

State of Hawai'i  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic  
Resources  
Honolulu, Hawai'i 96813

April 10, 2026

Board of Land and Natural Resources  
Honolulu, Hawai'i

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National Monument Conservation and Management Permit to Mr. James Morioka, Papahānaumokuākea Marine Debris Project (PMDP), for Access to State Waters to Survey and Remove Marine Debris and Disentangle Marine Life as Needed

I. SUMMARY

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Conservation and Management Permit, PMNM-2026-007, to Mr. James Morioka, Papahānaumokuākea Marine Debris Project (PMDP). PMDP also requests a Special Ocean Use permit, PMNM-2026-008 for the capture of imagery for fundraising purposes. These special ocean use activities are contingent upon approval of PMNM-2026-007.

II. BACKGROUND LAW

The Board of Land and Natural Resources (BLNR), by the Department of Land and Natural Resources (DLNR) DAR and Division of Forestry and Wildlife (DOFAW), permits certain otherwise prohibited or regulated activities on or in its lands and waters, pursuant to Hawaii Revised Statutes (HRS) § 187A-6, 183D-6, and 195D-4; Hawaii Administrative Rules (HAR) § 13-60.5-5, 13-60.5-6, 13-126-9 and 13-126-10, and all other applicable laws and regulations.

III. DURATION AND LOCATION

The permit, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (PMNM), including the Northwestern Hawaiian Islands State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Lālo (French Frigate Shoals)
- Kamokuokamohoali'i (Maro Reef)
- Kamole (Laysan Island)
- Kapou (Lisianski Island)
- Manawai (Pearl and Hermes Atoll)
- Kuaihelani (Midway Atoll)

- Hōlanikū (Kure Atoll)

Cultural protocol including oli, ‘ōlelo no‘eau, and ho‘okupu (limited) will also occur in open ocean surrounding Nihoa, Mokumanamana, and Ke Alanui Polohiwa a Kāne (Tropic of Cancer) when passing through.

The activities covered under this permit would be authorized to occur via three separate missions, two cruises and one flight, between April 27, 2026 and October 10, 2026. The flight will travel to Kuaihelani on April 27, 2026 and return on May 14, 2026, with gear traveling to Kuaihelani on M/V Imua February 3-8, 2026, and returning to Honolulu on the M/V Imua June 22-27, 2026. The first cruise will take place between August 8, 2026 and August 30, 2026. The second cruise will take place between September 15, 2026 and October 9, 2026. Expedition dates may vary if unforeseen interruptions or delays occur.

#### IV. PERSONS COVERED UNDER THIS PERMIT

PMDP requests 14 staff from the list below and 8 partners (TBD) to participate in their first mission and 16 staff from the list for their second and third missions. There will be 7 staff from the Hawai‘i Resource Group on the second and third mission. A final list of individuals covered under this permit will be included in a report to the permit coordinators.

##### PMDP Staff:

1. James Morioka (Executive Director) – Mission Lead PMDP-2025-02 – Lead Diver and Lead Small Boat Operator
2. Kevin O’Brien (PMDP) – Mission Lead PMDP-2025-03 – Lead Diver and Lead Small Boat Operator
3. Derek LeVault – Lead Diver and Lead Small Boat Operator
4. Andrew Sullivan-Haskins – Expedition Photographer, UAS Pilot, Lead Diver and Lead Small Boat Operator
5. Lauren Fraser – Lead Diver and Lead Small Boat Operator
6. Charlotte Frank – Diver and Small Boat Operator
7. Sydney Luitgaarden – Diver and Small Boat Operator
8. Kamali‘i Andrade – Diver and Small Boat Operator
9. Kau‘i Aguiar – Diver and Small Boat Operator
10. Charlotte Bond – Diver and Small Boat Operator
11. Matt McDole – Diver and Small Boat Operator
12. John (JJ) Freier – Diver and Small Boat Operator
13. Darrian Kahealani Muraoka – Diver and Small Boat Operator
14. Cascade Mayer – Diver and Small Boat Operator
15. Ossian Nichols – Diver and Small Boat Operator
16. Kealohi Sabate – Diver and Small Boat Operator
17. Laura Eliza Beckwith – Diver and Small Boat Operator
18. Matthias Kala‘i Sim – Diver and Small Boat Operator
19. Bryson Kaimana Kau – Diver and Small Boat Operator

