ‘Āina 2000).

⁶² Video interview of Dean Wilhelm, Ho‘okua‘āina, see website:
<https://hookuaaina.org/find-a-program/resources/hawaiian-values-based-lessons/>

⁶³ Mary Kawena Pukui, ‘Ōlelo No‘eau: Hawaiian Proverbs & Poetical Sayings 531 (1983).



divinities of the cosmos.”⁶⁴ When ali‘i failed to follow proper religious protocols and mistreated the people, the maka‘āinana were justified in abandoning their ali‘i as poor leaders and unfit conduits of the gods’ favor.⁶⁵ The maka‘āinana were free to move and make another ‘āina momona if they were unhappy with their ali‘i. This provided an incentive for ali‘i to treat the people fairly and generously.⁶⁶ More importantly, as Danielle Espiritu, former Program Specialist with the cultural program Ho‘okua‘āina, expressed:




Embedded within [the ‘ōlelo no‘eau, he ali‘i ka ‘āina, he kauwā ke kanaka is] the idea that [the ali‘i] were not going to be oppressive to [the] people, [nor] domineering. [They] were going to steward that authority, that kuleana in a way that protected [the] people and provided for their needs. So really, that’s what it meant to be an ali‘i that was pono, an ali‘i that was good and righteous. We see this in our ‘āina. If ‘āina is honored and stewarded well, it can provide abundantly for Kānaka, and it can allow the rest of the world to thrive. When we see that second part of the ‘ōlelo no‘eau, *he kauwā ke kanaka*, that people are the servants, it is important for us to pause and ask ourselves, how is the health and well-being of our ‘āina directly tied to how well we as kānaka steward it? And so, what is our kuleana, what is our responsibility, what is our privilege as Kānaka to really steward ‘āina? What is our relationship to ‘āina? We can all ask ourselves this ... And if we notice that our relationship [with ‘āina] is not healthy, then we can think about, “Okay what can we do to improve that? What can we do to make our relationship with ‘āina healthier? [What can we do] to really care for and to really mālama ‘āina in the way that it deserves, so that ‘āina can return to being ‘āina?” Embedded in the word ‘āina is ai which means to feed and to eat. How can we care for our relationship with ‘āina so that ‘āina can be thriving and can be a land of abundance?⁶⁷

⁶⁴ Lilikalā Kame‘eleihiwa, *Native Lands & Foreign Desires: Pehea Lā e Pono Ai?*, 36 - 37 (1992).


⁶⁵ Lilikalā Kame‘eleihiwa, *Native Lands & Foreign Desires: Pehea Lā e Pono Ai?*, 39 (1992).

⁶⁶ Lilikalā Kame‘eleihiwa, *Native Lands & Foreign Desires: Pehea Lā e Pono Ai?*, 26 (1992); Marion Kelly, *Changes in Land Tenure in Hawaii, 1778-1850* (June 1956) (unpublished thesis, University of Hawai‘i at Mānoa) (on file with author).

⁶⁷ Danielle Espiritu video interview, Program Specialist with Ho‘okua‘āina. See website: <https://hookuaaina.org/he-alii-ka-aina-he-kauwa-ke-kanaka/>.



All of Hawaiian society was responsible to take on this kuleana of mālama ‘āina. The maka‘āinana, however, by cultivating the land, enjoyed the greatest intimacy with ‘āina. Mary Kawena Pukui emphasized that “the fundamental unit in the social organization [of Hawaiian society is the] ‘ohana ... tied by ancestry, birth and sentiment to a particular locality which was termed ‘āina.”⁶⁸ These practices stem from the pre-contact era when ka po‘e kahiko lived under a communal land tenure system. The maka‘āinana tended to raise generations upon generations within the same ahupua‘a, with extended ‘ohana sharing provisions from the land and sea with each other.⁶⁹



The long-standing presence of the maka‘āinana on their ‘āina hānau and their rights of occupation, access, and gathering survived as a hallmark within Hawai‘i’s laws from the Kingdom period into the present day, despite a shifting at the Māhele from a communal land system to a private property regime. This is evidenced by the fact that all the crown, government, and chiefs’ lands remained subject to the rights of native tenants, with the clause “koe nae na kuleana o na kanaka” affixed to all royal patents and land commission awards.⁷⁰ To this day, all property in Hawai‘i (both public and private) are encumbered with this reservation.⁷¹

⁶⁸ E.S. Craighill Handy & Mary Kawena Puku‘i, *THE POLYNESIAN FAMILY SYSTEM IN KA‘U, HAWAI‘I* 2 (1998).


⁶⁹ E.S. Craighill Handy & Mary Kawena Puku‘i, *THE POLYNESIAN FAMILY SYSTEM IN KA‘U, HAWAI‘I* 2 (1998).

⁷⁰ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*. 48 *Haw‘n J. Hist.* 62 (2014).

⁷¹ David M. Forman & Susan K. Serrano, *Ho‘ohana Aku, a Ho‘ola Aku: A Legal Primer for Traditional and Customary Rights in Hawai‘i* 9 (2012).

3.2 The Codification of Cultural Practices and Customs into Kingdom and Contemporary Native Hawaiian Law

In the post-contact era when the Hawaiian archipelago became united under one rule, the early monarchs began to codify these ancient understandings. The 1840 constitution of the Hawaiian Kingdom makes clear the stature of ‘āina as paramount over Kānaka ‘Ōiwi, with a trusteeship held by the mō‘ī to care for the chiefs and people through sound management of the land:




Kamehameha I, was the founder of the kingdom, and to him belonged all the land from one end of the Islands to the other, though it was not his own private property. It belonged to the chiefs and people in common, of whom Kamehameha I was the head, and had the management of the landed property.⁷²

The constitution reflected the ancient understanding that the ali‘i possessed the kuleana to govern the people wisely and to observe religious and ceremonial protocols that ensured the protection of the land and people.⁷³ The maka‘āinana farmed the land and made it productive. While the ali‘i’s tenure on the land was impermanent due to acts of conquest among them, the maka‘āinana, for the most part (especially when they were treated well), remained a permanent fixture upon the land and devoted their endeavors to making ‘āina momona (fat, abundant land).⁷⁴


⁷² *Nā Kumukānāwai O Ka Makahiki 1839 A Me Ka 1840*, 1.1 Ka Ho‘oilina: Journal of Hawaiian Language Sources, Luna Ho‘oponopono et al., eds., Jason Kāpena Achiu trans., Mar. 2002 [hereinafter L.1840], at 41, available at <http://hooilina.org/collect/journal/index/assoc/HASHO166.dir/1.pdf> (last visited Feb. 11, 2023).

⁷³ Lilikalā Kame‘eleihiwa, *Native Lands & Foreign Desires: Pehea Lā e Pono Ai?*, 36-39 (1992).

⁷⁴ KAMANAMAIKALANI BEAMER, *NO MĀKOU KA MANA: LIBERATING THE NATION*, 45 (2014); E.S. Craighill Handy & Mary Kawena Puku‘i, *THE POLYNESIAN FAMILY SYSTEM IN KA‘U, HAWAI‘I 2* (1998).



The constitution also laid the groundwork for the Māhele, the privatization and division of the lands among the king, chiefs, and maka‘āinana. The Māhele (1848) introduced a hybridized system of private property that adopted some western constructs while protecting the vested rights of maka‘āinana – rights inherent to them via Hawaiian cosmology and grounded in custom and practice through the ancient land tenure system.⁷⁵ The Māhele sought to divide the formerly undivided interests in land shared in common between the King, chiefs, and maka‘āinana. The first stages of the Māhele involved the King and 252 chiefs quit-claiming their interests between each other. The lands, now considered freehold, were converted into allodial titles. The chiefs were then awarded royal patents for konohiki lands once they paid a commutation fee.⁷⁶ The King dedicated the bulk of his landholdings to the government, while keeping the remainder as crown lands for himself and his heirs.⁷⁷



As the Kingdom was evolving towards a private property regime, it did not wholly adopt a western framework.⁷⁸

All of the Crown, government, and chiefs’ lands remained subject to the rights of native tenants. The clause “koe nae na kuleana o na kanaka” is affixed to all LCAs, Royal Patents issued to konohiki, private citizens, Crown and government lands. This clause reaffirms that all lands throughout Hawai‘i to the present-day are encumbered by “reserved rights of native

⁷⁵ KAMANAMAICALANI BEAMER, *NO MĀKOU KA MANA: LIBERATING THE NATION*, 144 (2014).

⁷⁶ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*. 48 *Haw‘n J. Hist.* 59 (2014).

⁷⁷ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*. 48 *Haw‘n J. Hist.* 58 (2014).

⁷⁸ *Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm’n (PASH)*, 79 Hawai‘i 425, 447, 903 P.2d 1246, 1268 (1995) (concluding that the “western concept of exclusivity [in private property law] is not universally applicable in Hawai‘i” and that “the issuance of [] Hawaiian land patent[s]” at the time of the Māhele conveyed “a limited property interest.”).

tenants.”⁷⁹ The courts to this present day recognize a kuleana reservation attaches to private property holdings in Hawai‘i.⁸⁰

Hoa‘āina were able to acquire small land-holdings, or kuleana, for themselves through the 1850 Kuleana Act as well as acquire government lands through purchase.⁸¹ The Kuleana Act and the kuleana reservations attached to landholdings reflect traditional and customary understandings that pre-date Statehood and even the time of Kamehameha and his monarchy. These legal provisions represent hoa‘āina relationships to their ahupua‘a and recognize their rights to access lands from mauka to makai to gather materials for their basic needs (e.g., thatch and aho cordage for making rope and building hale, firewood for imu, ti leaf for wrapping food items, lei-making, and to serve spiritual and ceremonial purposes). Today, the Kuleana Act is memorialized in state law as Hawai‘i Revised Statutes, Section 7-1.⁸²

Hawai‘i Revised Statutes, Section 1-1 is another source of law that was enacted in 1892 as part of the civil code⁸³ of the Hawaiian Kingdom and has survived into Statehood. H.R.S. § 1-1

⁷⁹ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*. 48 *Haw‘n J. Hist.* 61 (2014).

⁸⁰ David M. Forman & Susan K. Serrano, *Ho‘ohana Aku, a Ho‘ola Aku: A Legal Primer for Traditional and Customary Rights in Hawai‘i* 9 (2012).



⁸¹ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*. 48 *Haw‘n J. Hist.* 61 (2014).

⁸² HRS § 7-1 states:

Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, aho cord, thatch, or ki leaf, from the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, running water, and roads shall be free to all, on all lands granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.

Haw. Rev. Stat. § 7-1 (2022).

⁸³ L.1892, c. 57, s 5, approved on November 25, 1892 which states, “Section 5. The common law of England, as ascertained by English and American decisions, is hereby declared to be the common law of the Hawaiian Islands in all cases, except as otherwise expressly provided by the Hawaiian Constitution or laws, or fixed



instructs Hawai‘i’s courts to look to English and American common law decisions for guidance, except where they conflict with “Hawaiian judicial precedent, or ... Hawaiian [custom and] usage” pre-dating 1892.⁸⁴ The origins of this law can be traced even further back to the early period of the Hawaiian Kingdom prior to 1838, when it was acknowledged that the islands were “governed ... without other system than [Hawaiian custom and] usage, and with a few trifling exceptions, without legal enactments.”⁸⁵ Under Kamehameha III, the constitutional monarchy took shape with the establishment of an Executive Department comprised of a Privy Council and Ministers to the King. This was followed by the creation of a Judiciary in 1847 authorized to “cite and adopt ‘[t]he reasonings and analysis of the common law, and of the civil law [of other countries] ... so far as they are deemed to be founded in justice, and *not in conflict with the laws and usages of this kingdom.*”⁸⁶ (emphasis added). This law also encompasses the entire spectrum of Hawaiian traditional and customary practices beyond the specific items listed in H.R.S. § 7-1.

During the Hawaiian Renaissance period when Kānaka Maoli began to fight for native access and gathering rights, resist evictions from ancestral lands, and organize against the Navy’s bombing of Kaho‘olawe, a State constitutional convention was held. This rare opportunity prompted Kānaka and local environmentalists to strategically position themselves as delegates in these proceedings. It was at the 1978 constitutional convention that certain key amendments were adopted. With respect to native rights, the delegates adopted a new amendment, Article XII, Section 7, which reads as follows:

The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who

by Hawaiian judicial precedent, or established by Hawaiian national usage, provided however, that no person shall be subject to criminal proceedings except as provided by the Hawaiian laws.”

⁸⁴ *State v. Zimring*, 52 Haw. 472, 475 (1970) (citing *De Freitas v. Trustees of Campbell Estate*, 46 Haw. 425, 380 P.2d 762 (1963)).

⁸⁵ *Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm’n (PASH)*, 79 Haw. 425, 437, 903 P.2d 1246, 1258 (1995) (note 21, citing 1 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 3 (1845-46)).

⁸⁶ *Id.* (note 21, citing Act of September 7, 1847, ch. I, § IV; 2 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* (1847) (emphasis added)).

are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.⁸⁷

This provision solidifies and enhances H.R.S., §§ 1-1 and 7-1, by making it a constitutional mandate for the State and its political subdivisions to “protect the reasonable exercise of customar[y] and traditional[] rights of Hawaiians to the extent feasible.”⁸⁸ Over the next forty years, a body of jurisprudence developed around these statutory and constitutional provisions which addressed issues of where Hawaiian rights are protected and to what extent.

The first landmark Native Hawaiian rights case emerged in 1982 with William “Billy” Kalipi, Sr. asserting his kuleana rights.⁸⁹ The Hawai‘i Supreme Court strictly interpreted H.R.S., § 7-1 in *Kalipi v. Hawaiian Trust Co.* (“*Kalipi*”) as protective only of access and gathering rights of native tenants actually residing within the ahupua‘a and that these practices may occur only on undeveloped lands.⁹⁰ However, as more cases have been litigated since *Kalipi*, the Hawai‘i Supreme Court has revisited the notion of whether traditional and customary practices are viable only on undeveloped lands. The court’s decision in *Public Access Shoreline Hawaii v. Hawai‘i County Planning Commission* (“*PASH*”) acknowledged that these traditions exercised on “less than fully developed” lands may also warrant protection.⁹¹

In *Pele Defense Fund v. Paty* (“*Pele I*”), the Hawai‘i Supreme Court expanded its ruling in *Kalipi* and acknowledged that gathering rights may extend to other ahupua‘a without benefit of tenancy if it can be demonstrated that this was the accepted custom and long-standing practice.⁹² The court gave great weight to kama‘āina evidence and acknowledged that

⁸⁷ HAW. CONST. art. XII, § 7 (1978).

⁸⁸ *Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm’n (PASH)*, 79 Hawai‘i 425, 437, 903 P.2d 1246, 1258, note 43 (1995).

⁸⁹ *Kalipi v. Hawaiian Trust Co.*, 66 Haw. 1, 656 P.2d 745 (1982).


⁹⁰ *FORMAN & SUSAN K. SERRANO, HO‘OHANA AKU, A HO‘OLA AKU* at 9 (citing *Kalipi*, 66 Haw. at 9, 656 P.2d at 750).

⁹¹ *See PASH*, 79 Hawai‘i at 451, *supra* note 76.

⁹² *Pele Def. Fund v. Paty (Pele I)*, 73 Haw. 578, 620, 837 P.2d 1247, 1272 (1992). *See FORMAN & SUSAN K. SERRANO, HO‘OHANA AKU, A HO‘OLA AKU, supra* note 78, at 13 (citing *Pele I*, 73 Haw. at 620, 837 P.2d at 1272). In *Pele I*, the plaintiffs, the Pele Defense Fund (“PDF”) challenged the state’s decision to exchange specific ceded lands for privately owned land on Hawai‘i Island. PDF claimed that after the land swap, its Native Hawaiian

“traditional and customary rights associated with tenancy in an ahupua‘a [may] extend[] beyond the boundaries of the ahupua‘a.”⁹³

These cases tend to reflect the practices of *hoa‘āina* in the terrestrial realms, particularly the *wao nahele* (upper rainforests with permanent cloud cover), the *wao lā‘au* (lower forests of characterized by traditional hardwoods utilized for building materials and permanent fruiting trees where human interactions and gathering practices were more pronounced), and the *wao kanaka* (where human settlements existed and the land was actively farmed). The *wao kanaka* also extended into the sea to include estuarine environments where *loko i‘a* (fishponds) were constructed and where the nearshore reefs existed.



3.2.1 Ahupua‘a Fisheries: Hoa‘āina and Konohiki Conservation Practices and the Ancient Kapu System; Codification of Customary Fishery Laws During the Kingdom Period; and Remnants of this System Today

Anciently, *hoa‘āina* rights were recognized also as to fishing and gathering in the nearshore waters of the ahupua‘a. Prior to Kamehameha I’s unification of the islands under one rule, the islands were governed separately by several *mō‘ī* (supreme chiefs), lesser chiefs at the *moku* (regional) level called *ali‘i ‘ai moku*, and at the ahupua‘a level the *ali‘i ‘ai ahupua‘a*.⁹⁴ Konohiki, those who possessed special expertise in natural resource management, were designated by the *ali‘i ‘ai ahupua‘a* to oversee agricultural activities; to fairly allocate water

members seeking to exercise traditional subsistence, cultural, and religious practices were denied access to the undeveloped and now privately owned land. PDF provided testimony and affidavits attesting to the actual practices of Native Hawaiians living in in the Puna region as traditionally gathering outside of their ahupua‘a of residence onto the lands subject in this litigation. This evidence formed the basis for the court’s decision to affirm these practices as rights protected by law.

⁹³ FORMAN & SUSAN K. SERRANO, HO‘OHANA AKU, A HO‘OLA AKU, *supra* note 78, at 13-14 (citing *Pele I*, 73 Haw. at 620-21, 837 P.2d at 1272; citing also *Pele Def. Fund v. Estate of James Campbell*, Civ. No. 89-089, 2002 WL 34205861 (Haw. 3d Cir. Aug. 26, 2002)).

⁹⁴ E.S. CRAIGHILL HANDY & MARY KAWENA PUKUI, *THE POLYNESIAN FAMILY SYSTEM IN KA‘U, HAWAI‘I* 5 (1998).

among the maka‘āinana (common people of the land); to monitor fishery health; and enforce kapu. The kapu were strictures and regulations governing human behavior in a manner that preserved resource abundance and allowed for continued renewal.⁹⁵

Traditional resource management by konohiki was place-based at the ahupua‘a level. Today, ahupua‘a are generally described as “wedge”⁹⁶ or “pie” shaped divisions of land “radiat[ing] from the interior uplands, claim[ing] a deep valley, and extend[ing] seaward past the shoreline.”⁹⁷ The State describes ahupua‘a as the “Hawaiian equivalent of a watershed . . . a land division with the streams and valleys serving as boundaries . . . includ[ing] the land from the mountains to the coast.”⁹⁸ They are also typically described as self-sustaining units of land running “from the mountain to the sea” and providing for the chief and his people “a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land. . . [B]oth inland and shore fishponds were considered to be part of the ahupua‘a and within its boundaries.”⁹⁹

In reality, ahupua‘a divisions are quite varied throughout the Hawaiian archipelago. Not all ahupua‘a are watersheds, nor possess a mauka-a-makai (mountain to sea) connection, nor sustained all the needs of the people.¹⁰⁰ The diverse configurations of ahupua‘a and the various

⁹⁵ CARLOS ANDRADE, HĀ‘ENA THROUGH THE EYES OF THE ANCESTORS, 30, 74 (2008).


⁹⁶ E.S. CRAIGHILL HANDY & ELIZABETH GREEN HANDY WITH THE COLLABORATION OF MARY KAWENA PUKUI, NATIVE PLANTERS IN OLD HAWAII: THEIR LIFE, LORE, AND ENVIRONMENT 48 (rev. ed. 1991) [hereinafter HANDY, HANDY & PUKUI].

⁹⁷ Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua‘a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai‘i*, 48 HAW‘N. J. HIST. 69 (2014) (citing Marion Kelly, *Changes in Land Tenure in Hawaii, 1778-1850* (Jun. 1956) (unpub. M.A. thesis, U. Hawai‘i)).


⁹⁸ HAWAI‘I ASSOCIATION OF WATERSHED PARTNERSHIPS, <http://hawp.org/what-is-a-watershed> (last visited Aug 29, 2023).

⁹⁹ *Application of Kamakana*, 58 Haw. 632, 638-39, 574 P.2d 1346, 1350 (1978). (citing *In re the Boundaries of Pulehunui*, 4 Haw. 239, 241 (1879) and *Harris v. Carter*, 6 Haw. 195, 197 (1877)).

¹⁰⁰ See generally Gonschor & Beamer, *supra* note 85 (providing empirical evidence that only 5.4% of Hawai‘i’s nearly 2,000 ahupua‘a qualify as true watersheds. Few ahupua‘a boundaries actually follow watershed boundaries; rather the boundaries may run along ridgelines or transect watersheds. Some ahupua‘a were landlocked



types of ‘ili (or smaller land strips within ahupua‘a) and ‘ili lele (disconnected strips of land that, when consolidated, met the functional and daily requirements for access to multiple resources) suggests a more complex, place-specific ahupua‘a-by-ahupua‘a management framework. Recent scholars have introduced more accurate working definitions of ahupua‘a to mean “culturally appropriate, ecologically aligned, and place specific unit[s] [of land] with access to diverse resources,”¹⁰¹ or “a community-level land-division component that has been implemented in various ways, as part of a larger social-ecological system, with the aim of maximizing resource availability and abundance.”¹⁰²



For ahupua‘a with coastal connections, Professor of Hawaiian Studies, Dr. Carlos Andrade describes ahupua‘a fisheries as having been well “cared for as if they were extensions of [] gardens” tended just as carefully and intentionally as the “gardens filling coastal plains, stream-lined valleys, and forest clearings in the uplands.”¹⁰³ An illustration of Dr. Andrade’s words, can be found in the practice of limu gathering that ensured the continual regrowth of seaweed beds. These practices include plucking limu above the holdfast rather than ripping the limu at the base and/or taking home limu rock and all. Such practices were kapu as there would be no replenishment of stock for future generations to gather from. Other conservation practices include cleaning limu first in the ocean and rubbing the limu against one’s hands or legs like a scrubber or sponge. This stimulates spores to release and take hold on new substrate and helps to expand limu growing areas.

Oral history interviews of kama‘āina, long-time native residents of Mana‘e, East Moloka‘i validate Dr. Andrade’s words. One kama‘āina attested to certain reef patches in the ahupua‘a of ‘Aha‘ino that are named after women on old Māhele maps from the 1800s.¹⁰⁴

and did not have the capability alone to provide for all the daily needs of the people. Other ahupua‘a span mid-mountain to sea rather than begin from the mountain peak; include coastal resources only; span both leeward and windward coasts and mountain ranges; or are split into ‘ili lele.)

¹⁰¹ *Id.* at 71.

¹⁰² Dr. Kawika Winter, *Applying Traditional Resource Mgmt. Philosophies to Contemporary Conservation Efforts on Kaua‘i*, Presentation to the Native Hawaiian Rights Clinic, Univ. of Haw. William S. Richardson Sch. of Law (Nov. 9, 2015).

¹⁰³ CARLOS ANDRADE, *supra* note 83 at 30.

¹⁰⁴ Malia Akutagawa, Shaelene Kamaka‘ala, Harnonee Williams, & the Native Hawaiian Rights Clinic, *Traditional & Customary Practices Report for Mana‘e, Moloka‘i* 55-56 (2016).

The named reef patches were cultivated as gardens by these ancient women.¹⁰⁵ Another kama‘āina described the construction by his grandmother of upright configurations made of stacked stone that served as “manini hale” or houses for the manini fish (*Acanthurus triostegus*, convict tang). The fish were harvested by hand by lifting up the top stone during low tide when the manini hale were left only partially submerged under water.¹⁰⁶

Evidence of possible deliberate coral plantings by ancient kūpuna as a customary practice can be found in the ahupua‘a of ‘Aha‘ino on the island of Moloka‘i. Coral reef scientist Dr. Jim Maragos explained his observations to a kama‘āina from ‘Aha‘ino that a fishpond there possessed coral lanes extending out from the mākāhā (sluice gate) where fish congregate and access.¹⁰⁷ Evidence of “pruning” coral to attract more fish and other marine species that utilize increase niche areas on the reef is practiced in Kahalu‘u Bay on Hawai‘i Island.¹⁰⁸

Uncle Mac Poepoe is aware of all the locations of onshore ko‘a (fishing shrines) and the corresponding ko‘a (special, abundant fishing grounds) in the ocean along Moloka‘i’s northwest coast.¹⁰⁹ He monitors these areas to determine health and abundance of the marine resources.

Some ko‘a along the coastline of other islands are fed palu (chum). For example, native communities who fish ‘ōpelu (*Decaperus spp.*, Mackerel Scad) hānai or mālama ko‘a for ‘ōpelu and prepare palu consisting of vegetable-based. The people of Miloli‘i, Hawai‘i have maintained their traditions of feeding their ‘ōpelu ko‘a.¹¹⁰ They prepare the palu into a porridge-like substance and place it in a handkerchief for hand-feeding the fish.¹¹¹ The fish are trained to feed on the palu, become tame, and congregate in large numbers at the ko‘a over time.¹¹² After

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 83.


¹⁰⁸ *Id.* (citing Interview with Dr. Kaipo Perez, Recreation Specialist I, City & Cty. of Honolulu, in Honolulu, Haw. (Jul. 1, 2015).

¹⁰⁹ Interview with Mac Poepoe, Konohiki, Hui Mālama O Mo‘omomi, in Honolulu, Haw. (Sep. 25, 2015).

¹¹⁰ Dr. Mehana Blaich Vaughan, lecture in HWST 458/NREM 491 Natural Resource Issues & Ethics in Hawai‘i, Kamakakūokalani Ctr. for Hawaiian Studies, Univ. of Haw. (Feb. 5, 2015).


¹¹¹ *Id.*

¹¹² *Id.*



consistent feedings the ko‘a is open for sustainable harvesting. When harvesting season begins, families who cared for the ko‘a have first priority to the catch.¹¹³

Titcomb described the common practices that lawai‘a (fishers) observed in feeding ko‘a and harvesting responsibly:



Fishing grounds were never depleted, for the fishermen knew that should all the fish be taken from a special feeding spot (*ko‘a*) other fish would not move in to replenish the area. When such a spot was discovered it was as good luck as finding a mine, and fish were fed sweet potatoes and pumpkins (after their introduction) and other vegetables so that the fish would remain and increase. When the fish became accustomed to the good spot, frequented it constantly, and had waxed fat, then the supply was drawn upon carefully. Not only draining it completely was avoided, but also taking so many that the rest of the fish would be alarmed. At the base of this action to conserve was the belief the gods would have been displeased by greediness or waste.¹¹⁴

These kinds of practices that persist today reflect *hoā‘āina* values of *mālama*. They also reflect the ancient *kapu* system that served as a set of conservation measures placed by *konohiki*. There were *kapu* for terrestrial, aquatic, and marine resources. For example, water use was regulated through a complex set of *kānāwai* (laws). This entailed the fair allocation of water and honoring time slots among *mahia‘i* (farmers) for opening and closing ‘auwai (irrigation ditches) leading from the main stream to a vast network of *lo‘i kalo* (taro patches). *Konohiki* or *lunawai* (water managers) enforced the *kānāwai* and exacted capital punishment on those who disobeyed the law.¹¹⁵


Similarly, *kapu* were also integrated into fisheries management and conservation. *Konohiki* oversaw the fishing activities within each *ahupua‘a*. They ordered the people to alternate fishing areas to avoid depletion and allow for replenishment. They also issued species-specific *kapu* to correspond with fish spawning periods.¹¹⁶

¹¹³ *Id.*


¹¹⁴ MARGARET TITCOMB, *NATIVE USE OF FISH IN HAWAII* 12-13 (2d. ed. 1972).

¹¹⁵ HANDY, HANDY, & PUKU‘I, *supra* note 86 at 57-59.

¹¹⁶ TITCOMB, *supra* note 102, at 13.



According to respected Hawaiian historian, Mary Kawena Pukui, the kapu system in the Kā‘ū district of Hawai‘i Island was practiced in the following manner:



When inshore fishing was tabu (kapu), deep sea fishing (lawai‘a-o-kai-uli) was permitted, and vice versa. Summer was the time when the fish were most abundant and therefore the permitted time for inshore fishing. Salt was gathered at this time, also, and large quantities of fish were dried ... In winter, deep sea fishing was permitted. A tabu for the inshore fishing covered also all the growths in that area, the seaweeds, shellfish, as well as the fish. When the kahuna had examined the inshore area, and noted the condition of the animal and plant growths, and decided that they were ready for use, that is, that the new growth had had a chance to mature and become established, he so reported to the chief of the area, and the chief ended the tabu. For several days it remained the right of the chief to have all the sea foods that were gathered, according to his orders, reserved for his use, and that of his household and retinue. After this, a lesser number of days were the privilege of the konohiki (overseers of lands under the ali‘i). Following this period the area was declared open (noa) to the use of all.¹¹⁷


At the end of a fishing expedition, the lawai‘a would make an offering of the first catch before the altar of Kū‘ula; prized catch were set aside for the ali‘i and his household; then apportionment to the kahuna and konohiki; and finally among the fishermen and those who were in need.¹¹⁸ As Titcomb describes,

Division was made according to need, rather than as reward or payment for share in the work of fishing. Thus all were cared for. Anyone assisting in any way had a right to a share. Anyone who came up to the pile of fish and took some, if it were only a child, was not deprived of what he took, even if he had no right to it. It was thought displeasing to the gods to demand the return of fish taken without the right.¹¹⁹


¹¹⁷ *Id.* at 14.

¹¹⁸ *Id.* at 8.

¹¹⁹ *Id.*



Ali‘i (chiefs) were not immune from societal expectations related to sharing. While technically speaking the catch belonged to the ali‘i when fishing was done by or for him, the ali‘i was obligated to share generously with the people.¹²⁰ A well known legend of Chief Ha-la-e-a of Ka‘ū, Hawai‘i portended the likely fate of ali‘i who are motivated by greed. Chief Ha-la-e-a’s habit of keeping all the fish for himself was his undoing. One day at sea, the lawai‘a inundated the chief’s canoe with all of the day’s catch, and left him to sink and perish in his own avarice.¹²¹



Dr. Lilikalā Kame‘eleihiwa, a professor of Hawaiian Studies at the University of Hawai‘i at Mānoa, explains the source of reciprocity and interdependence between ali‘i and maka‘āinana is embedded within the obligation to mālama ‘āina. Ali‘i were charged with providing the leadership and organization to make the land bountiful and, in turn, capable of sustaining a growing population. The maka‘āinana (common people) through their labor fed and clothed the ali‘i. If a commoner failed in his kuleana to mālama the portion of ‘āina allotted to him, he was dismissed. A konohiki (resource manager) was also discharged of his duties if he failed to properly direct the people in their labor. If the land suffered and the people starved, it was perceived as the fault of the ali‘i for displeasing the gods and not following religious protocols. Negligence in mālama ‘āina (land stewardship) signaled also a breakdown in the relationship between ali‘i and maka‘āinana.¹²²


Similarly, a system of rights to one’s fishery and responsibility to mālama and manage the resources enhanced fish stocks and sustained Hawai‘i’s traditionally large pre-contact population of nearly one million.¹²³ At the end of the 19th century when the Hawaiian Kingdom

¹²⁰ HAWAIIAN FISHING LEGENDS xviii (Dennis Kawaharada, ed., 1992).

¹²¹ *Id.* at xviii-xix.


¹²² LILIKALĀ KAME‘ELEIHIWA, NATIVE LAND AND FOREIGN DESIRES: PEHEA LĀ E PONO AI? 30-31 (1992).

¹²³ I KEPĀ MALY & ONAONA MALY, KA HANA LAWAI‘A A ME NĀ KO‘A O NĀ KAI ‘ĒWALU: SUMMARY OF DETAILED FINDINGS FROM RESEARCH ON THE HISTORY OF FISHING PRACTICES AND MARINE FISHERS OF THE HAWAIIAN ISLANDS iii (2003) [hereinafter I MALY & MALY, KA HANA LAWAI‘A] (“It is staggering today, to contemplate that in ancient times, nearly every member of the Hawaiian population regularly participated in some form of fishing — and population figures in the islands, range from some 400,000 to 1,000,000 people in 1778. Native lore and early historical accounts tell us that though those traditional generations, the fisheries were resilient and healthy. This being a reflection on the relationship between people and nature, and the management system that evolved through ancient times. Today, only a very small percentage of the population of the Hawaiian Islands fishes,



was illegally overthrown and annexed to the United States, Hawai‘i’s konohiki fisheries were dismantled and thrown into the commons to better align with an imperialistic and capitalistic agenda. With the same population numbers today, Hawai‘i’s fisheries are imperiled as a tragedy of the commons.

During the Kingdom period, *hoa‘āina* rights extended into the nearshore *ahupua‘a* fisheries and were managed by the konohiki (landlords) who possessed *ahupua‘a* through royal patents. This understanding was codified in the Constitution and Laws of June 7, 1839 and reaffirmed in 1840.¹²⁴ Specifically, the law divided fishery rights among three classes of people: the king, the konohiki, and the *hoa‘āina*.¹²⁵ It acknowledged the resource rights and practices within traditional *ahupua‘a* fisheries that give priority to *hoa‘āina* as *ahupua‘a* tenants and, akin to ancient practice, conveyed special privileges to chiefs/konohiki as “landlords” in managing the resources.



The Hawaiian nation standardized ancient practices by preserving *ahupua‘a* fisheries (from the shoreline to the coral reef) to the exclusive use of the landlord and *ahupua‘a* tenants. The landlord had the right to *kapu* for himself a specific species of fish and was entitled to one-third of the tenants’ catch. The waters beyond the reefs and the open ocean was granted to all the people.¹²⁶ These were the *kilohe‘e* grounds (described as the waters shallow enough to wade or see the bottom by canoe with the aide of *kukui* oil to harvest *he‘e* or octopus), the *luhe‘e* grounds (the deeper waters where octopus was caught by line and with a cowrie lure), the *mālolo* grounds (characterized by rough currents and choppy seas where the *mālolo* or flying fish frequent), and beyond into deeper waters.¹²⁷

yet, as the methods of fishing and management systems have evolved away from the traditional system, the fisheries themselves have diminished at alarming rates.”).

¹²⁴ *Id.* at 243-244.

¹²⁵ *Id.* at 244 (citing Act Regulating Taxes (June 7, 1839) (amended Nov. 9, 1840), ch. III, § 8(1)).

¹²⁶ *Id.*

¹²⁷ TITCOMB, *supra* note 102 at 15 (describing the meanings of the different fishing grounds named in the fishing law.).

Several iterations of the law appeared in subsequent years, but these changes were minor and essentially preserved the fishing rights as described above.¹²⁸ Through 1897, the law governing konohiki fisheries generally encompassed the following:


- 1) Private konohiki fisheries spanned the ahupua‘a shoreline at low tide to the reef’s outer edge. In areas where there were no reef, the konohiki fishery extended from the beach at low water mark to one geographical mile seaward.
- 2) The konohiki and hoa‘āina within the ahupua‘a had exclusive and joint rights to the private fishery.
- 3) The konohiki had the authority to regulate the fishery in the following ways:
 - a) Placing a kapu on one species of fish for his/her exclusive use
 - b) Receiving from all tenants one-third of their catch within the fishery
 - c) Placing temporary fishing prohibitions during certain periods of the year¹²⁹

Classified as private property, the konohiki fisheries could be leased or the fee transferred by purchase or through inheritance. Piscatory (fishing) rights, however, were reserved for native tenants, by law and per ancient custom. The Māhele and the dilution of the traditional land tenure system in Hawai‘i through the introduction of private property concepts led to an erosion in the understanding of konohiki as a person skilled in managing natural resources; who placed kapu on certain species and fishing areas to allow for reproduction and renewal; and who was responsible not only for the sustenance of the hoa‘āina (common people living within the ahupua‘a or ‘ili), but for distributing portions of the catch to the ali‘i and their households. Over time the skill and the kuleana to mālama ahupua‘a fisheries were subsumed by notions of konohiki as mere “landlords” and the common people as “tenants.”¹³⁰


¹²⁸ Alan T. Murakami & Wayne Chung Tanaka, *Chapter 10: Konohiki Fishing Rights*, 618, n. 34 in *NATIVE HAWAIIAN LAW: A TREATISE* (Melody Kapilialoha MacKenzie, Susan K. Serrano, D. Kapua‘ala Sproat, Ashley Kaiā Obrey, & Avis Kuuipoleialoha Poai, eds., 2015) (noting minor changes to the fishing laws that reflected “transient shoal fish reserved for the king and also the fish reserved by each konohiki, and the areas in which the restrictions applied” but that there were no substantive changes in terms of fishing rights.).

¹²⁹ *Id.*

¹³⁰ *Territory of Hawaii v. Bishop Trust Co., Ltd.*, 41 Haw. 358, 361-62 (1956) (describing that konohiki were traditionally considered agents of the chief responsible for ili, land subdivisions within an ahupua‘a, but later written laws referenced konohiki as chiefs or landlords. Hoa‘āina who traditionally labored on the land to provide for their families and for the chiefs were later referenced under the law as tenants of an ahupua‘a.).



All cases interpreting the konohiki fisheries laws placed greater emphasis on western constructs that characterize konohiki as property owners rather than those selected for their ‘ike (knowledge, expertise) and an ethic for conservation. Similarly *hoa‘āina* were perceived as mere tenants with piscatory rights, regardless of whether they fulfilled *kuleana* (responsibility) to *mālama* (care for) the resources.



In *Haalelea v. Montgomery* (1858),¹³¹ the plaintiff Ha‘alelea received from his deceased wife Kekau‘ōnohi ownership of Honouliuli ahupua‘a, and claimed the right of konohiki over the ahupua‘a fishery. Defendant Montgomery received a deed conveying Pu‘uloa in fee. Pu‘uloa is a portion of land within Honouliuli ahupua‘a. Montgomery claimed that the deed to Pu‘uloa gave him the right to deny *hoa‘āina* access to fish there. The court held in favor of Ha‘alelea and recognized his status as konohiki as well as the right of *hoa‘āina* to fish within the entire ahupua‘a, including Pu‘uloa. This right of the *hoa‘āina* to access and utilize the fishery was enforceable against the konohiki. The court found Montgomery to be an ahupua‘a tenant of Honouliuli with a piscatory right as well, but not the authority of konohiki to subject other tenants to any kapu or tax for use of the fishery. That authority rested in Ha‘alelea alone as the konohiki.

In *Hatton v. Piopio* (1882),¹³² the parties disputed over rights to the same ahupua‘a fishery as in *Haalelea*. Plaintiff Hatton leased the konohiki fishing rights to Honouliuli ahupua‘a. Defendant Piopio, who resided on his employer Dowsett’s land in Pu‘uloa within the ahupua‘a of Honouliuli, went fishing within the waters off of Pu‘uloa. Hatton brought suit for trespass against Piopio, claiming the defendant was not a tenant and therefore did not have a piscatory right to fish in the ahupua‘a. The Court confirmed the findings and holding in *Haalelea*, and further held that the defendant Piopio was a lawful tenant with fishing rights in the ahupua‘a:

¹³¹ *Haalelea v. Montgomery*, 2 Haw. 62 (1897).

¹³² *Hatton v. Piopio*, 6 Haw. 334 (1882).

Every resident on the land, whether he be an old hoaina, a holder of a Kuleana title, or a resident by leasehold or any other lawful tenure has a right to fish in the sea appurtenant to the land as an incident of his tenancy.¹³³

Another challenge Hatton had brought was to Piopio's commercial sale of fish from the ahupua'a fishery. The court found that despite the Section 1477 of the Civil Code (1859) which qualified identified specific rights of hoai'aina to gather "firewood, house timber, aho cord, thatch and ki leaf from the land from which they live for their own private use, but they shall not have a right to take such article to sell for profit[.]" the law did not explicitly prohibit the sale of fish taken from the ahupua'a fishery.¹³⁴

Rather than look to Hawaiian custom as a guide, the court dismissed customary practice as belonging to "primitive days" when "there was no trade or commerce and no currency."¹³⁵ The court found it repugnant for Hatton to "appropriate the fruit of another man's skill and labor" and asserted that "fishing in the open sea off our coasts does not tend materially to lessen the supply unless extraordinary means are used and the fish taken in spawning season."¹³⁶

While the court in *Hatton* continued to recognize the customary right of tenants to fish within their ahupua'a, its underlying rationale to neglect Hawaiian traditional subsistence and sharing customs in favor of European and American notions of commerce foreshadowed the entire dismantling of the Konohiki Fisheries that would take place less than two decades after the *Hatton* opinion.

In 1893, the Kingdom of Hawai'i was illegally overthrown by a group of missionary businessmen backed by the U.S. Navy.¹³⁷ Five years later, via Joint Resolution the U.S. Congress

¹³³ *Id.* at 336.

¹³⁴ *Id.* at 336-37. Section 1477 of the Civil Code of 1859 was adopted by the State of Hawai'i as Hawai'i Revised Statutes, section 7-1. HAW. REV. STAT. § 7-1 (2013).

¹³⁵ *Id.* at 337.

¹³⁶ *Id.*

¹³⁷ Joint Resolution to Acknowledge the 100th Anniversary of the January 17, 1893 Overthrow of the Kingdom of Hawai'i and to Offer an Apology to Native Hawaiians on behalf of the United States for the Overthrow of the Kingdom of Hawai'i, S.J. Res. 19, Pub. L. No. 103-150, 107 Stat. 1510 (1993).

annexed Hawai‘i as a U.S. Territory¹³⁸ and in 1900 passed the Organic Act.¹³⁹ which, among other substantive changes in governance, de-privatized the konohiki fisheries to make them available as a commons for all. With the exception of “fish pond[s] [and] artificial inclosures” [sic], Section 95 of the Organic Act repealed konohiki “exclusive fishing rights” and made these private fisheries “free to all citizens of the United States subject, however to vested rights.”¹⁴⁰ Section 96 of the Act clarified that these rights were “vested” only if the owner of the konohiki fishery successfully petitioned the circuit court within a two-year period.¹⁴¹ Even if vested, the

“Whereas, from 1826 until 1893, the United States recognized the independence of the Kingdom of Hawai‘i, extended full and complete diplomatic recognition to the Hawaiian Government, and entered into treaties and conventions with the Hawaiian monarchs to govern commerce and navigation in 1826, 1842, 1849, 1875, and 1887; . . .

Whereas, in pursuance of the conspiracy to overthrow the Government of Hawai‘i, the United States Minister and the naval representatives of the United States caused armed naval forces of the United States to invade the sovereign Hawaiian nation on January 16, 1893 . . .

Whereas the Congress, through the Newlands Resolution ratified the cession, annexed Hawai‘i as part of the United States, and vested title to the lands in Hawai‘i in the United States; . . .

Whereas the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States . . .”

¹³⁸ Joint Resolution to Provide for Annexing the Hawaiian Islands to the United States, J. Res. 55, 55th Cong., 30 Stat. 750 (1898).

¹³⁹ Hawai‘i Organic Act, ch. 339, 31 Stat. 141 (1900) [hereinafter Organic Act].

¹⁴⁰ Organic Act, *supra* note 115. Section 95 of the Organic Act reads in full:

§ 95. Repeal of laws conferring exclusive fishing rights. That all laws of the Republic of Hawaii which confer exclusive fishing rights upon any person or persons are hereby repealed, and all fisheries in the sea waters of the Territory of Hawaii not included in any fish pond or artificial inclosure shall be free to all citizens of the United States, subject, however, to vested rights; but no such vested rights shall be valid after three years from the taking effect of this Act unless established hereinafter provided.

¹⁴¹ Organic Act, *supra* note 127. Section 96 of the Organic Act reads in full:

§ 96. Proceedings for opening fisheries to citizens. That any person who claims a private right to any such fishery shall, within two years after the taking effect of this Act, file his petition in a circuit court of the Territory of Hawaii, setting forth his claim to such fishing right, service of which petition shall be made upon the attorney-general, who shall conduct the case for the Territory, and such case shall be conducted as an ordinary action at law. That if such fishing right be established the attorney-general of the Territory of Hawaii may proceed, in such manner as may be provided by law for the condemnation of property for public use, to condemn such private right of fishing to the use of the citizens of the United States upon making just compensation, which compensation, when lawfully ascertained, shall be paid out of any money in the treasury of the Territory of Hawaii not otherwise appropriated.