20. Neha Acharya-Patel – Diver and Small Boat Operator
21. Owen Pyle – Diver and Small Boat Operator
22. Jesse Moonier – Diver and Small Boat Operator
23. TBD – Diver and Small Boat Operator
24. TBD – Diver and Small Boat Operator
25. TBD – Diver and Small Boat Operator

#### M/V Imua Staff

1. Dennis Hans Bishop (Hawai'i Resource Group – HRG), Captain, M/V Imua
2. TBD (HRG), First Mate, M/V Imua
3. TBD (HRG), Second Mate, M/V Imua 19
4. TBD (HRG), Lead Engineer, M/V Imua
5. TBD (HRG), Deckhand, M/V Imua
6. TBD (HRG), Deckhand, M/V Imua
7. TBD (HRG), Cook, M/V Imua

#### V. INTENDED ACTIVITIES

The proposed permit activities would allow for large-scale marine debris survey and removal operations within PMNM and imagery collection for fundraising purposes.

Similar permits were issued in 2025 (PMNM-2025-004 and PMNM-2025-005). New modifications/activities to the 2026 permit application include the following: (1) field testing new marine debris cutting and processing tools such as a heavy-duty net extraction platform, (2) a pilot project to collect glass on the first and second mission, and (3) ancillary projects including coral bleaching surveys, archaeological surveys, algae distribution surveys, and expanded support for NOAA field camps. A biosecurity plan has not been finalized but will be coordinated between subject-matter experts at DAR and other co-managing agencies in coordination with PMDP for the permit to be considered valid for activities in the nuisance algae mitigation zones (NAMZ).

The National Oceanic and Atmospheric Administration (NOAA) NWHI Marine Debris Project (Project) began in 1996 and was led by NOAA National Marine Fisheries Service (NMFS) and other agency partners through 2021. The Project has demonstrated over time the necessity of large-scale marine debris removal operations for the protection and safety of marine wildlife, specifically the endangered Hawaiian monk seal and threatened green sea turtle. Between 2015 and 2021, the Project was co-led and co-managed by James Morioka (Executive Director, PMDP, and Kevin O'Brien (President and Founder, PMDP), while still operating under NOAA, prior to the creation of PMDP in 2019. PMDP is leading the Project in Papahānaumokuākea indefinitely after completing successful missions in 2020-2021 under NOAA auspices.

Since 2020, PMDP has led or partnered on thirteen (13) successful large-scale cleanups, successfully removing over 1.23 million pounds of marine debris from sensitive reefs, islands and atolls while rescuing countless entangled animals. In 2025, PMDP removed 184,940 pounds of debris during 66 operational days within PMNM. For 2026, PMDP aims to remove 200,000 pounds of marine debris over 66 days.

Specific objectives of the Papahānaumokuākea Marine Debris Project (PMDP) are as follows:

#### Marine Debris Survey and Removal

- Surveying for and removing derelict fishing gear (DFG) from shallow coral reef environments (0-30 ft depth) at Lalo (French Frigate Shoals), Kamokuokamohoali‘i (Maro Reef), Manawai (Pearl and Hermes Atoll), Kuaihelani (Midway Atoll), and Hōlanikū (Kure Atoll). Opportunistically at Kamole (Laysan) and Kapou (Lisianski).
- Surveying for and removing DFG, plastics, and other entanglement hazards from shoreline habitats at Lalo (French Frigate Shoals), Kamole (Laysan Island), Kapou (Lisianski Island), Manawai (Pearl and Hermes Atoll), Kuaihelani (Midway Atoll), and Hōlanikū (Kure Atoll).
- Evaluating the rates of marine debris accumulation and assessing its abundance and distribution on coral reefs and shorelines.
- Assessing ecological impacts of DFG on coral reef environments.
- Rescuing entangled protected wildlife, including Hawaiian monk seals, sea turtles, and sea birds, from marine debris when human intervention is necessary or possible.
- Conducting Unmanned Aerial Vehicle (UAV) surveys to detect marine debris and assess the abundance and distribution of marine debris on coral reefs and shorelines using an approved UAV platform.
- Conducting Diver Propulsion Vehicle (DPV) surveys to aid in the detection of marine debris underwater.
- Field-testing new prototype cutting tools (manual and electric) in-water and on-shore.
- Field-testing a new heavy-duty net extraction platform.
- Opportunistically removing large marine debris items such as abandoned derelict vessels (ADVs), FAD/weather/tide buoys, and other material.

#### Native Hawaiian Cultural Protocol

- Conducting Native Hawaiian cultural protocols (oli (chant) and ‘ōlelo no‘eau (Hawaiian proverbs)) at all islands and atolls, including Nihoa, Ke Alanui Polohiwa a Kāne, Mokumanamana, Lalo, Kamokuokamohoali‘i, Kamole, Kapou, Manawai, Kuaihelani, and Hōlanikū.
- Conducting Native Hawaiian cultural protocols including ho‘okupu (ceremonial gift offering) consisting of ti leaf and if permitted, wai (freshwater) and pa‘akai (salt) at Nihoa, Ke Alanui Polohiwa a Kāne, Mokumanamana, and Kuaihelani.

#### Ancillary Projects

- PMDP Field Camp Technician at Manawai supporting NOAA/Cooperative Institute for Marine and Atmospheric Research (CIMAR) Hawaiian monk seal research and marine debris surveys
- Hawaiian monk seal surveys
- Hawaiian monk seal restraining and flipper-tagging
- Coral bleaching surveys
- Maritime archaeology surveys
- Algae distribution surveys

PMDP intends to film/photograph protected wildlife (including Hawaiian monk seals, sea turtles, and seabirds) interacting or being affected by the threats of marine debris, while strictly following all PMNM BMPs. All footage (film/photograph) will be provided to the four Co-Trustees (NOAA, U.S. Fish and Wildlife Service (USFWS), State of Hawai'i, and the Office of Hawaiian Affairs (OHA)) upon return from PMNM. PMDP also intends to capture images for fundraising purposes.

## VI. PURPOSE AND NEED

The proposed activities would be in support of priorities identified in Monument management and recovery plans, included but not limited to: 1) Papahānaumokuākea Marine National Monument (PMNM) Management Plan (MMP), 2) Hawai'i Marine Debris Action Plan (HI-MDAP), 3) Recovery Plan for the Hawaiian Monk Seal, 4) Mai Ka Po Mai: A Guidance Document for Papahānaumokuākea, 5) Endangered Species Act of 1973 (ESA), and 6) Marine Mammal Protection Act of 1972 (MMPA). Other priorities are listed in the application.

The Hawaiian Archipelago (specifically the PMNM) is centrally located within the world's largest ocean gyre, the North Pacific Gyre and thus becomes a large depository for marine debris. The PMNM, a United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Site, is home to more than 7,000 marine species, 25% of which are endemic, found only in the Hawaiian Archipelago. Marine debris and derelict fishing gear adversely affect the wildlife and habitats of the PMNM either by directly entangling or harming marine animals (seals, turtles, whales, fish, and invertebrates) or adversely impacting corals via large nets rolling across fragile coral ecosystems. Additionally, there is a serious and growing concern for the entanglement of monk seals, particularly with no formal Project currently led by NOAA.

Papahānaumokuākea is deeply significant in the ancestry of Kānaka Maoli (Native Hawaiian people), representing an extension of their genealogy tracing back to the elemental energies that birthed the Pae 'Āina Hawai'i (Hawaiian archipelago). Venturing into Papahānaumokuākea means reconnecting with Hawaiian ancestral ties, transitioning from Ao (light, day; the realm of humans) to Pō (dark, night; the realm of the gods). This place, frequented by kūpuna (elders) for thousands of years, holds profound cultural and genealogical significance, as reflected in the Kumulipo, a Hawaiian cosmogonical genealogy chant.

## VII. METHODS/PROCEDURES

### In-Water Marine Debris Survey and Removal Operations:

Three (3) methods are used for in-water or underwater survey and removal of derelict fishing gear (DFG):

- Swim Surveys (60%): This is PMDP's primary method for surveying and detecting marine debris. Swim surveys are used within atoll lagoons around reticulated complex reefs where boat maneuvering to tow divers is ineffective.
- Diver Propulsion Vehicle (DPV) Surveys (30%): DPVs are utilized to accelerate swim

surveys, covering more reef area and conserving more energy, which aids in safer, more efficient marine debris detection and removal operations.

- **Tow-board Surveys (10%):** This method allows for rapid visual surveys in shallow water between 0 and 30 feet deep, typically in large sand flats or backreef areas (within the atoll's barrier reef). This method uses the 19-ft inflatable boat to tow two freedivers (snorkelers) 100-ft behind the boat moving at 1-2 knots.