Territory of Hawai‘i could exercise the option to condemn a konohiki fishery in favor of public use, provided it justly compensate the owner.¹⁴²

Shortly after the passage of the Organic Act, a 1904 adjudication, *In re Fukunaga*, signified definitively the Territorial Supreme Court’s opinion that Congress intended to “destroy, so far as it is in its power to do so, all private rights of fishery and to throw open the fisheries to the people.”¹⁴³

The exact number of konohiki fisheries affected by this law was not documented.¹⁴⁴ Ahupua‘a fisheries were known from memory by hoa‘āina and konohiki resource stewards and their locations were not always mapped or specified in writing.¹⁴⁵ Latter calculations based on the number of coastal ahupua‘a and ‘ili, and inland ‘ili possessing fishery rights estimate that there were originally between 1,200 – 1,500 konohiki fisheries.¹⁴⁶ Of those fisheries, between 360-720 were classified private in 1900.¹⁴⁷ By 1953, approximately 300-400 konohiki fisheries were registered, 248 were unregistered (and subsequently lost), and 37 were condemned for government use.¹⁴⁸

The provisions in the Organic Act respecting konohiki fisheries brought about a lot of confusion and conflicting decisions between the Supreme Court of the Territory of Hawai‘i, the federal district court, and the U.S. Supreme Court. Several questions arose from varied cases:

- Did the konohiki and hoa‘āina have vested rights in their respective ahupua‘a fishery? And if so, how did the Organic Act affect these vested rights?
- If a person is deprived of ownership of a private konohiki fishery for failure to petition the circuit court within the two-year window required under Section 96 of the Organic

¹⁴² *Id.*

¹⁴³ *In re Fukunaga*, 16 Haw. 306, 308 (1904).

¹⁴⁴ Murakami & Tanaka, *supra* note 104, at 621, n. 78 (citing NORMAN MELLER, INDIGENOUS OCEAN RIGHTS IN HAWAII: SEA GRANT MARINE POLICY AND LAW REPORT 9-10 (1985) [hereinafter MELLER])

¹⁴⁵ *Id.* at 621.

¹⁴⁶ *Id.*, n. 79 (citing MELLER at 10).

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 622, n. 81 (referencing table titled “KONOHIKI FISHERIES ACQUIRED, 1900-1953” in RICHARD H. KOSAKI, HAW. LEGIS. REFERENCE BUREAU, REP. NO. 1, KONOHIKI FISHING RIGHTS 13-14 (1954).

Act, is that a violation of constitutional due process and a taking of property without just compensation?

The cases that followed the Organic Act brought more confusion than clarity about the nature of vested rights in the konohiki fisheries; especially with respect to the rulings coming out of the Territory of Hawai‘i versus opinions issued out of the U.S. Supreme Court. While U.S. Supreme Court decisions are supposed to be controlling law, oddly enough when Hawai‘i was admitted officially as the fiftieth State of America, the State elected to adopt the Territory Supreme Court opinions on vested rights in the konohiki fisheries. The following summarizes the seminal cases on konohiki fisheries post overthrow and pre-statehood.

The Supreme Court of the Territory of Hawai‘i considered in *Smith v. La‘amea* (1927) the defendant La‘amea’s claim of adverse possession of an ‘ili parcel of Maunalua on the island of O‘ahu and a common right of piscary.¹⁴⁹ The court found that the defendant did not satisfy the criteria for adverse possession and that his occupancy was permissive as evidenced by an annual payment of one dollar to the konohiki for a right to fish there. However, the Court in its opinion mentioned that one who successfully acquires a portion of an ahupua‘a through adverse possession becomes “an occupant or tenant and [is] entitled to the common right of piscary ...”¹⁵⁰ The court reaffirmed the foundational case, *Haalelea v. Montgomery* (1858) issued during the Kingdom of Hawai‘i period which stated:

We understand the word tenant, as used in this connection, to have lost its ancient restricted meaning, and to be almost synonymous at the present time with the word occupant, or occupier, and that every person occupying lawfully any part of an ahupua‘a is a tenant within the meaning of the law. Those persons who formerly lived as tenants under the konohikis but who have acquired fee simple title to their kuleanas, under the operation of the Land Commission, continue to enjoy the same rights of piscary that they had as hoainas under the old system.”¹⁵¹

In this manner, the Court recognized that hoā‘āina vested rights originated as ancient, unwritten customary laws which were then codified under statute. The fact that this ruling took place two decades after the passage of the Organic Act is significant in that the court still acknowledged ancient custom.

¹⁴⁹ *Smith v. Laamea*, 29 Haw. 750 (1927).

¹⁵⁰ *Id.* at 756.

¹⁵¹ *Id.* at 755.

Three years later, the Territory of Hawaii Supreme Court made an about-face in *Damon v. Tsutsui* (1930). The Court upended *hoa‘āina* fishing rights when it ruled that those who became *ahupua‘a* tenants post-1900 “did not have any ‘vested’ rights within the meaning of the Organic Act and therefore the repealing clause [in section 95] was operative as against them.”¹⁵² The Court likened vested rights statutorily created under Kingdom law to a contractual transaction whereby an “offer” to convey piscatory rights was made, but no longer available for acceptance given the changes wrought by the passage of the Organic Act.¹⁵³

The consolidated cases of *Carter v. Territory* and *Damon v. Territory* (1902) were brought by two individual plaintiffs claiming vested *konohiki* fishing rights from “time immemorial . . . ancient custom and prescription” and via Royal Patent grants conveying fee simple title to nearshore fisheries of *Waialae-iki* and *Moanalua*, respectively.¹⁵⁴

These type of land grants issued at the time of the *Māhele* often were identified in name only, but their *palena* (boundaries denoted by special features on the land) were well known by the *kama‘āina* (old-timers) who held extensive place-based knowledge of the uses and borders of their *ahupua‘a*.¹⁵⁵ A Boundary Commission was established in 1862 to resolve *ahupua‘a* and *‘ili* boundaries which were typically granted in name only. These boundaries were certified through documenting *kama‘āina* attestations.¹⁵⁶ As one of the early Hawaiian Kingdom Supreme Court decisions indicates, land surveys and plots alone would not suffice without supporting evidence of *kama‘āina* authentication.¹⁵⁷

Other cases describe *ahupua‘a* generally as running “from the mountain to the sea” and providing for the chief or *konohiki* and *hoa‘āina* “a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the

¹⁵² *Damon v. Tsutsui*, 31 Haw. 678, 693 (1930).

¹⁵³ *Id.*

¹⁵⁴ *Carter v. Territory of Hawaii and Damon v. Territory of Hawaii*, 14 Haw. 465, 466-67 (1902).

¹⁵⁵ Brenton Kamanamaikalani Beamer, *Huli Ka Palena* (unpub., M. Geog. Thesis, U. Hawai‘i) 4, 14-21 (2005) (defining *palena* as *moku*, *ahupua‘a*, and *‘ili* boundaries that were more than physical demarcations, but also represented people’s intimate relationship to the land. As such, the emotional and spiritual connections to place in addition to geographical locations were embedded in the people’s memory); KAMANAMAIKALANI BEAMER, *NO MĀKOU KA MANA: LIBERATING THE NATION*, 32-33 (2014). The *palena* created “spaces of attachment and access ... [they] delineated the resource access of *maka‘āinana* and *ali‘i* on the ground, literally connecting people to the material and spiritual resources of these places.” The knowledge of these *palena* known “visually and cognitively” by *kama‘āina* was shared orally from one generation to the next.

¹⁵⁶ Gonschor & Beamer, *supra* note 85 at 60-61.

¹⁵⁷ *In re Boundaries of Pulehunui*, 4 Haw. 239, 251 (1879).

varied products of the intermediate land. . . . [B]oth inland and shore fishponds were [also] considered to be part of the ahupua‘a and within its boundaries.”¹⁵⁸

The Carter and Damon Court opted to neglect the law directing Hawaii’s courts to defer to Hawaiian custom and usage in adjudicatory proceedings and rely on kama‘āina expert testimony to determine the nature of specific Hawaiian customs. Had it followed this methodology, the Court would have known that adjacent fisheries were considered part of the ahupua‘a and special rights were conferred as an incident to trusteeship and management responsibilities of the konohiki, hoa‘āina tenancy, resource use, and mālama. Instead, the Territorial Supreme Court improperly upheld the American common law, here the western precept that places the navigable servitude as a public right superior to ancient custom regarding fisheries use and management.¹⁵⁹

The next inferential step for the Court was to look solely to the statutory laws of the Kingdom as a justification for nullifying ancient custom pre-dating the first written fishery law in 1839. Thus, any fishery rights available to the konohiki stemmed only from Kingdom law and not custom.

The Court then analyzed the fishery laws of the Kingdom to determine whether specific property rights to the fisheries were conveyed within the language of these laws. It referenced the express language in the 1851 statute as the government’s intent to convey “to the people certain rights of piscary” in “[a]ll fishing grounds” that “are hereby forever granted.”¹⁶⁰ The court construed this statutory language to be inadequate to grant a property conveyance with exclusive fishing rights.¹⁶¹ It found the Kingdom fishery statutes to confer “but a privilege to take fish from [an] area of water, if caught while there, a mere theoretical species of property at best.”¹⁶² Further, these laws were subsequently repealed by Congress in 1900 which laid the foundation for throwing konohiki fisheries into the commons.


¹⁵⁸ *In re Kamakana*, 58 Haw. 632, 638-39, 574 P.2d 1346, 1350 (1978) (citing *In re Boundaries of Pulehuni*, 4 Haw. 239, 241 (1879) and *Harris v. Carter*, 6 Haw. 195, 197 (1877)).

¹⁵⁹ *Carter v. Territory of Hawaii and Damon v. Territory of Hawaii*, 14 Haw. 479, 466-67 (1902).

¹⁶⁰ *Id.* at 474.


¹⁶¹ *Id.*

¹⁶² *Id.* at 475.



The U.S. Supreme court accepted *certiorari* and reversed the decision in *Damon v. Hawaii* (1904).¹⁶³ Finding language in the fishery statutes of the Kingdom that conveyed “private property,” the high Court concluded these statutes plainly “mean[t] what they sa[id] . . . [and] [t]here [was] no color for a suggestion that they created only a revocable license. . . . If the Hawaii statutes did not impart a grant, it is hard to see their meaning. . . . [Thus], such rights as the plaintiff claims, and . . . as . . . he and his predecessors in title have been exercising for forty years, have been recognized as private property.”¹⁶⁴

The U.S. Supreme Court addressed the reluctance of the Territorial Court to accept konohiki fisheries as private property and protecting vested rights:



A right of this sort is somewhat different from those familiar to the [American] common law, but it seems to be well known to Hawaii, and, if it is established, there is no more theoretical difficulty in regarding it as property and a vested right than there is regarding any ordinary easement or *profit a prendre* as such. The plaintiff’s claim is not to be approached as if it were something anomalous or monstrous, difficult to conceive and more difficult to admit . . . [A]nomalous as it is, if it is sanctioned by legislation, if the statutes have erected it into a property right, property it will be, and there is nothing for the courts to do except to recognize it as a right.¹⁶⁵

The Territory of Hawaii then argued that the royal patent issued to the appellant was defective by failure to distinctly grant the fishery despite the description in the royal patent of ahupua‘a metes and bounds and a reference to a fishing right in the adjoining sea bounded by certain named islets.

The Court disagreed:

[I]t does not follow that any particular words are necessary to convey [the fishery] when the intent is clear. When the description of the land granted says that there is incident to it

¹⁶³*Damon v. Hawaii*, 194 U.S. 154 (1904).

¹⁶⁴*Id.* at 159-60.

¹⁶⁵*Id.* at 158.

a definite right of fishery, it does not matter whether the statement is technically accurate or not . . . ¹⁶⁶

Having resolved the issue in *Damon v. Hawaii* regarding vested rights in fisheries granted by royal patent to private individuals, the U.S. Supreme Court turned to the issue of rights to nearshore ahupua‘a fisheries conferred by statute. The Court held in *Carter v. Hawaii* that vested rights may also be conferred by statute. ¹⁶⁷

Decades later, the Hawaii Territorial court ignored the U.S. Supreme Court’s cautionary approach in protecting vested rights.

The *Bishop v. Mahiko* (1940)¹⁶⁸ case involved the Estate of Bernice Pauahi Bishop as konohiki of Makalawena ahupua‘a. The subject ahupua‘a, including its fishery was originally awarded to Akahi via land commission award in 1855 and royal patent in 1884. Title then passed from Akahi to her niece, Bernice Pauahi Bishop.¹⁶⁹ As was typical at the time of the Māhele, the award of Makalawena did not describe the ahupua‘a and fishery by metes and bounds, but in name only. This being so, the court assumed according to ancient custom that the fishery belonged to the ahupua‘a.¹⁷⁰

The trustees for the Bishop Estate sued on behalf of the Estate as well as the ahupua‘a tenants. J.H. Mahiko and Ane Una personally appeared as tenants on their own behalf and to represent the other hoā‘āina of Makalawena.¹⁷¹ The parties’ fishery interests were not timely registered in circuit court pursuant to Section 96 of the Organic Act. The parties challenged the constitutionality of Sections 95 and 96 of the Organic Act as a deprivation of private property

¹⁶⁶ *Id.* at 161.

¹⁶⁷ *Carter v. Hawaii*, 200 U.S. 255 (1906).

¹⁶⁸ *Bishop v. Mahiko*, 35 Haw. 608 (1940).


¹⁶⁹ *Id.* at 625.

¹⁷⁰ *Id.* at 628.

¹⁷¹ *Id.* at 614.

without due process of law and a taking of private property for public use without just compensation under the fifth amendment of the U.S. Constitution.¹⁷²

The Supreme Court for the Territory of Hawai‘i saw no reason to concern itself with reviewing “the respective rights of piscary enjoyed by konohikis and common people in ancient times,” rather it confined its analysis to the “written laws” or statutes promulgated under Kingdom law and held over by the Republic of Hawaii.¹⁷³ The Court reviewed the Kingdom konohiki fishery statutes and in its analysis recognized the statutorily created vested rights of piscary. However, hinged on the absence in the record of metes and bounds for the ahupua‘a and fishery of Makalawena as a reason for justifying the whole- scale condemnation of the fishery for public use:




The inherent incidents of private fishing rights, the manner and circumstances of their creation, their exclusion from the application of all laws of the Kingdom of Hawaii and its successors, the Provisional Government and Republic of Hawaii, conferring original title to lands, the absence of official records by which their boundaries might be identified, the source of the information of the facts and the declared purpose to make all of the sea waters of the Territory free to the citizens of the United States, are ample justification for the procedure prescribed, both for the segregation and final condemnation of private fishing rights. . . . [W]e conclude that, even though statutory rights to private fisheries in the sea waters of the Territory of Hawaii at the time of annexation of the Hawaiian Islands to the United States were vested rights and the titles of the owners thereof were entire, complete and not inchoate, in the absence of official records of the boundaries of such private fisheries, it was within the power of the Congress of the United States, in accomplishment of its declared purpose to make all sea fisheries in the sea waters of the Territory not included in any fish pond or artificial enclosure free to the citizens of the United States.¹⁷⁴

¹⁷² *Id.* at 617-18.


¹⁷³ *Id.* at 615.

¹⁷⁴ *Id.* at 676-77.



The Court concluded that the Organic Act effectively “repealed all of the pre-existing laws of the Republic of Hawaii which conferred exclusive fishing rights[,]” and provided a process by which to legally remove vested rights of piscary.¹⁷⁵

Ultimately the Court upheld the constitutionality of sections 95 and 96 of the Organic Act. Section 95 which provided a three year window before the Organic Act would take full effect in repealing exclusive fishing rights that had not adequately “vested” in accordance with section 96 registration requirements was held to be “reasonable and constitute due process.”¹⁷⁶ Further, the Court deemed that the plaintiffs’ failure to timely petition before the circuit court their exclusive fishing rights in the Makalawena ahupua‘a within the two-year window, pursuant to the requirements of section 96 of the Organic Act, effectuated a waiver of the parties’ constitutional rights and a waiver of compensation upon condemnation of the fishery:



Holding as we do that the establishment of a private fishery is but the preliminary step provided in the proceedings in condemnation authorized by section 96 of the Hawaiian Organic Act, the failure to establish a private fishing right constitutes, in legal effect, a waiver to compensation. The failure of the trustees and tenants to take the necessary proceedings to establish the fishing right of Makalawena was tantamount to a waiver of any compensation to which they might have been entitled upon condemnation.


In considering the question of waiver we . . . conclude that . . . [t]he legal effect of failing to assert a claim to a private fishing right was not to vest the right in the United States in a proprietary sense but simply to relinquish the fishery subject thereto to the free use and enjoyment of all citizens of the United States – to convert an exclusive private fishing right into a public fishing right, the free use of which might be enjoyed in common by all citizens of the United States, including, if citizens, the trustees and tenants.¹⁷⁷

The Court finally concluded that the fifth amendment’s taking clause was inapplicable here due to an abandonment of private fishing rights for failure to timely register a claim:


¹⁷⁵ *Id.*

¹⁷⁶ *Id.* at 677.

¹⁷⁷ *Id.* at 678.



Considering the establishment of vested fishing rights in private fisheries solely as a provision for the segregation and separation of private fishing rights from public fishing rights, the failure to establish a private fishing right operated as an abandonment and waiver of all claims to and compensation for such fishing right, in the event of which the provision of the fifth amendment of the Constitution, in respect to the taking of property for public use without just compensation, does not apply.¹⁷⁸



The major impacts of the *Bishop v. Mahiko* decision rendered by the Territorial Supreme Court are two-fold: (1) it interpreted the Organic Act as requiring both konohiki and hoa‘āina alike to register their fishery rights or these rights would no longer be considered “vested”; and (2) it left no recourse for konohiki and hoa‘āina alike to be compensated for loss of fishery property and the rights associated with them if they failed to timely register their claims within the short period afforded by the Organic Act. Only those who timely registered and successfully petitioned the court had vested rights and were entitled to just compensation upon formal condemnation proceedings initiated by the government.

The 1954 Kosaki legislative report, however, cites an earlier federal district court decision, *United States v. Robinson* (1934), that the Territorial court wholly ignored.¹⁷⁹ The *United States v. Robinson* case adjudicated the rights of Dowsett Co., Ltd., a tenant possessing a hoa‘āina right of piscary in Hoaeae fishery that was subject to condemnation proceedings related to developing Pearl Harbor on O‘ahu.

Kosaki interpreted the federal district court in *United States v. Robinson* to hold that “private fisheries in the name of the konohikis would, in legal contemplation, establish the vested right of tenants who are kuleana owners.”¹⁸⁰ The court further addressed the fishery registration issue as to hoa‘āina:

A practical consideration bearing on this matter is the question whether Congress intended the many hundreds (or thousands) of tenants to validate each of their rights by

¹⁷⁸ *Id.* at 680.

¹⁷⁹ RICHARD H. KOSAKI, HAW. LEGIS. REFERENCE BUREAU, REP. NO. 1, KONOHIKI FISHING RIGHTS 27-28 (1954) (citing *United States v. Robinson*, Civ. No. 292 (D. Haw. 1934)).

¹⁸⁰ *Id.* at 28.

proceedings in courts. I am loath to believe that Congress had any such drastic requirement in mind.¹⁵⁷

The federal district court also confirmed that Dowsett Co., Ltd. was also entitled to compensation in a share of the sum to be paid for the Hoaeae fishery in an amount commensurate with “the value of its hoaina right of piscary.”¹⁸¹

The *United States v. Robinson* case also remarked on a matter similarly presented in the 1930 *Damon v. Tsutsui* case regarding the fishery rights of new tenants who move to an ahupua‘a after the Organic Act took effect. Where the territorial court in *Damon v. Tsutsui* held newcomers do not possess vested rights, the federal district court in *United States v. Robinson* found a discrepancy in this ruling from the prior *Smith v. Laamea* case issued in 1927. Favoring the *Smith v. Laamea* case, the federal district court opined:



[I]f a fee-simple title to a portion of the ahupua‘a originated even as late as approximately 1924 (certainly long years after the repeal of the fishing laws of 1900) the owner of such parcel of land would become entitled, upon acquiring title, to an appurtenant right of fishery.¹⁸²

The full import of this decision is that had J.H. Mahiko and Ane Una, the hoa‘āina parties in the *Bishop v. Mahiko* case, appealed and the U.S. Supreme Court reviewed the matter, it perhaps would have overturned the Territorial court’s decision and hold the Territory liable for an unconstitutional taking of the Makalawena fishery without just compensation.

Despite the U.S. Supreme Court cases overturning the Territory of Hawai‘i rulings in their interpretation of vested rights as only those konohiki fisheries that were officially registered with the circuit court, it appears that Hawai‘i, under Territory rule and later as a State having been admitted into the American Union in 1959, blatantly ignored the highest judiciary of the land. Hawai‘i became the 50th State of America in 1959 with the passing of the Admissions Act, and “all the islands, together with their appurtenant reefs and territorial waters” were ceded

¹⁸¹ *Id.* at 28 (citing *United States v. Robinson*, Civ. No . 292 (D. Haw. 1934)).

¹⁸² *Id.* (citing *United States v. Robinson*, Civ. No . 292 (D. Haw. 1934)).



to the U.S. government.¹⁸³ This Act transferred all public lands, including fisheries and marine waters to the new State of Hawai‘i, to be held in trust for the general public as well as for the benefit of native Hawaiians.¹⁸⁴ Following statehood, the Hawai‘i legislature recognized konohiki fisheries and the rights that attach to these fisheries, only if they have “vested”¹⁸⁵ within the meaning of the Supreme Court of the Territory of Hawai‘i decisions. Further, Hawai‘i adopted into its constitution an amendment protecting “[a]ll fisheries in the sea waters of the State ... subject to vested rights and the right of the State to regulate the same[.]”¹⁸⁶ Hawai‘i’s constitution also makes clear that the State may “condemn such vested rights for public use.”¹⁸⁷ While technically there may still be remaining konohiki fisheries in Hawai‘i, a full and accurate inventory of these fisheries has never been made. Furthermore, those konohiki fisheries that successfully “vested” have not taken full advantage of this distinction. No present-day holders of vested konohiki fisheries are actively posting kapu on a preferred species of fish, nor rotating fishing grounds through announcing opening and closing of sections of their fishery, nor enforcing their rights to one-third of the all catches made in their fishery.

Despite the existing cloud over the status of konohiki fisheries today, the constitution, statutory law, and common law on Native Hawaiian rights generally protects *hoā‘āina* rights. Arguably, the types of sustainable practices of marine harvesting and gathering in the nearshore waters described earlier in this report warrant continued acknowledgement and protection, as well as attribute to *hoā‘āina* priority rights over their *ahupua‘a* fishery for their subsistence.