#### Shoreline Marine Debris Survey and Removal Operations:

Shoreline Surveys: PMDP staff will conduct surveys by walking the shorelines (between water and vegetation lines on shore) of the islands and atolls within PMNM to collect and remove marine debris. The Project primarily focuses on collecting and removing entanglement and ingestion hazards to wildlife. A new pilot project has been proposed to collect a small collection of glass, during PMDP-2026-01 (2026 Mission #1) and PMDP-2026-02 (2026 Mission #1). No metal, lumber, tires, or other hazardous or abrasive/jagged material is removed without an appropriate risk assessment. All appropriate marine debris is collected and staged at a small boat 'pick-up point', where PMDP's 19-ft inflatable boats can approach the shorelines and safely load the marine debris to transport back to the ship. The marine debris is stored aboard the ship and transported back to Honolulu, Hawai'i for proper disposal at the end of each mission

#### Aerial Marine Debris Survey Operations:

Unmanned Aerial Systems (UAS) Surveys: These surveys will be conducted using an approved UAV platform over coral reefs and shorelines at all islands and atolls and deployed and recovered from the inflatable boats when possible. The goal is to detect large, floating, entangling marine debris over coral reefs (which pose the greatest threat to wildlife), detect wildlife entangled and endangered in these nets, identify areas of high-density debris accumulation, and capture imagery to help detect anomalies in the habitats that would often get overlooked (like large sand flats). Strict UAV rules, regulations, protocols (FAA Part 107 regulations) and BMPs will be followed and enforced for aerial survey operations.

#### Wildlife Disentanglement Operations:

The Project often encounters marine wildlife entangled in marine debris. When necessary, PMDP staff who are fully qualified, certified, trained and authorized to handle, restrain, and disentangle marine wildlife will communicate with State and Federal agencies to assess the situation and develop risk mitigation strategies. If human intervention is necessary to prevent potentially fatal outcomes to marine wildlife, PMDP staff will work with the appropriate offices for guidance and next steps.

- **Hawaiian Monk Seal Disentanglement Operations:** Hawaiian monk seals are often entangled in marine debris, necessitating intervention and disentanglement for their survival. When an entangled Hawaiian monk seal is identified, PMDP staff will promptly notify the NOAA NMFS PIFSC Protected Species Division (PSD) Hawaiian Monk Seal Research Program (HMSRP) of the situation. A full assessment of the seal's health and surrounding habitat will be conducted and relayed to the HMSRP office. James Morioka (PMDP Executive Director), Andrew Sullivan-Haskins, and Cascade Mayer are professionally trained Hawaiian monk seal handlers with extensive experience. They have all assisted in handling and disentangling numerous seals in PMNM. NOAA NMFS

authorizes PMDP staff as Co-Investigators on the Hawaiian monk seal permit NMFS Endangered Species Act (ESA) Permit #27552, to lead the handling, restraining, and disentanglement of endangered seals using established protocols, procedures, equipment and supplies, including manual restraint, hoop-net restraint, or stretcher-net restraint methods.

- Marine Turtle Disentanglement Operations: Marine turtles are frequently entangled in marine debris, particularly in shallow water coral reef environments. When a turtle is identified as entangled, the team will assess the turtle and its surrounding environment. If permitted, and the disentanglement scenario does not cause further risk to the staff and Project, the team will handle the rescue of turtles, ensuring the turtle's head remains above water for effective breathing, and proceed with the disentanglement and release process. NOAA NMFS authorizes PMDP staff as Co-Investigators on the NMFS ESA Permit #21260, to lead the handling, restraining, and disentanglement of marine turtles using established protocols, procedures, equipment and supplies.

#### Marine Debris Transport and Disposal:

Marine debris collected from within the Papahānaumokuākea Marine National Monument will be managed as follows (for more details, please refer to the Supplemental Biosecurity Plan and application):

- All marine debris will be stored in PMDP's specialized marine debris storage bins or placed in super sacks.
- When derelict fishing nets are stored in PMDP's marine debris storage bins, they will be cut to appropriate sizes in the field (3-ft by 3-ft by 3-ft). These nets will remain contained in the bins until they arrive in Honolulu. Upon arrival, the marine debris storage bins will be craned off the ship wholesale and transported directly to either:
  - H-Power/Covanta Energy through Hawaii's "Waste to Energy" initiative for direct incineration, or
  - Plastic Research Recycling Facility Center for Marine Debris Research for recycling through Hawaii Pacific University's "Nets to Roads" initiative.
- All other marine debris not stored in PMDP's marine debris storage bins will be stored in supersacks on the ship's deck until they reach Honolulu. Upon arrival in Honolulu, this debris will be craned off the ship and placed in roll-off containers provided by Radius Recycling. These containers will then be transported to HPower/Covanta for incineration and disposal.

More detailed information about this project can be found in the attached application.

#### VIII. ADHERENCE TO FINDINGS CRITERIA, BMPs, AND OTHER SAFETY PROTOCOLS:

The activities described above may require the following regulated activities to occur in State waters:

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or non-living Monument resource

- Anchoring a vessel
- 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
- Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

### Monument Management Plan Strategies

The activities proposed by the applicants directly support the MMP (PMNM MMP Vol. 1, 2008) 3.3: Reducing Threats to Monument Resources – 3.3.1: Marine Debris (MD) Action Plan – “Reduce the adverse effects of marine debris to PMNM resources and reduce the amount of debris entering the North Pacific Ocean” including but not limited to the following priority management needs:

- Strategy MD-1: Remove and prevent marine debris throughout the life of the plan:
  - Activity MD-1.1: Continue working with partners to remove marine debris in the Monument and reduce additional debris entering the Monument;
  - Activity MD-1.2: Catalog, secure, contain, and properly remove hazardous materials that wash ashore in the NWHI;
- Strategy MD-2: Investigate the sources, types, and accumulation rates of marine debris within 5 years;
  - Activity MD-2.1: Work with partners on marine debris studies;
  - Activity MD-2.2: Develop and standardize marine debris monitoring protocols for marine and terrestrial habitats;
- Strategy MD-3: Develop outreach materials regarding marine debris within 2 years.
  - Activity MD-3.1: Work with partners to continue to develop and implement an outreach strategy for marine debris.

Additional management needs this project addresses can be found in the application.

### Best Management Practices (BMPs)

To safeguard Monument resources the applicants will abide by all applicable PMNM BMPs while conducting the aforementioned activities within PMNM.

<b>BMP Number</b>	<b>Title</b>	<b>Download</b>
001	Marine Alien Species Inspection Standards for Maritime Vessels	<a href="#">PDF</a>
002	Protocol for Acquiring Avian Blood Samples	<a href="#">PDF</a>
003	Human Hazards to Seabirds Briefing	<a href="#">PDF</a>
004	Best Management Practices for Boat Operations and Diving Activities	<a href="#">PDF</a>
005	Protocols to Reduce Impact to the Laysan Finch	<a href="#">PDF</a>
006	General Storage and Transport Protocols for Collected Samples	<a href="#">PDF</a>

007	Best Management Practices for Terrestrial Biosecurity	<a href="#">PDF</a>
008	Seabird Protocols Necessary for Conducting Trolling Research and Monitoring in Papahānaumokuākea Marine National Monument	<a href="#">PDF</a>
009	Best Practices for Minimizing the Impact of Artificial Light on Sea Turtles	<a href="#">PDF</a>
010	Marine Wildlife Viewing Guidelines	<a href="#">PDF</a>
011	Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment, Papahānaumokuākea Marine National Monument (Monument)	<a href="#">PDF</a>
012	Precautions for Minimizing Human Impacts on Endangered Land Birds	<a href="#">PDF</a>
015	Nonnative Species Inspection Requirements at Midway Atoll	<a href="#">PDF</a>
016	Best Management Practices for Activities on Nihoa	<a href="#">PDF</a>
017	Best Management Practices for Maritime Heritage Sites	<a href="#">PDF</a>
018	Rodent Prevention and Inspection Standards for Permitted Vessels	<a href="#">PDF</a>
019	Best Management Practices for Activities on Mokumanamana (Necker Island)	<a href="#">PDF</a>
020	Best Management Practices to minimize the spread of nuisance alga	<a href="#">PDF</a>

For activities related to the nuisance algal outbreak of *Chondria tumulosa* at Kuaihelani (Midway Atoll), Manawai (Pearl and Hermes Atoll), and Hōlanikū (Kure Atoll), BMP #20 requires a biosecurity plan for activities within the NAMZ which is currently under review. Permitted activities at these atolls will be subject to this plan once it is approved by all co-managing agencies. Activities at these atolls will not occur without an approved biosecurity plan.