3.2.2 Considerations for Understanding Appropriate Fishing Practices at Papahānaumokuākea Based on Kānaka ‘Ōiwi Rights, Beliefs, and Practices



¹⁸³ Pub.L. No. 86-3, 73 Stat. 5 (1959). Hawaii Admission Act, Pub. L. No. 86-3, §§ 4-5, 73 Stat. 5 (1959).

¹⁸⁴ *Id.*

¹⁸⁵ HAW. REV. STAT. § 187-23 (2012).

¹⁸⁶ HAW. CONST. art. XI, § 6 (1978).


¹⁸⁷ *Id.*




Having concluded an analysis of traditional and customary rights and practices in ahupua‘a fisheries, can some of the ‘Ōiwi concepts, law and jurisprudence be applied towards developing a methodology for exploring Hawaiian custom at Papahānaumokuākea as a largely remote, wild oceanic environment, dotted with small kūpuna islands and atolls, and only sparsely peopled by scientists and researchers? Thus far, the analysis of Native Hawaiian rights has focused principally on Kānaka interactions in the ahupua‘a environment of the main Hawaiian islands, chiefly in certain wao where human activity is more prevalent; such as, the terrestrial and nearshore marine environments of the wao kānaka, the lowland forest known as the wao lā‘au, and the upper rainforest known as wao nahele. There is one region of the ahupua‘a that is rarely visited due to it being the least accessible and because it is kapu. This is the wao akua, the tops of the mountain, a region reserved for the gods, where Kānaka treat as sacred. Preserving the wao akua also makes ecological sense. Keeping the mountaintops undeveloped means that rain harvested there feeds the forests below and gives life to the rest of the ahupua‘a. Where ahupua‘a management, conventionally understood as managing resources from mauka to makai, the lower down the ahupua‘a one traverses, the more noa the activities and human interactions become. What lessons can be drawn from the way wao akua is perceived within the ahupua‘a setting when we consider that Papahānaumokuākea is also wao akua?

Papahānaumokuākea juxtaposed with the main Hawaiian islands on the vertical access can also be seen as moving from greater kapu at the top where the ancient, kūpuna islands exist in Pō to more noa activities as we descend longitudinally to the younger, main Hawaiian islands where Kānaka live and interact more freely in the Ao. Papahānaumokuākea is described as a deeply spiritual place, a primordial realm and home to the gods where creation begins. Much in the same way that Kānaka placed kapu on wao akua as it exists on the vertical access of the ahupua‘a from mauka to makai and lifted spiritual strictures as well as physical access, movement, and interactions incrementally along the descending wao, we can apply the same principles to Papahānaumokuākea as wao akua and the realm of Pō when compared to the main Hawaiian islands which exists in the realm of Ao and more closely resembles in its totality a wao kanaka.

Wao akua and the Pō also ensures that powerful creative forces contribute to the physical manifestation of abundance in the wao kanaka and in the ao. As we take the esoteric and craft a more accessible and concrete picture of Papahānaumokuākea and seek to understand why we





protect this space as a national marine monument and now a marine sanctuary, we look to the fact that globally we must kapu some areas of our vast ocean as kīpuka (oases) from which life can flourish and seed surrounding waters. Western scientific terminology characterizes this effect as spillover. Thus the importance of maintaining Papahānaumokuākea as a kīpuka with limited and conscientious interactions in order that this place can provide for and ensure abundance in the fisheries of the main Hawaiian islands.



Our interviews reveal that for some Kānaka, particularly residing or having their genealogy rooted in Ni‘ihau, the most northerly island in Ka Pae ‘Āina, that certain families traversed occasionally to Nihoa to fish for ulua. Going back to ahupua‘a thinking, the Hawaiian perception of wao akua is that no one shall enter this spiritual realm unless they were qualified to do so and observed the necessary ceremonies and only for a very specific need, such as harvesting a majestic koa tree to hew into a great canoe. Reflecting on the practices of Ni‘ihau fisherman, we know that excursions to Nihoa were not daily or regular; rather, they were seasonal and for a specific purpose. Taking into account also that Ni‘ihau is a small island and the populace there may not have all the resources they need, they may look to nearby islands like Nihoa as a kind of ‘ili lele where their people have priority rights to harvest from in order to sustain themselves. The waters surrounding Nihoa may also have been known by Ni‘ihau families as an important ulua ko‘a, one for which they had established long, generational relationships with. It also supports the Hawaiian notion and ethic to “stay in our own backyard” (synonymous with one’s own ahupua‘a) because there is already more than enough to feed one’s family. Hence, the Hawaiian Kingdom made it a point to protect the nearshore waters from the shoreline to the edge of the reef, or where no reef existed, then up to one mile from shore for the konohiki and hoa‘āina of their respective ahupua‘a. It is also why these konohiki fisheries focused on subsistence usage only and not commercial, rewarding only the konohiki for sound management of the ahupua‘a fishery by entitling him to one-third of the catch. This practice also supported ancient precepts of giving first fruits of the land at Makahiki where the maka‘āinana placed tribute on the ahu for Lono and as an apportionment to the ali‘i class in gratitude for their leadership and organization of the labor that produced ‘āina momona.


Finally, as our team indicates in the cultural impact assessment, we give great deference to the true meaning of lawai‘a, that goes beyond a simple English translation of being a fisherman; rather, undergirding the word lawai‘a is an ethic of conservation. A lawai‘a is one who understands when he has taken enough (lawa) fish (i‘a) and one who knows when to stop



(lawa) to avoid overharvesting, so that there will be more than enough for others and for future generations. A true lawai‘a understands reciprocity, what it means to give back and that kuleana (right, privilege, and responsibility) means first to mālama before one has the right to take. Our interviews collectively reveal this foundational understanding of reciprocity; and for this reason, we recommend that this also be the foundation for government decision-making as to fishing regulations within the Marine Expansion Area for Papahānaumokākea as a National Marine Monument and in the future as a Marine Sanctuary. We would also like to point to the current regulation of “sustenance fishing” applied within the original boundaries of the monument (that was established at pre-expansion) as the guide for crafting fishing regulations in the MEA. The sustenance standard assures that overharvesting does not occur in this wao akua. It ensures that the level of kapu owed to this sacred realm of Pō is maintained, and what flows physically into the realm of Ao, our main Hawaiian islands, is the benefit of spillover that feeds our wao kanaka fishery with abundance.


3.3 Current Public Trust Protections also Trace their Origin to the Kumulipo, Ancient Custom, and Kingdom Law

As described earlier, the overthrow and annexation of the Hawaiian Kingdom in the 1890s wrought significant changes to the understandings of the laws which stemmed from the Hawaiian world view, the ancient communal land tenure system, and the customs that emerged from this period before the Kingdom took power. As stated above, in many ways the Kingdom still adopted and codified ancient custom into its laws. Remarkably, laws like the Kuleana Act and the Judiciary Act survived through the territorial period and into statehood. However, much of these laws were deliberately misinterpreted or ignored once Hawai‘i was placed under martial law and controlled by American and Christian missionary interests. The citizenry were denied voting rights and the judiciary was now stacked with American judges who lacked an understanding of the mana behind the laws originating from the Kingdom. Commerce was also centered around sugar production which necessitated significant water diversions from rich windward valleys to leeward lands. What arose from this period was a commodification of water



and characterization of water as a property right, rather than a public good. Disputes over water tended to encompass the right of sugar companies as “konohiki” to hold water for themselves and to attain “prescriptive” rights over water likened to western property constructs of adverse possession.¹⁸⁸

In a post-Territory Hawai‘i, the Hawai‘i Supreme Court, in a series of groundbreaking cases, began a decolonize the law and reinvigorate the sources of law protecting native rights. Some of those cases have been described above in the section above. In 1973, the Court in *McBryde Sugar Co. v. Robinson* rejected the notion of prescriptive rights and private ownership of water, stating that from the time Hawai‘i became a kingdom, the King maintained certain “sovereign prerogatives” which included “encourag[ing] and even ... enforc[ing] the usufruct of lands for the common good[,]” water being one of them.¹⁸⁹ Applied to the State of Hawai‘i as the new “sovereign” this court decision had the effect of returning water as a public trust. The Court further reinforced this understanding in *Robinson v. Ariyoshi* (1982):




[W]e believe that by [the sovereign reservation], a public trust was imposed upon all the waters of the kingdom. That is, we find the public interest in the waters of the kingdom was understood to necessitate a retention of authority and the imposition of a concomitant duty to maintain the purity and flow of our waters for future generations and to assure that the water of our land are put to reasonable and beneficial uses. This is not ownership in the corporeal sense where the State may do with the property as it pleases; rather, we comprehend the nature of the State’s ownership as a retention of such authority to assure the continued existence and beneficial application of the resource for the common good.¹⁹⁰

Reflecting on the implications of *McBryde* and *Robinson v. Ariyoshi* necessitates a deeper acknowledgement that the public trust as understood from the Kingdom’s perspective encapsulates the understanding of the ali‘i, through divine right and mo‘okū‘auhau tracing to

¹⁸⁸ See generally, *Lonoaea v. Wailuku Sugar Co.*, 9 Haw. 651 (1895), *Hawaiian Commercial & Sugar Co. v. Wailuku Sugar Co.*, 14 Haw. 50 (1902).


¹⁸⁹ *McBryde Sugar Co. v. Robinson*, 54 Haw. 174, 186 (1973), *McBryde Sugar Co. v. Robinson*, 55 Haw. 260, 270 (1973).

¹⁹⁰ *Robinson v. Ariyoshi*, 65 Haw. 641,674, 658 P.2d 287, 310 (1982)



origins in the Kumulipo, having kuleana to care for the ‘āina and their people for the common good. Indeed, the Court has acknowledged of the kuleana the chiefs had to the maka‘āinana where the “public trust [comprises] a dual concept of sovereign right and responsibility[,]” a hallmark of “the ancient Hawaiian system.”¹⁹¹

Subsequent to the landmark decision in *McBryde*, the delegates to the 1978 constitutional convention solidified this case by adopting Article XI. Section 7 specifically refers to water and affirms the State’s “obligation to protect, control and regulate the use of Hawaii’s water resources for the benefit of its people.”¹⁹² Section 1 provides the State’s and Counties’ responsibilities under the Public Trust:



For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai‘i’s natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.¹⁹³

Article XI, The Hawai‘i Supreme Court recognizes both Article XI, section 1 and article XI, section 7 as the public trust doctrine and “a fundamental principle of constitutional law in Hawai‘i.”¹⁹⁴ These constitutional provisions have had profound effects on our jurisprudence, one that is unmatched in any other jurisdiction throughout the United States. A survey of the cases arising out of the public trust include strong language from the Hawai‘i Supreme Court rejecting arguments from private commercial interests that they are protected under this doctrine and that to return water back to the stream would constitute “waste.”¹⁹⁵ Rather, the Court has made clear that resource protection is an important underlying public trust responsibility. The public trust also extends to ocean and fisheries health.¹⁹⁶

¹⁹¹ *In re Waiāhole Combined Contested Case Hearing*, 94 Haw. 97, 135, 9 P.3d 409, 447 (2000) (citing *Reppun v. Board of Water Supply*, 65 Haw.531, 547-48 and n. 14, 656 P.2d 57, 68-69, and n. 14 (1982)).


¹⁹² Haw. Const. art. XI, § 7 (1978).

¹⁹³ Haw. Const. art. XI, §1 (1978).

¹⁹⁴ *In re Waiāhole Combined Contested Case Hearing*, 94 Haw. 97, 132, 9 P.3d 409, 444 (2000).

¹⁹⁵ *Id.* at 137-138, 9 P.3d 409, 449-450 (2000).

¹⁹⁶ *See generally*, *Kelly v. 1250 Oceanside Partners*, 111 Hawai‘i 205, 140 P.3d 985 (2006).



Native Hawaiian traditional and customary rights are also deemed a public trust purpose as Hawai‘i’s indigenous people are inextricably tied to the natural environment.¹⁹⁷ The Court traces this public trust responsibility to Native Hawaiians as derivative of protections afforded under the Kuleana Act/H.R.S., § 7-1 which recognized the rights of *hoā‘āina* to traverse freely within their *ahupua‘a*, to access traditional trails, and to gather specific items that were critical to their daily survival, including water.¹⁹⁸ Thus, native rights are not only protected by Article XII, § 7 of the constitution, but doubly so under the public trust.

More recently, the Court has further expanded its understanding of native rights and the public trust to include a “duty to *mālama‘āina*” or “to care for the land[,]”¹⁹⁹ and that the State must exercise its fiduciary obligations as a trustee for lands it holds and manages.²⁰⁰ The Court in *Ching v. Case* (2019), which centered on the State’s obligation to properly manage ceded lands it had leased to the federal government for military training exercises, made clear also that:

[P]ublic lands ceded to the United States following the overthrow of the Hawaiian Monarchy and returned to Hawai‘i upon its admission to the Union hold a special status under our law. These lands are held by the State in trust for the benefit of Native Hawaiians and the general public. Accordingly, our constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including an obligation to protect and preserve the resources however they are utilized.”²⁰¹

The ceded lands, and thus the trusts currently managed by the State of Hawaii for the betterment of the conditions of native Hawaiians, are comprised of land originally set aside in 1848 by the laws and customs of the Kingdom of Hawaii. In 1848, the lands set aside as crown lands and government lands were made subject to a trust inspired by Native Hawaiian tradition.


¹⁹⁷ *In re Waiāhole Combined Contested Case Hearing*, 94 Haw. 97, 137, 9 P.3d 409, 449 (2000)

¹⁹⁸ HAW. REV. STAT. § 7-1 (1994) (ensuring *hoā‘āina* “right[s] to take firewood, house-timber, aho cord, thatch, or ki leaf ... [and] a right to drinking water, and running water, and the right of way. ...”).


¹⁹⁹ *Ching v. Case*, 145 Haw. 148, n. 26, 449 P.3d 1146, n. 26 (2019).

²⁰⁰ *Id.* at 1168, 170, (citing *In re Conservation Dist. Use Application HA-3568 (In re TMT)*, 143 Haw. 379, 400, 431 P.3d 752, 773 (2018); *State ex rel. Kobayashi v. Zimring*, 58 Haw. 106, 121, 566 P.2d 725, 735 (1977)).

²⁰¹ *Id.* at 152, 449 P.3d at 1150.



In 1893, the Kingdom was overthrown, and the Crown and Government lands subsequently were stolen by the Republic of Hawaii. When these land groupings were ceded to the United States by the Republic in 1898, federal law made them subject to a special trust,²⁰² and at statehood they were placed in what is known as the ceded lands trust. In the 1959 Hawai'i Admission Act, provisions explicitly protected lands and resources for “native Hawaiian” beneficiaries as defined in the Hawaiian Homes Commission Act.²⁰³ As a condition of statehood, section 5(f) of the Admission Act mandated that the State of Hawai'i manage certain ceded lands for any number of the five trust purposes, including the “betterment of the conditions of native Hawaiians.”²⁰⁴ Section 5(b) of the Admissions Act officially conveyed to the new State of Hawai'i title to 1,400,000 of the 1,800,000 of Kingdom crown and government lands.²⁰⁵ The OHA was the State's vehicle for fulfilling its duty to Native Hawaiians under section 5(f). It was established at the 1978 constitutional convention for that purpose.



As the CIA explains in greater detail, the Monument boundaries overlay a number of prior Kingdom, Federal, and State conservation areas. The Northwestern Hawaiian Islands, excluding Midway Atoll (Kuaihelani) are ceded lands, or part of the lands that were “ceded” to the United States government after the illegal overthrow of the Hawaiian Kingdom in 1893. The U.S. retained the NWHI per section 5(c) of the Admissions Act; however, it specified that these islands were also subject to the trust provisions indicated in section 5(f). These trust responsibilities among both federal and state agencies form the basis for the co-trusteeship relationship present today in the management of the Monument. The effect, then, of this trust relationship is that State law and jurisprudence regarding the public trust, and by extension Native Hawaiian rights and practices, extends also to Papahānaumokuākea.

²⁰² Sproat & Palau-McDonald, 57 *Harvard Civil Rights-Civil Liberties L. Rev.* 525 (2022) (stating that, “Both the Joint Resolution of Annexation and Hawai'i's Organic Act, which established a U.S. territorial government, recognized the special trust status of the Crown and Government Lands and also stipulated that revenue from the lands must be used to benefit residents of the islands.” Joint Resolution to Provide for Annexing the Hawaiian Islands to the United States, July 7, 1898, 30 Stat. 750; Hawaiian Organic Act, § 91, April 30, 1900, ch. 339, 31 Stat. 141 (1900).

²⁰³ Hawaii Admission Act, Pub. L. No. 86-3, §§ 4-5, 73 Stat. 5, 5-6 (1959).

²⁰⁴ *Id.* § 5(f).

²⁰⁵ *Id.* § 5(b).

3.4 As Custom is Determinative of Native Hawaiian Law, How is Custom Determined?

As stated previously, H.R.S., section 1-1 instructs Hawai‘i’s courts to look to English and American common law decisions for guidance, except where they conflict with “Hawaiian judicial precedent, or ... Hawaiian [custom and] usage.”²⁰⁶ One of the threshold issues in determining whether or not the law governing Native Hawaiian rights, then, is determining whether or not a purported practice is actually a Hawaiian custom.

Courts look to kama‘āina expert testimony as the foundation for authenticating Hawaiian custom and usage. This was first discussed in *Application of Ashford*²⁰⁷ which relied on “reputation evidence” of a kama‘āina over a shoreline boundary dispute rather than accept the conclusions of a certified land surveyor. The Court has recognized the definition of “kama‘āina” to mean as stated in the Hawaiian dictionary as one who is “[n]ative born, one born in a place, host[.]”²⁰⁸ The *Ashford* court stated:

Kama‘āina witnesses may testify to the location of seashore boundaries dividing private land and public beaches according to reputation and ancient Hawaiian tradition, custom and usage. The method of locating the seaward boundaries was by reputation evidence from kama‘āinas and by the custom and practice of the government’s survey office. It is not solely a question for a modern-day surveyor to determine the boundaries in a manner completely oblivious to the knowledge and the intention of the king and old-time kama‘āinas who knew the history and names of various lands and the monuments thereof.²⁰⁹


The premise for this case was based upon the requirements of H.R.S. § 1-1 to look to Hawaiian custom and usage to inform the law.

²⁰⁶ *State v. Zimring*, 52 Haw. 472, 475 (1970) (citing *De Freitas v. Trustees of Campbell Estate*, 46 Haw. 425, 380 P.2d 762 (1963)).


²⁰⁷ *In re Ashford*, 50 Haw. 314, 440 P.2d 76 (1968).

²⁰⁸ *Ka Pa‘akai O Ka ‘Aina v. Land Use Comm’n*, 94 Hawai‘i 31, 7 P.3d 1068 (2000).

²⁰⁹ *In re Ashford*, 50 Haw. 314, 316, 440 P.2d 76, 77 (1968).




Papahānaumokuākea presents a unique issue as to who determines Native Hawaiian custom in a space where, arguably, there are no kama‘āina, save an account noted in the CIA by Lei Wann describing her ancestor Hailama (and his brother) who lived on Nihoa island in the 1800s until they were evicted and the island depopulated. Hailama eventually settled in Hā‘ena, Kaua‘i, but would make regularly excursions on his canoe to Nihoa throughout his life. Lei Wann describes her ancestor Hailama as an experienced seafarer, also possessing certain that he likely learned from his childhood at Nihoa; namely, diving in the ocean to gather water with his guord along freshwater seeps and possibly acquiring mastery there as a ‘uahi bearer and teaching this art to several apprentices on Kaua‘i.



The CIA also recounts from ethnography work of Maly and Maly (2003) accounts by the late kupuna Kāwika Kaahulehua of Ni‘ihau and former captain of Hōkūle‘a conducting extremely seasonal fishing at Nihoa for ulua. The CIA also cites Maly and Maly in the recollections of late kupuna Eddie Ka‘anā‘anā who remembers his elders “voyaging from the southern region of Hawai‘i island to Ni‘ihau and to Nihoa.” Kupuna Eddie speculated that the primary purpose was not necessarily for fishing since there was a sufficient supply on Hawai‘i island. Rather, he surmised that his elders, being “seafaring people [and] navigators[,]” they would voyage to Nihoa to study “the sun, the stars ... [as a] training area[.]”


Aside from these accounts passed down the family line, the record is scant as to regular engagement in Papahānaumokuākea to the level that the MHI experience. Practically speaking, the small, low-lying kūpuna islands of Papahānaumokuākea, nominal for human habitation, would not lend itself to the kind of rich jurisprudence that has formed around native rights in the MHI -- which have evolved and have their genesis in multigenerational ‘ohana relationships to their ahupua‘a. This brings us back to the question of who is “kama‘āina” to Papahānaumokuākea that could help to inform what practices in the Monument are appropriate and customary?

Nohopapa Hawai‘i focused its community consultation efforts on not only those who had lineal connections to Papahānaumokuākea, but also those who cultivated pilina to this place in more recent years, both on a professional and personal basis. This pool of consultees identified multiple access kuleana to PMNM related to marine resource management, lawai‘a, ceremony,



education, resource gathering, special use, and research. They were also queried on their cultural resources, practices, beliefs associated with Papahānaumokuākea; namely as to:

- interconnectivity (both tangible and intangible) between Papahānaumokuākea and the MHI
- ecosystem health at Papahānaumokuākea and whether or not it affects the MHI
- areas critical to Native Hawaiian traditional subsistence, religious, and/or ceremonial activities
- cultural resources, practices, and/or beliefs with details as to their location, seasonality, lifespan, etc. that could inform pono management decisions



Consultees were also asked if they knew any akua affiliated with Papahānaumokuākea and whether or not they were familiar with mele, mo‘olelo, oli, ka‘ao, and/or significant inoa ‘āina that help to illuminate cultural understandings and interactions with Papahānaumokuākea and/or the relationship to the MHI.

Their answers yielded a deep knowledge of Papahānaumokuākea and an intimacy with this place and its cultural and spiritual significance such that in many ways they had become kama‘āina (familiar) to Papahānaumokuākea and understood what cultural practices are appropriate to this sacred space.