PMDP has actively collaborated with the Native Hawaiian community and intends to continue this collaboration indefinitely. Specifically, PMDP has partnered with the Office of Hawaiian Affairs (OHA) and NOAA to develop a culture-based strategy for the Project. This strategy aims to enhance inclusivity and collaboration with the Native Hawaiian community, facilitating access to the PMNM, creating culture-based outreach materials, and adhering to traditional protocols and procedures while in the field.

#### IX. REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific and cultural entities: DAR, DOFAW, NOAA Office of National Marine Sanctuaries Papahānaumokuākea National Marine Sanctuary, NOAA National Marine Fisheries Service, USFWS Refuges, USFWS Ecological Services, and the Office of Hawaiian Affairs (OHA). In addition, the permit application was posted on the Monument website within 40 days of its receipt, in accordance with the Monument's Public Notification Policy giving the public an opportunity to comment.

Monument Management Board (MMB) Agency Reviewer Questions and Applicant Responses:  
Below are some of the questions, comments, and responses received during the review process at the time of drafting this submittal. The review process will be completed before the permit will be issued.

### Comments

1. Amend the plan to treat shoreline debris from the NAMZ the same as in-water debris from the NAMZ or to propose a new hot water treatment with minimum parameters of 50 degrees Celsius for 10 minutes.

Response:

We would like to respectfully decline the recommendation to treat shoreline debris from the NAMZ the same as in-water debris from the NAMZ, or to apply an alternative treatment such as hot water. Instead, we would like to discuss returning to the previous approach.

We genuinely believe the shoreline marine debris targeted at the NAMZ Islands (specifically Manawai and Hōlanikū) poses an extremely minimal risk of spreading *Chondria*, as the debris target and remove is surveyed and identified beforehand to ensure that *Chondria* is not associated with it.

Additionally, the shoreline marine debris collected at Kuaihaleni last year that had *Chondria* present was determined to contain non-viable algae. Based on this finding, we believe there is sufficient justification to revert to the 2024 biosecurity protocol. That protocol allowed PMDP to target and remove shoreline debris that is high and dry, double-bag it, and transport it by ship back to Honolulu for proper disposal.

2. In the Biosecurity plan on page 2, any plants used for lei (including ti leaf) as ho‘okupu must be washed, cleaned, and frozen for biosecurity measures. The same may need to be mentioned on page 6 of the conservation and management permit.

Response:

Ti leaf lei used as ho‘okupu will be washed, cleaned, and frozen as part of our biosecurity measures. This process will only occur on Missions #2 and #3 aboard the chartered vessel, at Ke Alanui Polohiwa a Kāne, in the open ocean when transitioning from Ao to Pō. No ti leaf lei ho‘okupu is requested for Mission #1 (Kuaihelani) or any other islands or nearshore environments due to biosecurity concerns. No ti leaf lei material will be discharged into the environments outside of this specified open-ocean transit location.

### Questions

1. Regarding the shoreline debris protocol for Non-NAMZ - will there be inspections for nuisance algae on shoreline debris?

Response:

Yes. Following the 2024 biosecurity protocol, if *Chondria tumulosa* is identified on the marine debris itself or in the surrounding shoreline area, the debris will be left in place (or moved further up the shoreline to prevent it from re-entering the ocean) and not removed.

2. Could we get more information about the new heavy-duty net extraction platform?

Response:

The heavy-duty net extraction platform (CAD file link-  
<https://drive.google.com/file/d/1G9gv279BC3W6-ExOgahMHvZO3lw-4NSf/view>) is still

under development and has not yet been custom built or pilot tested. The current concept is a modular pontoon platform featuring:

- A drop-down landing-craft style bow gate
- A series of powered winches capable of pulling the largest nets out of the water
- A large working deck where nets can be cut into manageable sections
- A saltwater pump system to rinse nets prior to bagging

After cutting and rinsing, the net sections would be placed into double supersacks (double containment) and then transferred into a clean Zodiac small boat for transport.

Importantly, this platform will not be used for any nets that have *Chondria*. Instead, it will serve as a pilot study to test whether large nets can be safely cut, cleaned, and contained offshore, minimizing the possibility that any hypothetical algae fragments could enter the small boats.

3. What is the plan for in-water debris with *Chondria* left on Kuaihelani?

Response:

All in-water marine debris collected at Kuaihelani that may contain *Chondria* will be staged on the tarmac on Sand Island. The material will remain there until additional research or testing confirms that all algae present are non-viable, or until further treatment (e.g., bleach or hot water treatment) is applied to ensure the algae is fully neutralized before transport to the Main Hawaiian Islands.

We truly appreciate DAR's partnership in helping ensure these operations are conducted as safely as possible for Hawaii's ecosystems. Our goal is to maintain a precautionary approach while still allowing the removal of hazardous marine debris that continues to accumulate on the reefs and shorelines.

Please let us know if it will be helpful to discuss this further. We are happy to meet, chat, and revise the plan together to ensure DAR's concerns are fully addressed.

4. Could you provide additional detail on the custom marine debris storage bins proposed for use? Specifically:

*What material are the bins made of?*

Response:

Steel

*What is the thickness/specification of the bin walls?*

Response:

10-gauge thick steel (roughly 9/64-inches)

*Are the bins watertight?*

Response:

Yes, the bins are designed to be fully watertight to contain the bleach solution during the soak period

*Are the bins fully enclosed on top (e.g., with a lid or other cover)?*

Response:

The bins are not fully enclosed on top. They consist of a base and four side walls, with no lid or cover

5. During the 4-hour bleach soak, is there any intentional movement, repositioning, or agitation of debris within the bins to help ensure the bleach solution reaches enclosed spaces, crevices, or other hard-to-access areas?

Response:

Yes, there is intentional movement and repositioning of the debris within the bins during the 4-hour bleach soak to help ensure that the solution reaches enclosed spaces, crevices, and other hard-to-access areas. Additionally, the natural movement of the vessel at sea causes the bleach solution within the bins to circulate and mix, helping ensure the solution is well distributed and that the marine debris remains fully saturated throughout the treatment period.

6. In section 5b of the Conservation and Management Permit application, “Discharging or depositing any material or matter into the Monument” and “Anchoring a vessel” are identified as activities to be covered. Could you clarify when, where, and under what circumstances these activities may occur?

With respect to anchoring, could you clarify:

*Whether the anchoring would involve small boats, the R/V, or both;*

Response:

Small boats only

*Whether anchoring would occur only during operations or also overnight;*

Response:

Daytime operations only, no overnight

*Whether anchoring would occur only in sandy areas; and*

Response:

Anchoring would only occur in sandy areas

*The general locations or situations in which anchoring may be needed.*

Response:

Stabilizing the small boat while positioning alongside a large net during freediving and cutting operations before lifting, mandatory safety breaks during cutting and heavy lifting operations for large nets, operational breaks while remaining near an active debris site

7. With respect to “discharging or depositing any material or matter,” could you clarify: *Whether this is intended to refer to discharge associated with the bleach soak process for marine debris, or whether any other discharge/deposit activities are proposed?*

Response:

This is intended only to cover discharge associated with the bleach treatment process used for marine debris and operational equipment. Specifically, this includes bleach water solution used to disinfect marine debris, gear, boats, and deck areas at the end of each operational day. No other discharge or deposition activities are proposed.

8. On page 9 of the Special Ocean Use Permit application, the application states that “All field-based activities associated with imagery capture and marine debris removal will be conducted under a separate Conservation and Management Permit.” However, in section 5b,

several fieldwork-related activities are also checked. Could you clarify which activities are intended to be covered under the SOU permit versus the Conservation and Management Permit?

Response:

All field-based activities associated with imagery collection and marine debris collection will be conducted under the Conservation and Management Permit. The Special Ocean Use Permit is intended solely to allow the use of imagery and debris collected during those operations for fundraising and outreach purposes. The intent is to enable the organization to share imagery from permitted operations in order to support future fundraising efforts that help sustain marine debris survey and removal work in subsequent years.

9. On page 3, the application states that the activity would help Papahānaumokuākea by “providing critical, supplemental funding.” Could you clarify whether the intent is instead to describe how the proposed activity would support fundraising or solicitation efforts, rather than directly provide funding through the permit activity itself?

Response:

The application language referring to "providing critical, supplemental funding" is intended to describe how the imagery and associated storytelling from the work may support fundraising efforts, rather than funding being generated directly through the permit activity itself. As part of this effort, we are proposing a small pilot project involving the collection of glass marine debris. This would be the first time we test whether recovered glass debris could potentially be repurposed into new items, which could then be sold during fundraisers to support future marine debris removal work. If imagery or recovered materials are used in fundraising, all proceeds would be directed toward supporting additional operational days at sea in future years, allowing us to remove more debris from Papahānaumokuākea.