The common law developing around Native Hawaiian rights also point to the year 1892 and prior as a cut-off date for determining custom. The rationale behind this is that the last iteration of the Judiciary Act (now codified as H.R.S., §1-1) upholding the standard of Hawaiian custom and national usage was in 1892, prior to the overthrow of the Hawaiian Kingdom in 1893. The Hawai‘i Supreme Court has ruled that any assertion that a “time immemorial” standard must be used to determine the legitimacy of a purported custom must fail.²¹⁰ The Court has also taken the a more broad and fluid stance in interpreting Hawaiian custom warranting protection by establishing a criteria of “consistency,” “certainty,” and “reasonableness”:

(1) “consistency” is properly measured against other customs, not the spirit of the present

²¹⁰ Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm’n (*PASH*), 79 Haw. 425, note 39, 903 P.2d 1246, note 39 (1995).

laws; (2) a particular custom is “certain” if it is objectively defined and applied; certainty is not subjectively determined; and (3) “reasonableness” concerns the manner in which an otherwise valid customary right is exercised—in other words, even if an acceptable rationale cannot be assigned, the custom is still recognized as long as there is no “good legal reason” against it.²¹¹

A compelling way that this criteria can be applied has been found in arguments raised by Mauna Kea Anaina Hou before the State Board of Land and Natural Resources’ Hearing Officer regarding the Conservation District Use Application for the Thirty Meter Telescope atop Mauna Kea. When certain practices (e.g., constructing new kuahu (altars) and releasing cremated remains on the pu‘u) were identified as “contemporary” Hawaiian practices not warranting protection under the law, members of Mauna Kea Anaina Hou and other petitioners pushed back:


Insofar as Ka Pa‘akai does not express concern for “contemporary cultural practices,” this is because the category is nonsensical. Contemporary cultural practices are rooted in traditional and customary usages and values in existence prior to 1892 and are therefore also protected by Article XII, section 7 and other applicable laws.²¹²

Likewise, Nohopapa Hawai‘i takes the stance that an analysis of traditional and customary Hawaiian practices at Papahānaumokuākea should be viewed from this perspective, given that much of the experience shared by our consultees reveal engagement at Papahānaumokuākea post-1892, but have their basis in the standard of “consistency” as measured against other Hawaiian customs.

3.4.1 What Criteria is Generally Applied to Establish an Adequate Foundation for Proof of the Validity of a Purported Customary Practice?


²¹¹ *Id.*

²¹² Maunakea Anaina Hou and other petitioners – Exceptions to BLNR Hearing Officer’s FOFCOL, In Re CDUA – TMT, Mauna Kea, 116 (2012).



The Court has considered criteria as to whether or not a purported practice is a legitimate exercise of a traditional and customary practice covered under Article XII, Section 7, particularly in cases where Native Hawaiian criminal defendants have argued a constitutional privilege and exemption from prosecution. In these types of cases, the Native Hawaiian defendant must provide “an adequate foundation in the record connecting the claimed right to a firmly rooted traditional or customary native Hawaiian practice.”²¹³

Dr. Davianna Pomaika‘i McGregor, a University of Hawai‘i professor of Ethnic Studies whose research has been chiefly around hoā‘āina rights and practices provided in the *State v. Pratt* case several criteria for determining an adequate foundation for the proof of Native Hawaiian custom:



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- (1) The purpose is to fulfill a responsibility related to subsistence, religious, or cultural needs of the practitioner’s family;
 - (2) the practitioner learned the practice from an elder;
 - (3) the practitioner is connected to the location of practice, either through a family tradition or because that was the location of the practitioner’s education;
 - (4) the practitioner has taken responsibility for the care of the location;
 - (5) the practice is not for a commercial purpose;
 - (6) the practice is consistent with custom.²¹⁴

Dr. McGregor has also stated in one of her publications that the essence of Maoli practices is founded on traditional ‘ohana cultural values and customs that include, but are not limited to the following:

- 1) Only take what is needed.
- 2) Don’t waste natural resources.
- 3) Gather according to the life cycle of the resources. Allow the native resources to reproduce. Don’t fish during their spawning seasons.
- 4) Alternate areas to gather, fish and hunt. Don’t keep going back to the same place. Allow the resource to replenish itself.
- 5) If an area has a declining resource, observe a kapu on harvesting until it comes back. Weed, replant and water if appropriate.

²¹³ *State v. Hanapi*, 89 Haw. 177, 187, 970 P.2d 485, 495 (1998).


²¹⁴ *State v. Pratt*, 127 Haw. 206, 209, 277 P.3d 300, 303 (2012).

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- 6) Resources are always abundant and accessible to those who possess the knowledge about their location and have the skill to obtain them. There is no need to overuse a more accessible area.
 - 7) Respect and protect the knowledge which has been passed down inter-generationally, from one generation to the next. Do not carelessly give it away to outsiders.
 - 8) Respect each other's areas. Families usually fish, hunt, and gather in the areas traditionally used by their ancestors. If they go into an area outside their own for some specific purpose, they usually go with people from that area.
 - 9) Throughout the expedition keep focused on the purpose and goal for which you set out to fish, hunt, or gather.
 - 10) Be aware of the natural elements and stay alert to natural signs, e.g. falling boulders as a sign of flash flooding.
 - 11) Share what is gathered with family and neighbors.
 - 12) Take care of the kūpuna who passed on the knowledge and experience of what to do and are now too old to go out on their own.
 - 13) Don't talk openly about plans for going out to subsistence hunt, gather, or fish.
 - 14) Respect the resources. Respect the spirits of the land, forest, ocean. Don't get loud and boisterous.
 - 15) Respect family 'aumakua. Don't gather the resources sacred to them.²¹⁵

While some of these 'ohana cultural values and customs speak to practices associated with hoā'āina gathering, fishing, and hunting in their respective ahupua'a, there are other precepts here that could be universally applied to Papahānaumokuākea, particularly when observing kapu, allowing resources to replenish themselves, observing life and reproductive life cycles of certain species important for sustenance, and protecting traditional knowledge.

²¹⁵ MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, THE NATURE CONSERVANCY, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, MAKAKUPA'IA AND KAWELA, ISLAND OF MOLOKA'I 16-17 (2006).



3.4.2 What Criteria Should Be Applied for Establishing an Adequate Foundation for Proof of the Validity of Purported Customary Practices at Papahānaumokuākea given its Unique Status as Wao Akua and in the Realm of Pō?



A more customized framework for proving an adequate foundation for customary practices in the Monument is warranted, given the uniqueness of interactions Kānaka ‘Ōiwi undertake in Papahānaumokuākea, a deeply sacred place identified as belonging in the Pō. Unlike the Main Hawaiian Islands that exist in the ao where Kānaka regularly interact in their environment and have deep ties as hoā‘āina to their ahupua‘a, Papahānaumokuākea belongs to Pō and is wao akua. It is a primordial realm where the gods dwell and manifest themselves powerfully today in various kinolau (body forms and elementals). It is a dynamic place known for its creative and regenerative processes. The high kapu (sacredness) of Papahānaumokuākea engenders deeper reverence and respect; and for this reason, a unique test for proving an adequate foundation for customary practices in the Monument is necessary.

Based on our background research, Papahānaumokuākea must be afforded special considerations because of its importance in Hawaiian history and origin stories. A framework for establishing an adequate foundation for proof of a legitimate custom within Papahānaumokuākea must be developed to help state and federal agencies, along with the co-trustee managers, to determine what appropriate actions, activities, and practices may take place within the Wao Akua and realm of Pō that characterizes Papahānaumokuākea. This tool is necessary because we cannot properly analyze Papahānaumokuākea like we do in a traditional ahupua‘a analysis in the main Hawaiian Islands in which there is precedent to help guide the analyses.

To help establish a method for legitimizing customs within Papahānaumokuākea and inform future management of the monument and proposed sanctuary, including fishing and non-fishing regulations, we looked to the standards for the issuance of cultural permits at Papahānaumokuākea:



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- The practice is non-commercial and will not involve the sale of any organism or material collected;
 - The purpose and intent of the practice are appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice, and its associated values and protocols;
 - The practice benefits the resources of the Northwestern Hawaiian Islands;
 - The practice benefits the Native Hawaiian community;
 - The practice supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands;
 - The practice aligns with the Monument Management Plan, proposed future Sanctuary Management Plan, and Mai Ka Pō Mai, which aim to support the perpetuation of traditional practices and integrates indigenous knowledge;
 - The practice establishes relationships to ‘āina;
 - The practice strengthens Native Hawaiian connections to Papahānaumokuākea;
 - The practice utilizes traditional knowledge to support and guide management practices within Papahānaumokuākea;
 - The practice relates to establishing, renewing, and maintaining pilina to Papahānaumokuākea;
 - The practice can be rooted in tradition;
 - The practice is appropriate within Wao Akua and Pō that is Papahānaumokuākea.

Our legal team also interviewed Akoni Palacet-Nelson and Kealoha Pisciotta to conduct a deeper dive into the foundational principles for which the cultural working group devised the current cultural permit standards. Some key highlights of that interview include the following:

- The very notion of “sanctuary,” not just in the modern, legal sense of designating marine sanctuaries, carries with it a sacredness, a kapu. “How we impose kapu is based on [a] value system,” one based on understanding akua.
- The resurrection of an akua foundation, chiefly with akua Lono, was necessary to ensure the recovery of Kaho‘olawe from physical and spiritual demoralization inflicted upon it by years of military bombing exercises. The ceremonies and protocols established for Kaho‘olawe were established to allow Kaho‘olawe to heal and replenish itself.



- A similar template can be applied to Papahānaumokuākea, with the focus not being on restoration and healing as was necessary for Kaho‘olawe; rather, one that informs how we should engage with and in what manner of access is appropriate for Papahānamokuākea as Pō.
- The sacred nature of Papahānaumokuākea means that it is inappropriate for “general population to randomly cruise [there] ... even the kahuna class [were] selective” when accessing this space. Even if one was of ali‘i lineage, this “birthright” did not automatically entitle them entrance, “You still had to prove yourself in order to enter Papahānaumokuākea.”
- Several mo‘olelo also indicate how various akua and ali‘i accessed Papahānaumokuākea and for what purpose. One such story is that of Kawelo and his “rites of passage to the Pō [which] was not about building that physical strength, as most ali‘i would jump off cliffs and do all kinds of stuff in their rites of passage. But for Kawelo, going to Nihoa was about building strength in his spiritual faith and belief” as part of his preparations for “becoming a chief.” Papahānaumokuākea is a place that “opens up doors for us for not just access for subsistence but also for spiritual practices such as rites of passages to build our connections to our mo‘okūauhau.”
- Rights of access to and use of Papahānaumokuākea must be understood within the context that what comes with rights are “responsibilities to maintain its integrity ... [in the process of accessing this place] we are not allowed to unravel creation. We are allowed to participate in it and perpetuate ‘āina momona, that is our mandate.” Central to this understanding is the ‘ōlelo no‘eau, “He ali‘i ka ‘āina he kauwā ke kanaka.” So the question we must ask is, “When you take a look at the permitting process, how are we serving the ‘āina that feeds us? I think that is an appropriate piece that we could use to define the physical connection and that ‘ohana connection to Papahānaumokuākea in that it is chief to us, it is our ancestor, and we serve it, not it serves us.”
- With respect to fishing and other activities that could be perceived as extractive at Papahānaumokuākea, a kapu is imposed, not as the “chiefs [or] konohiki” would impose; rather it is here a “divine kapu” by virtue of the reverence we must attribute to this wao akua and realm of Pō.
- Papahānaumokuākea is not just important to Kānaka who physically access this space, that it exists alone is important to the perpetuation and advancement of Hawaiian culture and ‘ike.



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- The genealogical and ‘ohana connection that Kānaka have to Papahānaumokuākea and all aspects of creation places kuleana upon us to behave in a “symbiotic relationship” with those who are the true kama‘āina of these kūpuna islands and oceanic environment: the fish, the monk seals, the sharks, the cetaceans, the birds. When cultural permit applications are being reviewed, “I look at some permits and it's like who when request this? And why, what for? Does Papa need this, or does someone need their degree? Do we want to use Papa as that place? And if we do maybe we need to set some boundaries - we need to create a kapu, or a season. We are not just going to let people come from all over the world here and do research and next thing you know policies are being created based on this research that are not relative to Papa’s cycle.” Research cannot be “extractive.” In sum, the questions posed to permit applicants are essentially this, “Are you actually ready? Are you prepared to give something back.”
 - The Kānaka ‘Ōiwi methodology of kilo and processing data in place naming, mele, mo‘olelo and how pilina and mutual trust is cultivated between people and place, and namely here at Papahānaumokuākea, gives us an opportunity to share how research should be done and how it can be a reciprocal process as well as a healing one for Kānaka who seek to rediscover ‘ike kūpuna as well as make new discoveries.

3.5 Operationalizing and Fulfilling the Constitutional Mandate to Affirmatively Protect Native Hawaiian Rights and Practices, and by Extension, the Public Trust Obligations to Native Hawaiians, via the Ka Pa‘akai Legal Framework

Relevant to the CIA for the proposed sanctuary designation of Papahānaumokuākea is an analysis of cultural impacts of the designation and recommended mitigation actions and or alternatives if the potential impacts may prove adverse to cultural practices. The Hawai‘i



Supreme Court decision with *Ka Pa‘akai O Ka ‘Aina v. Land Use Commission* (“*Ka Pa ‘akai*”)²¹⁶ provides a good framework from which to inventory native traditions, including religious and ceremonial practices; determine likely impacts of the proposed Papahānaumokuākea sanctuary designation; and to arrive at recommendations based on the impact assessment. In *Ka Pa ‘akai*, the Court deemed that State agencies, in this case the Land Use Commission, have “statutory and constitutional obligations” to Native Hawaiians.²¹⁷ The court stated that one of those obligations is “to protect the reasonable exercise of customarily and traditionally exercised rights of Native Hawaiians to the extent feasible”.²¹⁸ In addition to ruling that the Land Use Commission had failed to meet its obligation to protect the reasonable exercise of these rights, the court also mandated that state agencies make an independent assessment regarding the impact of proposed actions on Native Hawaiian traditional and customary practices. In order “to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accomodating private interests[,]”²¹⁹ the three factors that agencies must consider when making these assessments and in fulfilling their constitutional obligatons under Article XII, 7 are:

- “(1) the identity and scope of ‘valued cultural, historical, or natural resources’ in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
- (2) the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
- (3) the feasible action, if any, to be taken ... by the [State and/or its political subdivisions] to reasonably protect native Hawaiian rights if they are found to exist.”²²⁰

IV. APPLICATION OF NATIVE HAWAIIAN RIGHTS, THE PUBLIC



²¹⁶ *Ka Pa‘akai O Ka ‘Aina v. Land Use Comm’n*, 94 Hawai‘i 31, 7 P.3d 1068 (2000).

²¹⁷ *Id.* at 1083.

²¹⁸ *Id.*


²¹⁹ *Id.*

²²⁰ *Id.* at 1084.



TRUST WITHIN THE KA PA‘AKAI LEGAL FRAMEWORK OF ANALYSIS AS TO AN INVENTORY OF VALUED CULTURAL, HISTORICAL, AND NATURAL RESOURCES; POTENTIAL IMPACTS FROM THE PROPOSED PROJECT; AND RECOMMENDATIONS FOR MITIGATION AND BEST PRACTICES

In order to complete the CIA and apply the Ka Pa‘akai legal framework to the proposed Papahānaumokuākea sanctuary designation, Nohopapa Hawai‘i reviewed existing literature, oral traditions (found in mele, mo‘olelo, oli, ka‘ao, significant inoa ‘āina), and transcripts of consultee interviews and answered questionnaires.



Identity and Scope of Valued Cultural, Historical, or Natural Resources at Papahānaumokuākea, including the Extent to which Traditional and Customary Native Hawaiian Rights are Exercised

Importance of Papahānaumokuākea to Native Hawaiians



Native Hawaiian traditional and customary practices are inextricably intertwined with ‘āina. Appropriately managing ‘āina and its resources is a familial relationship embodied in cosmogonic origin stories and is the basis of Native Hawaiian physical and cultural survival. Managing ‘āina, therefore, has always been a kuleana: a privilege, right, and most importantly, a responsibility. It is this relationship with ‘āina that gives rise to Native Hawaiians’ duty to mālama.


In addition to the cultural and spiritual reasons, Papahānaumokuākea is also significant because it provides Native Hawaiian voices equal footing with federal and state entities in a complex management structure can lead to the successful stewardship of the natural and cultural resources and provides a model of traditional indigenous management that can be replicated in the pae ‘āina and beyond.

“Remote ocean areas are some of the last vestiges of what intact functioning ecosystems once looked like, and thus provide baselines for comparisons with more exploited locations.” These large-scale remote ocean areas should “be valued and appreciated for their cultural heritage and importance” as they serve as “important cultural connections and life sustaining services to oceanic peoples” such as the Native Hawaiian community.

For Pacific cultures, the ocean serves as a pathway of connection to each other, and is essential to cultural preservation today. . . . The ocean played a key role for Native

Hawaiians not only for the resources it provided, but also for physical and spiritual sustenance in their everyday lives.²²¹

“Stories and traditions about our islands give us a sense of place and belonging, reminding us that this is a lasting home, one that we will remain rooted in forever. It gives us perspective and orientation that help to frame our travels and explorations into new directions.”²²² Hawaiian well-being is tied to a strong sense of cultural identity that links people to their homeland. At the core of this connection is the deep and enduring sentiment of aloha ‘āina, or love for the land. The ‘āina sustains Native Hawaiian identity, continuity, and well-being as a people; “it embodies the tangible and intangible values of our culture that have been developed and evolved over generations of experiences of our ancestors.”²²³




The concept of aloha ‘āina is one of great antiquity that originates from the ancient traditions concerning the genealogy and formation of the Hawaiian Archipelago. Papa-hānau-moku (an epithet that literally means Papa-who-gives-birth-to-islands) and Wākea (literally the vast expanse of sky) are the two most prominent ancestors of our people from which all genealogies in Hawai‘i descend. The union of this couple results in not just the ‘birthing’ of the archipelago but also the ‘birthing’ of a unified Hawaiian consciousness—a common ancestral lineage that forges links between the genealogies of both land and people. Since that point on in our history, this archipelago and its people became inseparable, as the well-being of one becomes invariably connected to the well-being of the other.²²⁴

²²¹ Kekuewa Kikiloi et. al, Papahānaumokuākea: Integrating Culture in the Design and Management of one of the World’s Largest Marine Protected Areas, 45 *Coastal Management* 436, 438 (2017).


²²² Kekuewa Kikiloi, *Rebirth of an Archipelago: Sustaining a Hawaiian Cultural Identity for People and Homeland*, 6 *Hūlili: Multidisciplinary Research on Hawaiian Well-Being* 73, 74 (2010).

²²³ *Id.* at 75.

²²⁴ *Id.* at 76.



Today, we know that the Hawaiian Archipelago expands well beyond the “main” Hawaiian islands and encompasses the smaller coral islands, seamounts, banks, and shoals collectively referred to as the Northwestern Hawaiian Islands.²²⁵



“Literally translated, aloha can mean love, grace, or affection, and it is often used as a greeting or farewell. Yet it also denotes mercy, respect, and more. ‘Āina is that which feeds, including land and natural and cultural resources. But ‘āina is also an ancestor, an extension of the family, and the physical embodiment of different akua (gods or ancestors). It is sacred and revered. Because of the deep and profound meanings associated with each component word, the phrase aloha ‘āina is difficult to translate into English; it is a philosophy, relationship, and cultural obligation that is visceral for Kānaka. It is a piko, or umbilical cord that tethers us as Indigenous People to Hawai‘i and defines our place in this universe. Aloha ‘āina invokes kuleana: the right and corresponding responsibility to care for Hawai‘i’s natural and cultural resources for present and future generations.”²²⁶


“It can be described, albeit insufficiently, as a worldview and familial relationship with Hawai‘i’s islands and all of their resources.”²²⁷ Dr. Jamaica Heolimeleikalani Osorio revealed another meaning of aloha ‘āina as a “magnetic force: it creates pilina (intimacy or connection) between place and community.”²²⁸ It is something that “is rooted in the reciprocal relationship between Kānaka and the Hawaiian archipelago that arises from Native Hawaiians’ shared mo‘okū‘auhau (genealogy) with our ‘āina. The Kumulipo—a cosmogonic chant—and other

²²⁵ The Northwestern Hawaiian Islands include (from east to west) Nihoa Island, Necker Island, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisianski Island, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll. Note that these are their contemporary names. Research done by Kekuewa Kikiloi investigated the original Hawaiian names for the Northwestern Hawaiian Islands through examining oral traditions and first-hand observations. See generally Kekuewa Kikiloi, *Rebirth of an Archipelago: Sustaining a Hawaiian Cultural Identity for People and Homeland*, 6 *Hūlili: Multidisciplinary Research on Hawaiian Well-Being* 73 (2010).

²²⁶ Sproat & Palau-McDonald, 57 *Harvard Civil Rights-Civil Liberties Law Review* 525, 526 (2022).

²²⁷ *Id.* at 529.


²²⁸ *Id.* at 529-530; JAMAICA HEOLIMELEIKALANI OSORIO, *REMEMBERING OUR INTIMACIES: MO‘OLELO, ALOHA ‘ĀINA, AND EA*, 12-13 (2021).



historical works trace the birth of Native Hawaiians to the beginning of time.”²²⁹ For Native Hawaiians “ biocultural resources are [] ancestors, part of the extended family, and the physical embodiment of different akua (gods or ancestors).”²³⁰

Our consultee responses to questionnaires and interviews revealed profound relationships to Papahānaumokuākea. Two anonymous consultees expressed their beliefs regarding the importance of Papahānaumokuākea and a false separation from Ka Pae ‘Āina:

- Although they may be spoken of as two things, they are one in the same thing. They are the left and the right of a single body of islands.
- They were never not connected. It’s only when Westerners arrived that they become disconnected in people’s minds. From a Hawaiian culture view, there’s not a Northwestern Hawaiian Islands and a main Hawaiian Islands. It’s all the same.



Another respondent who requested anonymity, discussed the interlinkages between Papahānaumokuākea and the MHI as ecosystems:

In the ocean the survival of species depends on successful dispersal of offspring in both directions (into and out of Papahānaumokuākea) which depends on changing oceanographic patterns and environmental conditions (i.e. current directions and seasonal changes). In this way, both regions can impact the health of each other depending on the dispersal direction of a specific species.

Over geologic time, the kupuna islands have been stepping stones for species of birds, plants, fish, invertebrates to colonize younger islands as they were born. The genetic diversity found in some populations currently living in Papahānaumokuākea (i.e. opihi) spans millions of years longer compared to populations of the same species found in the main Hawaiian Islands. Understanding patterns in the genetic diversity of these older lineages can help us figure out which species are sharing offspring between Papahānaumokuākea and the main Hawaiian Islands.


²²⁹ Sproat & Palau-McDonald, 57 Harvard Civil Rights-Civil Liberties Law Review 525, 531 (2022).

²³⁰ *Id.*

Likewise, Uncle Paka Harp explained:


“All islands in the Hawaiian archipelago are connected. Protecting Papahānaumokuākea from commercial fishing insures continued replenishment of declining fish stock in the main islands to the benefit of many. The Hawaiian counter-current assists replenishment through larval distribution from the NWHI to the main Hawaiian islands. Please see: <https://www.science.org/doi/10.1126/science.1059781>.

Along the same vein, others remarked as to the marine ecosystem and the well-being of Kānaka Maoli overall:

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- Our whole pae ‘āina and archipelago of islands are all connected. The ocean, currents and animals do not see boundary between Papahānaumokuākea and the lower Hawaiian Islands, so you cannot separate them.
 - This was corroborated by another respondent as she stated that the health of Papahānaumokuākea and ecosystems affect the main Hawaiian Islands, “Yes, absolutely (and vice versa, monk seals are a really strong example of this).”
 - The health of Papahānaumokuākea and its ecosystems affect the main Hawaiian Island physically and spiritually. Physically it is abundant and has some of the most diverse species in our archipelago, so it creates a refuge and holding bank of resources to help support the lower Hawaiian Islands.
 - Papahānaumokuākea is connected culturally and spiritually to the lower main Hawaiian Islands. Spiritually it is the cross between pō and ao for kanaka maoli and on a cultural and spiritual level it affects both kanaka and ‘āina kai because our lāhui can only be healthy when our ‘āina/kai are healthy as well.


A consultee wishing to remain anonymous spoke to the existence of a cultural and spiritual connection between the NWHI and MHI as “evidenced within chants and ka‘ao that establish these connections through genealogy and migration.”

Brad Ka‘aleleo Wong also attested to the cultural and spiritual connection between Papahānaumokuākea and Ka Pae ‘Āina:



Our kūpuna created a foundation of pō/ao that spans the entire pae ‘āina and our surrounding seascape. There are many mo‘olelo and accounts of the importance of pō, as a place where life comes from, and returns to upon passing. The things that one experiences in the region of Papahānaumokuākea validates these mo‘olelo and helps us understand why our kūpuna described this area the way they did.

Another added:



Yes, Papahānaumokuākea and the “main” Hawaiian Islands are certainly connected. Perhaps magnifying the separation as if they are two separate spaces might affect the way we perceive the relationship. There is indeed a barrier that divides ao and pō, main Hawaiian Islands and the Northwest Hawaiian Islands, however, we know as Kānaka (and even scientists) that we are one Hawaiian chain—ka pae ‘āina o Hawai‘i nei—arising from the volcanic activity beneath the sea and eventually returning to it as time presses forward. Thus, instead of thinking that there is a line two spaces, we know that there is ocean, currents, waves, birds, fish, limu, and so many other things that regularly traverse between and ties Papahānaumokuākea to the “main” islands. We are indeed connected. What happens in one space (good or bad) has a similar impact on the other. I have yet to see our ancestors describe the two spaces as if they are separate. When they mentioned ka pae ‘āina o Hawai‘i, it would always be from Hawai‘i island to Hōlanikū. That is the mindset that we must continue to preserve. There is indeed a cultural distinct, however, they are two parts to one whole. Without the other, there is no Hawaiian archipelago.

As discussed in the CIA:

Consultees characterized their pilina to the PMNM as personal, and self-identified as having genealogical or ‘ohana as well as cultural, spiritual, and mālama/stewardship kuleana connections to the Kūpuna Islands and their contiguous, adjoining seascapes and skylscapes. Including the themes of reciprocity such as mālama, stewardship, and kuleana, also themes connecting skylscapes and seascapes; voyaging navigation, celestial observation, and of course spiritual practices surrounding ceremony, including heiau

practices at Hikiau, Hale o Keawe, and Ale‘ale‘a Heiau in South Kona and other spiritual connections were all mentioned in affiliation with the PMNM.²³¹

Some individuals discussed genealogies more closely linked to Papahānaumokuākea:

- My family name is Nihoa and much of my ancestors are from Kaua‘i.
- ‘Anakala Kepā and ‘Anakē Onaona Maly: “Onaona shares genealogical connections with po‘e kahiko and the genealogies of the Hawaiian Islands. Kepā as an ethnographer.” They see their roles as ethnographer’s to mālama Papahānaumokuākea.

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Others acknowledge that all Kānaka Maoli have their mo‘okū‘auhau rooted in Papahānaumokuākea:

My kāne and I have been. As Kānaka Maoli, we all have genealogical ties and relationship to Papahānaumokuākea. In our Kumulipo we know that the first being is the ko‘a and that is our genealogical relationship the ko‘a and all living beings within our whole pae ‘āina and Papahānaumokuākea.

The majority of our consultees cultivated a pilina to Papahānaumokuākea by virtue of making access trips to the Monument for various purposes, such as:

- **Ho‘omana, kuhikuhipu‘uone, ceremony**
- **Interaction with Kūpuna Islands**
- **Lawai‘a and resource gathering (e.g., ‘opihi, hā‘uke‘uke, ‘a‘ama, pūpū, limu kohu, limu pālahalaha, and fish caught on the journey)**
- **Non-instrument navigation and voyaging and different forms of kilo (kilo lani, kilo hōkū, kilo ‘āina, kilo moana)**
- **Research and Education (e.g., intertidal studies,**

²³¹ E HO‘I I KE AU A KANALOA, RETURN TO THE CYCLES OF KANALOA: CULTURAL IMPACT ASSESSMENT FOR THE NOMINATION OF THE PAPA HĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT AS A NATIONAL MARINE SANCTUARY, Nohopapa Hawai‘i, 137-38 (2023).

- **Special use**
- **Studying and naming of wahi pana**
- **Kia‘i Moana (marine stewardship), overall management of the Monument (e.g., serving as a former PMNM-ONMS or OHA staff member; serving as members to the Cultural Working Group, Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC), and the permitting committee for the Monument Management Board; etc.)**

Their strong pilina to Papahānaumokuākea instilled in them a deep sense of responsibility to caring for this special place. Here are some of their comments:



- **Anonymous:** “[T]he many hō‘ailona this special place has shown me over the years has strengthened my pilina to Papahānaumokuākea. I will spend the rest of my life supporting a collective pilina and kuleana to ensure the voice of ‘Ōiwi are always at the forefront of guiding co-management.”
- **Anonymous on their kuleana:** [E]nsuring Hawaiian voices, language, culture, and perspective are placed at the forefront in efforts to manage, conserve, and share the mo‘olelo of PMNM.
- As a member of the RAC in the Native Hawaiian alternate seat, I have kuleana to provide recommendations about current and prospective management and research activities in Papahānaumokuākea and to voice concerns about culturally sensitive issues so they’re discussed and acknowledged.
- **Nai‘a Lewis:** To leverage my experience working for ONMS-PMNM in support of protecting this sacred region with aloha.
- **Hōkū Pihana:** My role is to be present in the conversation for our Kūpuna Islands. To listen and stand firm for our kūpuna and our keiki to ensure Papahānaumokuākea is always cared for and sustained throughout generations. And to ensure our Kānaka ‘Ōiwi voices are always present.
- **Anonymous:** I have become involved with the Cultural Working Group, ensuring that Hawaiian voices, language, culture, and perspective are placed at the forefront in efforts to manage, conserve, and share the mo‘olelo of Papahānaumokuākea.

- **Hōkū Pihana:** My role is to be present in the conversation for our Kūpuna Islands. To listen and stand firm for our kūpuna and our keiki to ensure Papahānaumokuākea is always cared for and sustained throughout generations. And to ensure our Kānaka ‘Ōiwi voices are always present.
- **Anonymous:** I am moved by the professionals who are working in that space to help support their/our activities there to mālama Papahānaumokuākea. In this personal capacity, I have also become involved with the Cultural Working Group, ensuring that Hawaiian voices, language, culture, and perspective are placed at the forefront in efforts to manage, conserve, and share the mo‘olelo of Papahānaumokuākea.

Many had cultivated pilina and strong kuleana to Papahānaumokuākea by directly accessing places like Nihoa, Mokumanamana, Lalo, the French Frigate Shoals, La Perouse, and ‘Ōnūnui/‘Ōnūiki. One person recalled her father visiting Midway Island and fishing at Papahānaumokuākea prior to the establishment of the Monument. Another respondent who is a traditional voyager traveled to some of these islands and provided ho‘okupu.

‘Anakala Kepā and ‘Anakē Onaona Maly stated, “The islets, shoals, pinnacles, are associated with the mo‘okūauhau of the Hawaiian Islands, wahi pana, and places of significance in Hawaiian beliefs, traditional & customary practices.” They stressed that, “The entire archipelago is important but islands and atolls like Nihoa and Mokumanamana and Holaniku are important in specific ways that have been documented.” One consultee reflected on Moku Manamana’s importance to summer solstice ceremonies, while another added that Mokumanamana as well as Nihoa are important “navigational and spiritual/ceremonial center[s]” and that “Kuaihelani – backbone of heaven – [is] a sacred site [and] storied area of akua visits.” Uncle Paka Harp Identified Moku Manamana as not only important for spiritual, religious, and/or ceremonial activities, but also for traditional subsistence.

Another consultee emphasized that, “[Not only] [t]he islands themselves [and] particularly Mokumanamana, [but]each location can be its own critical point of connection; including the ocean space being traveled.” Most importantly, several consultees emphasized the critical importance of all areas in Papahānaumokuākea. One consultee summarized it aptly, “[Papahānaumokuākea is] an ‘āina akua. A place that belongs to the akua, which to me means a place that is of the elements of nature, where we as people may learn from, understand, but to not desecrate.” Finally, another consultee expressed the significance of Papahānaumokuākea as a totality, “All areas east to west, from beneath the sea floor to above the celestial dome.”




Others, regardless of whether they have physically accessed Papahānaumokuākea, still feel a strong connection, some having even committed much of their life’s work to its protection. One such person is Uncle Paka Harp. He states, “I have no need to go there. My kuleana is to join others to ensure the perpetuation of established protections and to gain additional protections so that the area remains as healthy as possible until the US occupation ends and the area is returned to the rightful State, the Hawaiian Kingdom.” Uncle Paka, although not aware as to whether his ‘ohana has immediate lineal ties to Papahānaumokuākea, he states, “ My kūpuna had more than sufficient marine resources than necessary available to them in the main islands so there would have been no need to go further.” He feels his kuleana to Papahānaumokuākea arises out of being a “Maoli koko” and by that virtue alone, he has a commitment to protecting these islands. He shares the work he started decades ago, first being mentored by kupuna to take on this kuleana:

I was kako‘o to the late Louis “Uncle Buzzy” Agard, Jr. who had an agreement with the military to maintain a military runway in exchange for exclusive fisheries access around Tern Island. Uncle Buzzy fished the NWHI since 1946.

I served as Chair of the first Native and Indigenous Rights advisory panel to Wespac in the late 1990s. Due to disregarding sustainable fisheries management by Wespac and the National Marine Fisheries Service, I drafted a plan in early 2000s to protect our kupuna islands’ surrounding marine environment and all marine and terrestrial species within. I drafted a management plan leading to the Coral Reed Ecosystem Reserve designation in December 2000.


The Nakachi ‘ohana also shared a unique perspective as Kahu Manō. They trace much of their genealogy to Maui as Kahu Manō. Kaikea Nakachi explained the family practice:

[For generations we] care[d] for patron sharks around Maui. We know that they’re constantly moving. That we come from a line of Kahu Manō that would’ve taken care of sharks, both Maui and across the pae ‘āina that would have visited Papahānaumokuākea, whether our ancestors went there or not. So, there’s a chance there was a more direct connection. But even indirectly, there is that connection of caring for manō while they’re



here in the pae ‘āina. And then, them probably traversing into Papa[hānaumokuākea] on their own. And most Hawaiians, whether they know it or not, are connected to Papa[hānaumokuākea]. Many of the i‘a species population centers actually are up in Papa[hānaumokuākea]. So, whether you’re harvesting or hānai, mālama certain ko‘a, you may be inadvertently connecting yourself to that lineage of i‘a, too.²³²

Kaikea’s father Mike Nakachi agreed, stating that their pilina to the manō extends several hundred years into the past, “But then I think from a lens from a manō being here for 450 million years and visiting Kure being the oldest to now Lō‘ihi [renamed Kame‘ehuakanaloa]. That connection between a form of akua or family member that we may know that may be in that realm.”²³³



Akoni Palacet-Nelson spoke of acquiring from a kia manu feathers from Papahānaumokuākea and he and his ‘ohana processing them to adorn Lono Makua. He explained the significance of receiving these feathers:

It lands us onto our ancestral foundation, but it also allows us to be relevant and present today and moving into the future. That causes the akua to be alive and the culture is alive because the akua is alive. We are calling that akua out. We know feathers have representation and they bring in mana from the highest realms, or even from the lowest realms. Whatever their representation is, the way how we handle it allows us to connect to the transmitted knowledge that was embedded in that process. So, it's like dancing hula, we can dance hula when we are young and we learn a song, and then for 20 years we don't dance that song, and then we gonna dance it again, or as the saying says it's like riding a bike. But on the DNA structure, we can go back to feather lei making if they never did it, or we can go back to pahu making if we never did it for generations, we can

²³² E HO‘I I KE AU A KANALOA, RETURN TO THE CYCLES OF KANALOA: CULTURAL IMPACT ASSESSMENT FOR THE NOMINATION OF THE PAPA HĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT AS A NATIONAL MARINE SANCTUARY, Nohopapa Hawai‘i, 87 (2023).

²³³ E HO‘I I KE AU A KANALOA, RETURN TO THE CYCLES OF KANALOA: CULTURAL IMPACT ASSESSMENT FOR THE NOMINATION OF THE PAPA HĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT AS A NATIONAL MARINE SANCTUARY, Nohopapa Hawai‘i, 91 (2023).

go back to wayfinding if it's lost. We can go back to that and regain all of that knowledge just by practicing it. That's important in doing the work, doing the hana.

Akoni has never physically accessed Papahānaumokuākea, but he speaks of this Wao Akua with much reverence and with a level of intimacy that is sincere and authentic:

I didn't go to Papahānaumokuākea but the feathers came to me and my 'ohana. So it awakened our connection to Papahānaumokuākea as well. So, I don't have to be there but if we did the songs, if we did the dances, if we did the motions that would connect us to Papa, that is all we need to connect to that genealogy, we don't have to be in that physical space. However, being in the physical space, the responsibility is to make sure that you bring that to the rest of the lāhui, 'ohana. That was the responsibility the chiefs had, our ali'i was not just sitting pretty they had responsibility to that knowledge and that interaction in that realm.

In fashioning an approach for our Ka Pa'akai legal analysis, we decided to group consultee mana'o into broad categories that denote different natural and cultural resources and the native traditional, customary, and religious practices associated with them. These categories are as follows:

- **Spiritual Sustenance, Religious Ceremonies and Protocol, Spiritual Sustenance, Religious Ceremonies and Protocol, Different Akua Who are Prominent at Papahānaumokuākea, Archaeology and Wahi Kūpuna Stewardship**
- **Kilo (e.g., kilo lani, voyaging and wayfinding, 'aimalama, etc.), Access Trips for Training and Mentorship, Indigenous Science/Research**
- **Feather Gathering**
- **Iwi Kūpuna (repatriations)**
- **Fishing (Sustenance, Subsistence)**
- **Other**



Spiritual Sustenance, Religious Ceremonies and Protocol, Spiritual Sustenance, Religious Ceremonies and Protocol, Different Akua Who are Prominent at Papahānaumokuākea, Archaeology and Wahi Kūpuna Stewardship

The CIA (Part I) does a comprehensive job of synthesizing consultee mana‘o and findings from a literature review on the cosmogony of Papahānaumokuākea and the migrations of various akua. Rather than duplicate the findings in Part I, this subsection will touch upon highlights from our consultation interviews and written responses to our questionnaires:

Prominent Akua

Prominent akua specifically mentioned by our consultees included: Kanaloa, Kū, Kāne, Ka wai a Kāne Lono, Wākea, Papa, Kū, Hina, Kamiki, Pele, Kānemiloa‘i, Kamahoali‘i, Kūhaimoana, Kānehekili, Keaomelemele, Mo‘oinanea mā, ‘Aukelenui‘aikū mā, Keānini‘ulakalani, Kauluakalana, Nāpapakahakuakeaolono, Moaniliha, and Umi. Our consultees provided an overarching and holistic perspective of how to understand these various akua at Papahānaumokuākea:

- All of the akua Hawai‘i are affiliated with Papahānaumokuākea. The akua Hawai‘i are elemental energies (the earth, the ocean, its currents, the sky, celestial bodies, lava, earthquakes, tsunamis, etc.). Each play a role in shaping the islands of Papahānaumokuākea.
- Through Akua process, there are many more that help to mālama all realms of the ocean and Papahānaumokuākea.
- All of the akua are in Papahānaumokuākea. Depends on who the practitioner calls upon.
- All Akua are affiliated with the entirety of the Hawaiian archipelago. There are no known boundaries for Akua. Personally, I recognize Kanaloa is the primary Akua of the ocean realm.


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- **Anonymous:** For myself given my ocean background, I associate closely with Kanaloa and his many forms while on various holomoana.
 - **Another anonymous consultee emphasized that** “[Papahānaumokuākea,] all of it inclusive of land and ocean, especially the ocean pathways for our Kānaka and kinolau of Kanaloa (whales, turtles, fish, etc.) [to be able] to journey there and back.”
 - **Kealoha Pisciotta** noted various kinolau of Kanaloa which she has fostered a pilina with from an early age, “I have worked with monk seals since I was a child, actually. The cetaceans and marine mammals are one of the connections that are very important to me and the protection of all of our Kanaloa over there. That’s where it started for me a long time ago.”

One consultee shared a special relationship with certain akua, “Hā’ena was a special place on Pīhemanu where I felt connected to my Papa. There are so many inoa Hawai’i in Papahānaumokuākea that share the mo‘okū‘auhau of Hawai’i. These are just two that resonated with me at this moment.”

Two anonymous consultees summed up the nature of the myriad of akua experienced at Papahānaumokuākea:

- [T]here are many other [akua] ...The many elementals that are experienced there.
- Upon reflection of akua, mele, oli affiliated with Papahānaumokuākea:
- Because it was experienced at many different times in successive waves of the precursors to Native Hawaiians, our Polynesian ancestors in general. I do think that there are many, many different stories and many, many different names and many, many different akua that have been assigned to the area at different times. I’m not aware of any specific ones that I would point out. I would just acknowledge all of them because they’re all true.


Mele, ‘Ōlelo No‘eau, Mo‘olelo, Importance of Naming



Mele, ‘ōlelo no‘eau, mo‘olelo provide a rich picture of the elements at play at Papahānaumokuākea and its prominent features. Here are ‘ōlelo no‘eau shared from our consultees:

- ‘Ōlelo No‘eau #1924 Ku pākū ka pali o Nihoa i ka makani. The cliff of Nihoa stands as a resistance against the wind.
- ‘Ōlelo No‘eau #2311 Nihoa i ka moku manu. Nihoa, island of birds.


It is important to note the living and ever-evolving aspects of Hawaiian culture as evidenced here in the composing of new mele and attributing inoa to places and newly discovered endemic species. Our consultees shared their experiences and provided examples:

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- The naming of Papahānaumokuākea by Aunty Pualani Kanahele.
 - Mele No Papahānaumokuākea Na Kainani Kahaunaele a me Halealoha Ayau (I also heard there was a hui that went to Papahānaumokuākea to create mele.
 - Hōkū Pihana: In 2012, our hui studied the wahi pana of Papahānaumokuākea and have since participated in the naming practices as a PMNM cultural working group participant.

One consultee expressed the power of assigning inoa and creating contemporary mele, oli, and mo‘olelo that reflect Kānaka encountering and forming close bonds to Papahānaumokuākea as they kilo and search for hō‘ailona:

I think there is something to be said about contemporary mele, mo‘olelo, oli, and inoa that are associated with PMNM. Besides names of each island—Kai‘anae, Hā‘ena, Kūkaehao (newer place names given to areas at Kuaihelani/Hōlanikū). Hāwane Rios also gave place names to certain areas on Hōlanikū during her time there. Names were given based on her observations and time spent there. She created a cool map that shows these place names. Hāwane has also created mele for this place.


Names are a way that we can bring Papahānaumokuākea and its inhabitants to our people and the people across the globe, specifically, names in Hawaiian. This is how I started getting involved with the work at PMNM because of the ongoing effort to name



places and species in Papahānaumokuākea. This represents a living language, culture, and people.


To date, the Nomenclature Hui has given/repatriated a total of 63 names to species, places, and other activities in/from Papahānaumokuākea. The Nomenclature Hui has a growing list of naming requests mainly coming from the scientific community who also understands the important role that language and culture play in the conservation and protection of PMNM. This also represents the understanding of PMNM scientists/managers etc. of how important Hawaiian culture and language is to the mālama of that space.”

Ho‘omana and Ceremonies, Archaeological and Cultural Value




We found a re-occurring theme from our consultee interviews and completed questionnaires: the sacredness of Papahānaumokuākea. Catherine Fuller stated, “As a native Hawaiian, I consider the islands to be a sacred cultural site because of the evidence of habitation and use by our kūpuna as well as their place in ao and pō.” Nai‘a Lewis echoed Catherine’s statement, “The place also supports increased spiritual awareness and connection within kanaka.” Our consultees, profoundly affected by Papahānaumokuākea gain ancestral wisdom as kia‘i of this place, ““The very act of trying to protect the area, spiritually, is a reflection of our kūpuna pushing us at this time to provide these protections.” (Anonymous)

One consultee noted certain “physical evidence of stacked stone there’s clearly physical evidence or physical representation of practice. There exists also spatial connections between Ka Pae ‘Āina, Papahānaumokuākea and other parts of Polynesia as related to the seasons, solstices, and equinoxes. Akoni Palacet-Nelson maintains heiau practices at Hikiau, Hale o Keawe, and Ale‘ale‘a Heiau in South Kona which link to Papahānaumokuākea where he makes “spiritual connections at Papahānaumokuākea and ... connect to ‘ike kūpuna that come out of that Pō region of Kāne.” Kealoha Pisciotta adds, “I have a spiritual connection with temple ceremony in the Polohiwas from Mauna Kea. I have a mo‘olelo from my ‘ohana that shares the story of how Mauna Kea and Mokumanamana, and other places in Papa are connected. In doing the ceremonies on Mauna Kea, they do connect directly to the Solstice and Equinox alignments connect directly to Papa (hānaumokuākea) itself. So, there’s a spiritual connection. Those



ceremonies were kind of brought back to life on Mauna Kea many, many years ago with the Royal Order (of Kamehameha). Uncle Kahu Rotorangi, who’s Hawaiian and Maori, and some of the star alignments and through those connections as well.”

Some tangible ways consultees have engaged in ceremony at Papahānaumokuākea are described in these accounts:

- 
- **Kēhaulani Springer:** We grounded ourselves in cultural protocol, including oli and mele; conducted kilo observations of the lani, honua and kai; participated in integrated research of our intertidal and coastal fisheries.
 - **A consultee wishing to remain anonymous explained** his experience offering ho‘okupu and how he had to observe certain rules prohibiting the bringing of ho‘okupu from outside the monument: The compromise was to bring wai which had to be frozen and then allowed to melt and present wai and i‘a from each one of those areas, i‘a ‘ula‘ula. In the case of Nihoa and Mokumanamana was ‘ū‘ū. And in the case of French Frigate Shoals, it was a red ‘uhu. So, I speared them and I presented them along with the wai. I also collected wai at the same time from all three areas, which were then used as ho‘okupu in many ceremonies.

Kilo, Access Trips for Training and Mentorship, Indigenous Science/Research

Multiple kinds of kilo are practiced at Papahānaumokuākea: kilo lani, kilo hōkū, kilo ‘āina, kilo moana, etc. Chadd Onohi Paishon describes as a traditional voyager, kilo is critically important, “The practice of non-instrument navigation continues into Papahanumokuakea specifically in my practice to Mokumanamana and understanding the movement of stars, moon, sun, waves, migration of whales, and movement of birds all of which happens in Papahanaumokuakea.” He adds, “Continued observation within Papahanaumokuakea of these people allows us to be prepared for change.”


Papahānaumokuākea is an important place for training and ‘ike building. Our consultees have shared their experiences conducting research and educational outreach through university work and professional affiliations:

- Research related to support effective community-based marine resource management
- Archival research of Kuaihelani with a strong ‘ōlelo makuahine component
- Leading outreach and educational lessons for PMNM within local communities.
- Kū‘ula (Traditional Hawaiian Marine Management)
- Intertidal ecosystem studies, monitoring ‘opihi
- “Workshops aimed to develop and refine inquiry and cultural practice methods, activities and measure for inclusion in the Native Hawaiian text for Papahānaumokuākea Marine National Monument. The workshop was held on Pihemanu (Midway) in November 2012 and included place-based, experimental meetings, workshops that utilized māka‘ika‘i, hana no‘eau, pule and kūkakūka.”
- “Native Hawaiian outreach education, resource management, cultural practices, research.”
- Studying wahi pana of Papahānaumokuākea and engaging in naming practices at PMNM
- Conducting interviews of “several Kanaka ‘Ōiwi to learn of their connections and mo‘olelo to Kuaihelani.”

Voyaging and Wayfinding:

Papahānaumokuākea is an important place of training for traditional voyaging and wayfinding. Consultees familiar with these practices describe the following:

- **Anonymous:** The practices done were “study of stars, sun, and moon as they relate to manamana.”
- **Chadd Onohi Paishon:** I have made a connection [to Papahānaumokuākea] through voyaging history. Continued practice of non-instrument navigation and voyaging. My connection is thru voyaging and the connection to Mokumanamana and our navigational heiau, Ko‘a Heiau Holomoana in Mahukona. I was able to make my first connection physically to Mokumanamana as a Team headed by Aunty Pualani Kanahale, that traveled there to observe the winter solstice. The practice of non-instrument navigation continues into Papahānumokuākea specifically in my practice to Mokumanamana and



understanding the movement of stars, moon, sun, waves, migration of whales, and movement of birds all of which happens in Papahānaumokuākea.

- **Hōkū Pihana:** I connect with the ancestral practices of wa‘a voyaging as these realms held the voyaging pathways that connected us to our Polynesian cousins and taught us how to voyage with our kūpuna on our oceans using our skills and tools.”
- **Catherine Fuller:** As a member of the Polynesian Voyaging Society who has had the privilege to visit Nihoa, Mokumanamana, and Lalo, the islands are a place of learning that our kūpuna used to study navigation. Today, being able to voyage through the islands also provides a way for modern voyagers to learn and perpetuate voyaging as part of our culture. The practice of voyaging and traditional navigation can happen in any season, weather permitting. The islands of Nihoa and Mokumanamana are valuable as small, visible targets that provide a manageable navigational challenge. Navigating and voyaging to Lalo and the islands beyond requires more skill and, for the safety of vessels and the ecosystem, modern navigational instruments as a backup.
- **Anonymous:** I do believe that there are navigational practices that occur. I do think auntie Pua (Kanahele) and some of her haumāna are actually on the money when it comes to the ahu, the platforms, the marae that are up on Mokumanamana as being navigational points. It also fits right into the Polynesian Voyaging Society’s navigators of shooting for a line of islands when they go south. When they come north, they shoot for a line of islands, and sometimes you hit the island that you’re looking for. Sometimes you hit an island that’s to the left of it, to the right of it, and then you make your course correction. So, it’s fortunate to have a line of islands in the south and a line of islands in the north.”




Feather Gathering

A special cultural practices permit allows for kia manu to acquire feathers and bones from birds at Papahānaumokuākea, in order for certain traditions to continue.

One consultee explained the history behind the rule:


Some of the early uncles that influenced the process with regards to consumable resources as part of the first conditions of the original Emergency Proclamation ... [T] here were culturally appropriate items like feathers, seabird feathers, some shells, and



some other not consumable. And when I say not consumable, not consumable for sustenance in the human body. They were negotiated with Fish and Wildlife Service through OHA. So those items could be brought back to be used by Native Hawaiians in restoring or creating culturally appropriate products.

One anonymous consultee explained their use of moli iwi (albatross bones used in ceremony, tattooing practices). As stated previously, Akoni Palacat-Nelson also shared the use of bird feathers from Papahānaumokuākea to fashion kāhili and prepare Lono Makua for annual Makahiki ceremonies.

Iwi Kūpuna (repatriations)



Akoni Palacat-Nelson shared that certain chiefs were buried at Papahānaumokuākea and surmises that this lent greater significance that they would already be resting in Pō by virtue of their physical bodies laying there. Today, Kānaka Maoli engage in repatriations of iwi that have been physically removed from Papahānaumokuākea. An anonymous consultee noted that “Halealoha [Ayau] and his crew reinterred iwi that was held at the Bishop Museum back to Nihoa [and] that’s a modern example of mālama kūpuna. So, it continues even to today. The very act of trying to protect the area, spiritually, is a reflection of our kūpuna pushing us at this time to provide these protections.”

Fishing (Sustenance, Subsistence)

“The foundational component of the native relationship with fisheries and harvesting of resources, was that the kānaka and their environment shared a familial and religious relationship. Each person bore responsibility for his or her actions. This concept is personalized and expressed in Hawaiian life as ‘Mālama i ka ‘āina, a mālama ka ‘āina iā ‘oe!’ (Care for the land, and the land will care for you!).”²³⁴

²³⁴ Kepā Maly Kumu Pono Associates, Volume I: Ka Hana Lawai‘a, pg ix.

Historical Accounts of Traditional Fishing

“An interview held with Mr. Bruce Robinson, whose family owns Ni‘ihau Island, in order to locate kupuna who might be able to recount Ni‘ihau bottom fishing practices before the modern fishery era, but Mr. Robinson reported that such kupuna do not exist today. Mr. Robinson reported that during the period from about 1915 to 1925, the oral tradition of past fishing practices carried on by Ni‘ihau residents was broken and that today’s kupuna on Ni‘ihau do not have a recollection of past fishing practices. He said that Ni‘ihau residents did have the capability to travel to Ka‘ula and Nihoa Island until the late 1800s. One Ni‘ihau remembrance is that of a woman who waited on the beach for weeks awaiting her husband’s return from a journey, he said.”²³⁵ “There is evidence that Ni‘ihau fishermen engaged in bottom fishing at considerable depths, according to Mr. Robinson.”²³⁶

The CIA also cites extremely seasonal ‘ulua fishing on Nihoa to bring back to families living on Ni‘ihau


Current Fishing within the PMNM

In more recent years, just prior to the establishment of the Monument, an anonymous consultee informed us that her father fished at Midway.

Since that time, however, Co-Trustees of the Monument prohibit all kinds of fishing except for sustenance, which means that those who have been authorized access to Papahānaumokuākea may catch fish during the period of access for reasonable consumption, but may not return home with anything caught at the Monument. Some rationale for these rules are derived from the Native Hawaiian Practices Permit, and those who have crafted the criteria for it. The permit is based on two important customs: (1) the traditional responsibilities and privileges of residency; and (2) the inappropriateness of harvesting outside of your ahupua‘a or moku (traditional land divisions) to subsist and take resources from. The Native Hawaiian

²³⁵ Pacific Fisheries Consultants, Native Hawaiian Fishing Rights Phase 1 The Northwestern Hawaiian Islands at 23 (July 1990).


²³⁶ *Id.*



Practices permit for PMNM acknowledged this and limits permittees to “sustenance fishing” a form of non-commercial fishing allowing permit holders to catch and consume within the monument borders. In these instances, it was deemed appropriate to harvest in outside areas like the PMNM to support the act of the journey, not to finance the journey.

Our consultees unanimously agree with the mana‘o behind this prohibition. One consultee explained the history behind the rule:


Some of the early uncles that influenced the process with regards to consumable resources as part of the first conditions of the original Emergency Proclamation made it such that any i‘a or any consumables be consumed while in the Monument and not brought back.



Brad Ka‘aleleo Wong stated, “While fishing is an important tradition for Hawaiians, and should be practiced with restraint in Papahānaumokuākea, it should not be the main purpose of our activities while there. Fishing should only be used to enhance one’s experience and to share in its abundance while also providing back to the place in some way. The action of fishing in Papahānaumokuākea should carry a certain mindset while doing so, and one that emphasizes reciprocity, respect, and kuleana to the place. As someone that enjoys fishing, too often we get carried away with the “sport” of it, and for some, the financial gain of it. That is not a knock on those types of activities in general, because I think they are important too. I just think there is a time and place for that to occur, and there is enough ocean for that close to the main Hawaiian Islands. I do believe Papahānaumokuākea can be a region that should feed us physically once again, at some time in the future. However, until that time, I think it is important that we learn from the region and utilize that knowledge to better mālama our resources here in the main Hawaiian Islands so we may once again think sustainably.



The Extent to which Valued Cultural, Historical, or Natural Resources -- including Traditional and Customary Native Hawaiian Rights – Will be Affected or Impaired by the Proposed Sanctuary Designation for Papahānaumokuākea




A general observation was made regarding the present state of Papahānaumokuākea in terms of anthropogenic disturbance and ongoing threats to the ecological and biocultural health of Papahānaumokuākea. Uncle Paka Harp noted, “Other than US military wrecks, contamination, and trash, commercial fishing wrecks and relics, objects and damages from past commercial exploitation, everything currently existing in the area are cultural resources.” While not necessarily an impact of sanctuary designation as this adverse situation already exists, this is an important observation to note as the Co-Trustees contemplate ways of improving existing conditions with collaboration and sound management.

Spiritual Sustenance, Religious Ceremonies and Protocol, Spiritual Sustenance, Religious Ceremonies and Protocol, Different Akua Who are Prominent at Papahānaumokuākea, Archaeology and Wahi Kūpuna Stewardship

One consultee expressed concern for the way cultural and historic sites are currently managed at Papahānaumokuākea and recommended that some changes be made to ameliorate the situation:

Having sat on the Humpback Whale National Marine Sanctuary and working at Mokupāpapa, I do know that there are benefits to the Monument designation and to the multi-org board that runs it with OHA (the Office of Hawaiian Affairs), NOAA (National



Oceanic and Atmospheric Administration) FWS, and DLNR (Department of Land and Natural Resources) as ‘equal’ partners. NOAA’s main competency is not in managing cultural and historic sites.

Regarding whether or not sanctuary designation would she demonstrated some uncertainty. She is unsure that any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds, “But I don’t imagine that our sites will be impacted. I would like to add, in addition to ‘Ōiwi wahi pana that I would love to see improvements to the care of currently neglected World War II sites, particularly on Midway.”



Other

Our consultees did not express many negative comments as to expected impacts along the different categories of cultural practices and traditions which we discussed earlier in the previous section. The following are more generalized comments on potential impacts.

In contemplating whether or not any cultural resources, practices, and/or beliefs will be lost or obliterated if this project proceeds, one consultant surmised, “[It] all depends on how governance is structured.”

Chadd Onohi Paishon stated, “I believe the areas of cultural practices are critical for Papahānaumokuākea because if we do not continue to practice then we will lose all Native Hawaiian traditional subsistence, spiritual, religious, and ceremonial activities.”

When asked whether any cultural resources, practices, features, or beliefs would be lost if the project proceeds, another consultee responded, “No, but there could be the potential for misinterpretation of cultural resources, or beliefs if consultation with cultural practitioners does not occur.” His experience with current management of the Monument has led him to believe that there is a “lack of Hawaiian involvement with developing long term management plans.”

Those who responded positively towards sanctuary designation expressed the following:




- **Catherine Fuller:**
 - She does not believe that any cultural resources practices, and/or beliefs will be obliterated or lost if this project proceeds
 - “Increased protection would be beneficial for the marine resources to eliminate any illegal fishing and gathering in the monument.”
 - “I think that the impacts would continue to be positive and important as a model of indigenous leadership in the protection of cultural, environmental and spiritual resources.”

- **Hōkū Pihana:** Positive, (1) more protection and support of PMNM. (2) increased food resources. (3) improved health and wellness of PMNM and MHI. If the sanctuary designation is grounded in Kānaka ‘Ōiwi practice and worldview with the intent to further protect the mo‘okū‘auhau of Hawai‘i nei through genuine and transparent relationships with all involved partners then I don’t see any major adverse effects from this designation.

- **Kēhaulani Springer:** I believe there will be positive impacts to allow for cultural practices to continue within Papahānaumokuākea.

- **Anonymous:** Sanctuary designation will strengthen existing protections in Papahānaumokuākea that stem from the current monument designation under the Antiquities Act which is vulnerable to alteration (i.e. reduced size of protected area), or removal by the president of the U.S.. Commercial activities being promoted as part of sanctuary designation. Positive impacts, Prevent repeal of current designation under the Antiquities Act.

- **Anonymous:**
 - Perhaps access by Kānaka for cultural purposes. I can imagine that an unregulated process might hinder or place too much red tape on projects/programs for Kānaka to continue our cultural practices and connections at these certain places.
 - Yes, I do support the designation. My biggest concern is ensuring that Kānaka voices are at the foundation and forefront of National Marine Sanctuary designation from planning to implementation. However, I know that there



are many Kānaka who are in these spaces doing just that. For this reason, I do support it.

- I can't think of any negative outcomes. I can think of only positive outcomes. So, with the designation and eventually adoption of a National Marine Sanctuary comes the protections that are associated with the National Marine Sanctuaries Act. The promulgation of rules. The implementation of fines. The sort of recognized structure of a federal agency as opposed to executive orders or executive proclamations. The additional recognition and hopefully increase in budget, which will increase protections. And then having the National Marine Sanctuary implores other federal agencies such as the Coast Guard, the military, other agencies to contribute at an increased level because of the designation. The protections of any future actions could not be reduced below the "floor" that was set by a Presidential Proclamation, Protections such as those suggested in future regulations could only be made stronger.




- **Naia Lewis:**


- I do not think there will be any major changes from what currently exists but unless it includes a lessening of protections, due to external pressures, such as WESPAC, a sanctuary would be a benefit.
- "As long as there is U.S. federal control, some in the Hawaiian community may never be trusting or satisfied or supportive of an action like Sanctuary Designation. However, with the current paradigm of political power and control, Sanctuary Designation would likely increase cultural integration and community input."


Others supported sanctuary designation, but either with some ambivalence or with certain caveats:

- **Pelika Andrade:** Depends. We are being assured that the co-existing co-managership will continue and existing respect for cultural collaboration will continue. Sanctuary designation could change that if agencies do not hold to this understanding. Could derail the existing co-management cohesiveness if sanctuaries start to 'own' and not continue to collaborate within their roles.
- **Chadd Paishon:** I think the impact on Papahānaumokuākea will be both positive and negative due to time and the changing environment which has continued from wa kahiko



and that will continue past us but is exactly why we need to continue our cultural practices. The positive is the continued recognition and practice to care for this very important area and the negative is that in access to this fragile environment, we will continue to see the progression of time and the process of erosion and others impact the area.

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- **Anonymous:** It depends on the Wespac (Western Pacific Regional Fishery Management Council) proposed fishing regulations and on the outcome of its pending review under the Sanctuary Designation process, it could definitely be harmful and negative in setting a dangerous precedent or loophole for exploitation and misinformed management decisions through the guise of cultural subsistence practices. If their proposed fishing regulations package is approved, it will definitely have adverse effects on the biocultural seascape of Papahānaumokuākea. It will change the relationship at a very basic level and will open up the flood gates to cultural subsistence being exploited through inaccurate information regarding cultural customs specific to Native Hawaiians. Our ‘Ōiwi kūpuna like Uncle Buzzy Agard and Uncle Kāwika Kapahulehua remind us that Papahānaumokuākea needs to be protected and the many conversations amongst the CWG led to the support for using the definition of sustenance (everything taken in the monument is consumed in the monument). Positive impacts would be if our cultural practices and ‘Ōiwi voice and position to support co-management of the Sanctuary through the CWG are protected in perpetuity.
 - **Anonymous:** I believe that sanctuary designation will have a positive impact on cultural resources however native practitioners should have a say on how the sanctuary is managed. I support [sanctuary designation] with concerns of government regulations that may restrict cultural access.”
 - **Brad Ka‘aleleo Wong :**
 - An indirect impact of Sanctuary designation that creates some level [of] uneasiness is how the potential new Sanctuary will uphold Hawaiian values and traditions within its management structure. And additionally how it will incorporate the perspectives if the Cultural Working Group, whose members have provided a wealth of knowledge and experience to environmental and cultural management.
 - A positive impact of Sanctuary designation is that it will provide additional protections for the region while hopefully providing necessary recognition to the importance of indigenous and cultural knowledge.
 - In general, I support the protection of the place as an ‘āina akua. Whether that is through a Sanctuary, Monument, Reserve, or other, is not my biggest concern, as it has been shown that each has provided protection and a level of elevation of cultural





knowledge. If NOAA has decided that a Sanctuary is what they need to provide the resources to help protect the place, then it is agreeable if they continue to give reverence to Native Hawaiian interests.

- As long as the Sanctuary stays within or ONLY encompasses what is already protected under the Antiquities Act, then that is maika‘i. I would not support any expansion outside of current Monument boundaries towards the main Hawaiian Islands, as that would erode trust within various Native Hawaiian communities and practitioners.
- **Anonymous:** I believe the sanctuary designation process is a good thing for conservation and the vitality of the corporeal and material ‘āina and moana. But I am concerned that this ceded additional authority to the federal government, particularly to the American empire which continues to illegally occupy Hawai‘i. So, I am wary of the potential losses Kanaka may sustain in the political arena.
- **Uncle Isaac “Paka” Harp:**
 - “Sanctuary designation provides a stabler platform for protections compared to Presidential proclamations under the Antiquities Act, which are subject to legal challenges. The caveat is that I have great concern over the differences between Monument and Sanctuary designations. Typically, under a Monument designation everything is prohibited unless specifically allowed. In comparison, under a Sanctuary designation everything is allowed unless specifically prohibited.”
 - “Other than perpetuating the occupying government’s control over Hawaiian Kingdom assets. There are no additional adverse impacts that come to mind. Positive Impacts are yet to be determined.”
 - “I support Sanctuary designation with concerns that are presented in my previous responses.”



The Feasible Action to be taken by the Co-Trustees to Reasonably Protect Native Hawaiian Rights

This section covers recommendations from our consultees and can be encapsulated in the following sentiments offered:

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- We need to understand how to tend to these spaces as one pae‘āina. If we need to call describe it as a biocultural seascape, then we can call it that. We have different pilina and knowledge associated with an intimate understanding of how these spaces function and what they need to be productive. Our kūpuna understood that Papahānaumokuākea has a different kapu and function in the Hawaiian Universe, so it is all connected. Just with different functions and relationships.
 - ‘Ōiwi practices and customs changed according to how our kūpuna understood the function of these realms and spaces - interconnected spiritually, physically, ecologically, etc. In all of our epic oral narratives and traditions, we see that Papahānaumokuākea represents a journey to Pō, the ‘Āina Akua, as an ultimate test of ancestral knowledge, mana, expertise, and so much more. It’s about the journey there and back. All these histories continue onto the Main Hawaiian Islands. There is no gap between these connections, though there is a major change of practice, customs, and values associated with Pō, Ao, and ‘Āina Akua.

Preserve Access for Continuation of Native Hawaiian Living Culture, Regaining Ancestral Wisdom and Sustenance

Our interviews and questionnaire responses made clear the importance of continuing access to Native Hawaiians for knowledge production, expressing and evolving their living culture, and regaining wisdom and guidance from their ancestors and Kūpuna Islands who reside in the Pō and Wao Akua:

- **Anonymous:** I would add that the mele, mo‘olelo, oli, ka‘ao created in recent years by Hawaiian (often on cultural accesses) should be uplifted and made known in appropriate ways for the community.
- **Naia Lewis:** The entire archipelago is important but islands and atolls like Nihoa and Mokumanamana and Holaniku are important in specific ways that have been documented. Research and new knowledge and cultural production by Hawaiians created for specific locations should be archived and referenced as needed.

- **Hōkū Pihana:** All of the Native Hawaiian practices in and relationship with PMNM have existed long before any types of marine protection designations existed and should be sustained always under every important designation given to Papahānaumokuākea and should be the main purpose for why the spaces of our kūpuna islands are protected, cared for, and recognized as invaluable culturally, spiritually, and environmentally.
- **Anonymous:** I strongly believe that access opportunities should be given to practitioners to grow in their understandings of this ancestral realm and was something I advocated for strongly in my assessment of visitation on Midway. I'm not sure how sanctuary designation might [a]ffect this.

Should Papahānaumokuākea receive successful sanctuary designation, mana‘o from our consultees ought to be given due consideration and possess the weight it deserves as representative of the position of Co-Trustee for Native Hawaiian interests.

Spiritual Sustenance, Religious Ceremonies and Protocol, Spiritual Sustenance, Religious Ceremonies and Protocol, Different Akua Who are Prominent at Papahānaumokuākea, Archaeology and Wahi Kūpuna Stewardship

Akua and Mo‘olelo

With respect to akua relationships and preserving knowledge in mo‘olelo, oli, and mele, our consultees stated:

- **Anonymous:** [O]ur presence as kākana in Papahānaumokuākea on huaka‘i is highly important to not only remember these and other mo‘olelo, but to experience what our kūpuna experienced, feel what they felt, and understand what they know. In this instance, we are also able to create new mo‘olelo and forge new connections to this place.
- **Anonymous:** Keeping mo‘olelo alive and advocating for the building of pilina to these sites, particularly to Kuaihelani.

- **Anonymous:** A more intimate connection with the elemental akua, and by that intimacy, a more fruitful dialogue can be carried out between the subject, the kanaka, and their lord, their akua.
- **Catherine Fuller:** We can continue to speak them [akua], recognize them, include them in protocols and public education
- **Kepā and Onaona Maly:** Research and new knowledge and cultural production by Hawaiians created for specific locations should be archived and referenced as needed.”

These comments speaks to ensuring access in order that Native Hawaiians may continue to build pilina, forge new connections with PMNM and the akua presences, and create new mo‘olelo, oli, mele, and inoa as a result.



Ensuring Cultural Access and Management

A number of our consultees emphasized that management of the sanctuary, if approved, needs to accommodate native Hawaiian traditional and religious exercises, as well as integrate their culture and approaches to management:

- **Naia Lewis:** Again, it’s about how the designation is written and implemented. Native Hawaiians, with relevant expertise and access experience should be involved in writing the designation and related documents. Multiple disciplines, utilized within a cultural context, should inform management decision making.
- **Kepā and Onaona Maly suggested that** “preservation and protection of the ‘Papahānaumokuākea’ region should not exclude the right of Hawaiians to exercise/engage in traditional cultural practices. Protection/preservation does not mean exclusive access for scientific purposes only. Too often the protection has led to denying access and perpetuation of practices that have time-depth in native history. ... Continue building stewardship initiatives and cultural practitioner partnerships. Done properly with actual respect and honor for native Hawaiian traditional and customary practices will enhance the long-term stewardship of Papahānaumokuākea. Giv[e] equal weight to ‘ike kūpuna in the long-term stewardship of Papahānaumokuākea.”
- **Catherine Fuller suggested that we** “[c]ontinue to gather commentary and ‘ike from a variety of constituencies to advocate for PMNM, educate about it and manage it safely. Ensure that those constituencies have access to the area to continue their relationship with it as kia‘i.”

- **Anonymous:** Find alternatives to federal and State-based management regimes like designating konohiki who can restore and maintain cultural resources in Papahānaumokuākea.

Kilo (e.g., kilo lani, voyaging and wayfinding, ‘aimalama, etc.), Access Trips for Training and Mentorship, Indigenous Science/Research

Specific to activities of kilo, voyaging and wayfinding, indigenous science and research, our respondents noted:

- **Anonymous:** Practitioners as scientists, longer term or recurring opportunities for Hawai‘i peoples to do seasonal kilo (observational practice) and to build pilina to place, that are potentially independent of jumping on a research cruise or marine debris removal effort but elevating this relationship building and kolo as research that is valued in its own right.
- **Chadd Onohi Paishon recommended,** “[t]o continue to access Papahānaumokuākea via the cultural practice of voyaging with our wa‘a.”
- **Anonymous:** Being elated as Indigenous science that is supported within its own category instead of tagged on to other research efforts as it is now.
- **Hōkū Pihana commented,** “I think it is important to include language about sample gathering and repatriation practices to ensure pono research behavior.”
- **Anonymous:** As an educator, I have a kuleana to share my experiences and perspectives about Papahānaumokuākea to help future generations of Hawaiians build a relationship with this place.

Thus, a recommendation would be to ensure that these types of educational opportunities continue for Kānaka Maoli.

- **Anonymous:** [A]s a practitioner of wa‘a I believe it is important to provide those experiences from the ocean as well and to ensure those traditions continue within that space.
- **Chadd Onohi Paishon:**
 - The practice of non-instrument navigation continues into Papahānaumokuākea specifically in my practice to Mokumanamana and understanding the movement of stars, moon, sun, waves, migration of whales, and movement of birds all of which happens in Papahānaumokuākea.

- Continued observation within Papahānaumokuākea of these people allows us to be prepared for change.

Fishing (Sustenance, Subsistence)

- **Nai‘a Lewis recommended**, “The region should not be opened to commercial or subsistence fishing (versus sustenance fishing).”
- **Hōkū Pihana recommended**, “to clearly and concisely describe fishing practices for consumption and cultural purposes while in Papahānaumokuākea so there are minimal to no ambiguity in how these practices are defined.”
- **Kepā Maly’s Ka Hana Lawai‘a (Vol. I)**
 - Interviewee recommendations included “Protect the Northwestern Hawaiian Islands from commercial fishing interests. This is important to both the protection of native species (the large breeding stock), and the well-being of the larger Hawaiian Archipelago fisheries.” pg. xi

Other

Other Biocultural Resources, Cultural Practices and Beliefs

- **Anonymous:** “Observing and sharing the direct impacts of anthropogenic activities happening in Papahānaumokuākea shapes new cultural norms and political decisions in positive ways to promote sustainable lifestyle choices and legislation (i.e. marine debris impacts on turtles, marines mammals and seabirds).”

De-Occupy Papahānaumokuākea from American Interference. Hawaiian self-governance and primary management of Papahānaumokuākea.

- **Uncle Isaac “Paka” Harp:** “De-occupation in addition to financial reparations for injuries inflicted on the Hawaiian islands and on Hawaiian subjects regardless of race is the primary and truly appropriate mitigation that should be pursued.” He also identified de-occupation as a preferred or desired mitigation measure.
- **Anonymous:**
 - Their primary concern is “the maintenance and enhancement of Native Hawaiian governance of Papahānaumokuākea.”


- “When Native Hawaiians are self-governing, I would greatly prefer that Papahānaumokuākea were governed entirely and holistically under a Native Hawaiian government with continued U.S. financial support. The total of financial resources that the U.S. spends on the management of Papahānaumokuākea would effect all-around more positive outcomes under Native Hawaiian governance.”

Sanctuary Boundaries

- **Anonymous:** The proposed marine sanctuary should stay within the same boundaries. “I also want to ensure the moana is protected from mining.”
- **Anonymous:** Prefer boundaries that include the maximum area possible, “Including land areas, and any jurisdiction and rules in favor of a unified approach under a single jurisdiction. The patchwork of jurisdiction creates unnecessary work and challenges.”
- **Nai‘a Lewis:** The boundaries should match the expanded boundaries of the existing monument.
- **Pelika Andrade:** “Expansion. Ensuring that Native Hawaiian influence and agency remains intact.”
- **Anonymous:** In terms of sanctuary boundaries, “the bigger the better.”
- **Anonymous:** I think an additional layer of protections are necessary. Protections of everything within the monument is essential to cultural integrity throughout the pae ‘āina.

Ensuring continued protections and overall mālama of Papahānaumokuākea

- **Uncle Isaac “Paka” Harp -**
 - Ultimately, the “only patriotic Hawaiian Kingdom subjects be in charge of management. These individuals must be elected by patriotic Hawaiian Kingdom subjects to management positions rather than being appointed by the occupying government.”
 - Short of full de-occupation of America, Uncle Paka stated that ensuring continuance of the existing Cultural Advisory Council to advise management is a way to integrate cultural practices into resource management and/or restoration today.
- **Hōkū Pihana**

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- “I think it is important to include language about sample gathering and repatriation practices to ensure pono research behavior.”
 - “These cultural practices should be interwoven into all aspects of how we care for and engage with Papahānaumokuākea most importantly how we weave our sciences and knowledge systems in research, stewardship, and sustainability.”

- **An anonymous consultee shared:**

- “I support additional layers of protection provided through this sanctuary process to protect our ‘Āina Akua from those who wish to exploit or de-value its existence and our genealogy.”

- **Kēhaunani Springer:**

- “I support the proposed Marine Sanctuary designation, so it can be permanently safeguarded as a place where kanaka maoli can connect spiritually and culturally to Papahānaumokuākea.” “I will continue to be an advocate for the protection of Papahānaumokuākea. As time and opportunity allows, I would also give back and mālama by providing research experience or other needs that may arise.


- **Pelika Andrade**

- “[I] [h]ave concerns. Ensure Native Hawaiian influence and agency.”
- “We are connected and have responsibilities there...but do not live there so we must act accordingly. It is not our playground or pillaging site...but the ‘home‘ of our hulu kupuna...a place to tread softly, and respectfully. As we would a treasured kupuna. As that relationship is grown and deepened, our actions will too!”


- **Brad Ka‘aleleo Wong**


- “As a former employee for a managing agency, I see my role as continuing to advocate for Native Hawaiian interests within Papahānaumokuākea in however ways possible by using my experiences from a management role perspective to ensure continued protections.”
- Much of the cultural background of Papahānaumokuākea was worked into the development of Mai Ka Pō Mai. Its integration into the new management plan would be a good first step in recognizing cultural knowledge, practices, and values into management.”
- “Another important effort would be to ensure that Native Hawaiians have a meaningful role within management so that cultural knowledge can be advocated for, where appropriate.”



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- “In the impacts I mentioned in prior questions, one way to ensure Hawaiian knowledge and values are used as the baseline for management, is to lean on the expertise of folks such as the Cultural Working Group to provide foundational knowledge for any new management plan.”
 - “I do want to best advocate for Hawaiian interests within Papahānaumokuākea, and if there are opportunities to advance things like Hawaiian involvement, knowledge, or management role or other, within this Sanctuary process, I think we should all look into all those options.”
 - Make sure that observations of direct impacts of anthropogenic activities happening at PMNM inform management decisions, regulations, and policies, especially as they may affect biocultural resources and cultural practices

- **Catherine Fuller**

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- “I support as long as it continues to be a collaboration between governmental agencies and native Hawaiian constituents.” She supports maintaining the 2016 boundaries.
 - “Increased interagency coordination would continue to be a benefit, following the model of the current use agreement, with multiple constituents continuing to create and provide commentary on protections as well as educational material for the public. With the continuing progress of climate change, it will be increasingly important to monitor and document the health of the marine and terrestrial ecosystems.”
 - “Continue to gather commentary and ‘ike from a variety of constituencies to advocate for PMNM, educate about it and manage it safely. Ensure that those constituencies have access to the area to continue their relationship with it as *kia‘i*.”
 - **Short or long-term concerns:** “Securing funding needed to employ sanctuary staff positions in ways that don’t adversely impact current PMNM staff.”



Integrate and Ensure that Cultural Practices and Native Rights are Protected. Uphold Cultural Resource Management and Restoration in Sanctuary.

- **An anonymous consultee shared:**

- “Details and specifics around cultural resources and practices are less important to note in a CIA than processes, organizational mechanisms, and governance that uplift knowledge and kuleana holders as primary decision-makers for all activities in and overall management of PMNM. Impacts cannot be mitigated and avoided through an inventory of words-it can only be mitigated and avoided through direct governance by knowledge and kuleana holders.”
- “Another HUGE process question that starts with the governance framework—strategies are best designed with this context in mind. If this type of discussion is wanted, I’d love to kōkua to figure out how to approach and facilitate the discussion, as well as offer my mana‘o in that discussion.”
- “Support, as long as it maintains or enhances Native Hawaiian governance mechanisms.”

- **An anonymous consultee offered the following recommendations:**

Key cultural understandings and interactions:

- “Many of these knowledge resources have been gathered. Some are recently created. All are telling of cultural understandings and interactions. None are useful as words at the fingertips of untrained or under-trained. If a ‘key’ is to be identified, it’s a process that always lifts the truly knowledgeable into positions of decision making and supports multiple schools of knowledge being brought to bear on decisions.”

- **An anonymous consultee recommended:**

- “To help apply Native Hawaiian, cultural practitioner, and innovation lenses to planning and plan implementation with multiple specialties including socio-organizational systems change and systems dynamics.”

- **An anonymous consultee recommended:**




- “Easy. Just get proper access, follow proper cultural and science protocols and practice.”
- “Getting more Hawaiians to work, study, visit, practice within Papahānaumokuākea.”
- “I think OHA (the Office of Hawaiian Affairs) and the Papahānaumokuākea group are doing a good job. I would rely on their responses.”

- **An anonymous consultee recommended adopting Hawaiian nomenclature for new species:**

- “Specifically with how naming can support management, but to reaffirm the point, naming something (especially with a Hawaiian name grounded in a traditional naming process/practice) is a way to make these species and places real and relevant to the world. The reality is that most people of the world will not see any of these species in real life; nor will most people be able to witness the true human impact (plastic, waste, invasive species etc.) on Papahānaumokuākea; nor will most people ever see the decline and extinction of a species; nor will most people ever see an eroding island return to the sea—most people in the world will never have that experience, but cultural practices demand spiritual connection. Thus, by doing these practices, creating and saying these new names, listen to mele, read mo‘olelo, these people who will never have a chance to ‘ike maka PMNM will be instantly transported there—helping to increase the important and priority these cultural resources.”
 - I am a language person, and I have always been interested in the ‘ōlelo Hawai‘i aspect of every area I have ever been involved in. I want to make sure that ‘ōlelo Hawai‘i and the unique perspective it offers is always incorporated into the management and protection of PMNM. Language is one of the ways we can ensure that it remains a Hawaiian place and a Hawaiian space offering more layers of cultural analysis and protection. Thus, anyway that ‘ōlelo Hawai‘i is a part of the designation is the role that I will assume (naming, research in Hawaiian language resources etc.)”
 - Important literature for traditional management: “See Mai Ka Pō Mai document; land management perspectives in Native Land and Foreign Desires (Kame‘eleihiwa), in Moku System (Winter et al), & No Mākou ka Mana (Beamer); Naming Practices in Hānau Ka Palihoa (Pihana & Lorenzo-Elarco).”
- **Hōkū Pihana**
 - “I support [sanctuary designation] and want to ensure that the Kanaka ‘Ōiwi gathering rights aren’t exploited or misinterpreted by other parties whose intent is to exploit the resources of Papahānaumokuākea for capital gains.”



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- “I feel that by using our Native Hawaiian tools, science, language, and knowledge systems in ocean stewardship throughout our pae ‘āina such as wa‘a kilo, and wahi pana we will contribute to the health and wellness of Papahānaumokuākea.”

- **An anonymous consultee recommended -**

- “Cultural Working Group (CWG) Nomenclature process, leading the way we articulate what inoa wahi mean to us, wahi pana, mo‘olelo, mele, oli in building, maintaining, and strengthening pilina to these places. Also being able to adapt and know that knowledge and pilina drive practices, so we know that names can evolve over generations. We have to be careful that our cultural practices are not distilled or white-washed into resource management and restoration today. The goal needs to be clear: ‘Āina Momona, healthy and thriving communities of people and place. Different places served different functions formed through generations of intimate pilina, so how do we learn how to listen to the needs of our ‘āina to thrive, and also re-adjust our behaviors to support productive places for our communities.”
- “I embrace a forever kuleana to continue supporting ‘Ōiwi voice, practices, research, and self-determination in guiding the co-management from agency, state, and community partnerships. One way or another, I know I will continue to stay active in the Sanctuary designation process and beyond. This is our generational work to keep opening doors and pushing boundaries - re-claiming spaces and our voice to self-articulate as much as possible.”

- **An anonymous consultee recommended**

- Cultural practices can be integrated into resource/restoration management “by allowing cultural practitioners to be a big part of the process.”
- Traditional/local strategies for resource management include “Mālama ‘āina.”

- **Kēhaulani Springer**

- “Share with the next generation and continue to have Native Hawaiians at the table for discussions about management and restoration.”
- “Kanaka Maoli need to be present in the space to maintain pilina and connection and to offer management strategies. Sometimes kapu are needed especially on endangered and threatened species.”

- **Pelika Andrade**

- Integrate cultural practices into management: “Purposefully! Respectfully! And deeply, not surface.”
- “Continue to partner, collaborate, and grow traditional and local relationships.”



- **An anonymous consultee recommended**

- “Traditional cultural beliefs and practices should inform modern resource management and restoration efforts. Our kupuna knew how to live sustainably and thrive in these islands, who better to inform and guide us in management and restoration?”
- “It is my hope that sanctuary designation will protect our cultural resources and practices from commercial and nontraditional purposes and allow for kanaka maoli practitioners to continue our traditional practices.”


- **Nai‘a Lewis**

- “There ha[ve] been substantive cultural activities which were documented; they should continue and new activities designed across the life of management in the region. I would add that all activities need to be packaged and shared in ways that allow them to be referenced and built upon as needed. We need more cultural collaboration to innovate on what has come before.”
- “The process leading up to formal designation MUST include the voices of people who have long standing ties or have accessed the region, preferably (but not solely) Native Hawaiians.”
- “I think others will have shared details about specific activities. I would add that it is critical that management continues to engage the public, to support the NHCWG (Native Hawaiian Cultural Working Group), to support innovations like Mai Ka Po Mai, and to uplift cultural research and processes designed by Native Hawaiians.”

- **An anonymous consultee recommended**

- “Finding alternatives to federal and State-based management regimes like designating konohiki who can restore and maintain cultural resources in Papahānaumokuākea.”
- “I support designation and encourage the Office of National Marine Sanctuaries to consider adopting a similar mission as the Kaho‘olawe Island Reserve Commission to ‘manage the sanctuary in trust until such time and circumstances as a sovereign native Hawaiian entity is recognized by the federal and state governments.”
- “Explore the idea of special area designations to allow for cultural practitioners to access Papahānaumokuākea for specific ceremonial, stewardship, and subsistence gathering practices.”



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- “The term cultural resources should be applied to other resources along with archaeological sites such as resources that are used for ho’okupu and Hawaiian cultural arts (i.e. feathers for kahili, ‘iwi manō for weaponry) .”
 - “Allowing opportunities for subsistence harvest by lawai‘a and other cultural practitioners to perpetuate tangible experiences and arts with younger generations.”

- **An anonymous consultee recommended**

- “I think it’s important when you talk about the legal analysis that there is a permitting process under the Native Hawaiian permit to conduct cultural activities such as fishing, navigating, and any other culturally appropriate activity. As you go through the analysis, especially Ka Pa‘akai there is a process by which the State and OHA and the other management board managers have allotted for Native Hawaiians who have the means, who have the ability to access the area. There is a process in which that exists and has existed since the beginning of the process for cultural practices.” “The fact that there’s a Native Hawaiian Cultural Working Group that helps to analyze the applications of permits both Native Hawaiian and others is a very, very important way of making sure that the activities that occur presently are in alignment with resource protection and cultural resource protection. You know, having slept in a bomb crater on Mokumanamana was one of the most surreal things that I have ever experienced because here’s a sacred ‘āina that, because it was, I don’t think we were ready at the time as Hawaiians because it wasn’t recognized or we didn’t have the knowledge to push for protections. Having the island used as a bombing range is sad, but good. Because now we know what happened and now we have kuleana to make sure it doesn’t happen again.”

- **Kepā and Onaona Maly -**

- “We do not know of any current impacts but suggest that preservation and protection of the “Papahānaumokuākea” regions should not exclude the right of Hawaiians to exercise/engage in traditional cultural practices. Protection/preservation does not mean exclusive access for science purposes only. Too often the protection has led to denying access and perpetuation of practices that have time-depth in native history. Take the example of fencing off forest regions to protect rare species (good plan, poorly executed), and finding that acts of sabotage occur, and the fences are cut open. Continue building stewardship initiatives and cultural practitioner partnerships. Done properly with actual respect and honor for native Hawaiian traditional and customary practices will enhance the long-term stewardship of





“Papahānaumokuākea.” “Considering earlier comments and giving equal weight to ‘ike kūpuna in the long-term stewardship of “Papahānaumokuākea” would eliminate concerns.”

Importance of maintaining strict cultural protocols for voyaging

- **Catherine Fuller:**
 - “As a voyager and a native Hawaiian, any time I spend within Papahānaumokuākea would be conducted with the utmost respect for the protocols and rules necessary to protect the area.”



Importance of preserving pristine marine ecosystem as a public trust

- **Catherine Fuller:**
 - “As a citizen of the Hawaiian Islands, I think of them as a place of hope, reminding us what a pristine marine ecosystem looks like. Papahānaumokuākea is a living treasure held in trust for all of Hawai‘i.”

Pono Research

- **Hōkū Pihana**
 - “I think it is important to include language about sample gathering and repatriation practices to ensure pono research behavior.”
 - “These cultural practices should be interwoven into all aspects of how we care for and engage with Papahānaumokuākea most importantly how we weave our sciences and knowledge systems in research, stewardship, and sustainability.”

Educating others about the significance of Papahānaumokuākea

- **Catherine Fuller**
 - “Having been there, it is my kuleana to represent my experience appropriately to the significance of the area as well as to educate others as to the area’s value.”



Justification for TCL/TCP designation:

Traditional and current Hawaiian cultural practices and knowledge streams recognize, uphold, and transmit knowledge regarding the inter-related nature of land, sea, and skynscapes and environments (Oliveira 58, 59, 64; Kikiloi et al. 2017). Kikiloi et al. (2017:438) write: The ocean played a key role for Native Hawaiians not only for the resources it provided, but also for physical and spiritual sustenance in their everyday lives (Andrade 2008; Oliveira 2014; Handy and Pukui 1958). The ocean as a cultural seascape is vital to Native Hawaiians' identity and being, and is an essential dimension to their cognitive understanding of the world (Lewis 1972; Kyselka 1987). It is imbued with cultural meaning that continues to connect the Hawaiian people in a genealogical web of ecological kinship (Oliveira 2014).

V. RECOMMENDATIONS



This legal analysis concurs with the recommendations and considerations provided in the CIA.