#### Note on the Supplemental Biosecurity Plan

All MMB agencies aside from DAR have expressed support and endorsement of the PMDP biosecurity plan. According to BMP #020, all MMB agencies must approve of the supplemental biosecurity plan. DAR is continuing to work with PMDP and the other co-managing agencies to come to an agreement on the biosecurity plan. Future comments and questions will be incorporated in the final biosecurity plan that will be approved prior to validity of this permit and PMDP’s departure for PMNM. The first unapproved version of the biosecurity plan is also attached.

#### X. ENVIRONMENTAL COMPLIANCE

##### NEPA / HEPA: (check-one)

- Categorical Exclusion / Exempt Class: HEPA Exemptions 1 & 5  
 EA: June 2005 Programmatic EA under NEPA  
 EIS

Other Consultations: (ESA/MMPA Section 7; NHPA Section 106, etc.)



their application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Conservation and Management General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

## XII. MONUMENT MANAGEMENT BOARD OPINION

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by NOAA, USFWS, ONMS, DAR, DOFAW and OHA staff.

## XIII. RECOMMENDATIONS

1. That upon the finding and adoption of the DLNR analysis by the BLNR, that the BLNR review and accept the declaration of exemption for purposes of recordkeeping requirements of the Hawaii Environmental Policy Act, Hawaii Revised Statutes chapter 343 and Hawaii Administrative Rules chapter 11-200.1. The actions which are anticipated to be undertaken under this permit will have little or no significant effect on the environment and are therefore exempt from the preparation of an environmental assessment under the Hawaii Environmental Policy Act, Hawaii Revised Statutes chapter 343 and Hawaii Administrative Rules chapter 11-200.1, in accordance with the declaration of exemption.
2. That the BLNR approve the proposed permit for James Morioka, Papahānaumokuākea Marine Debris Project, according to the form of the application and authorize and approve entry to State lands and waters of PMNM with the following conditions:
  - a. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within PMNM for obtaining patent or intellectual property rights.
  - b. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.
  - c. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocols as well as BMPs and the final version of a Supplemental Chondria Biosecurity Plan that is to be approved by the Division of Aquatic Resources (DAR) and the MMB
  - d. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
  - e. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge.
  - f. If there is any Hawaiian monk seal or any other protected species in the area when

performing any permitted activity shall cease until the animal(s) depart the area, except as permitted for specific management of that species.

- g. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary Native Hawaiian practices.

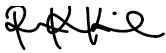
Respectfully submitted,



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Brian J. Neilson, Administrator  
Division of Aquatic Resources

APPROVED FOR SUBMITTAL



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Ryan K.P. Kanaka'ole, Acting Chairperson  
Board of Land and Natural Resources

Attachments:

- 1) Application
- 2) Unapproved PMDP 2026 Supplemental Chondria Biosecurity Plan
- 3) Declaration of Exemption ("DE") from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS & Chapter 11-200.1 HAR

**Papahānaumokuākea Marine National Monument**  
CONSERVATION AND MANAGEMENT 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:** James Motoharu Morioka

**Affiliation:** Papahānaumokuākea Marine Debris Project (PMDP) – U.S. 501(c)(3) non-profit organization

**Permit Category:** Conservation and Management; Special Ocean Use

**Proposed Activity Dates:** April 27 – October 10, 2026

- **PMDP-2026-01 (2026 Mission #1) – Shore-based mission at Kuaihelani (Midway Atoll)**
  - Tentative Dates: **April 27 (Mon) – May 14 (Thur), 2026 – 18 days**
    - Flights from Honolulu to Kuaihelani:
      - TBD Chartered Flight #1 – April 27, 2026 (Mon)
      - TBD Chartered Flight #2 – April 30, 2026 (Thur)
    - Flight from Kuaihelani to Honolulu:
      - TBD Chartered Flight #3 – May 11, 2026 (Mon)
      - TBD Chartered Flight #4 – May 14, 2026 (Thur)
    - Gear Transport from Honolulu to Kuaihelani:
      - M/V Imua departing Honolulu – February 3, 2026 (Tue)
      - M/V arrival at Kuaihelani: ~February 8, 2026 (Sun)
    - Gear Transport from Kuaihelani to Honolulu:
      - M/V Imua departing Kuaihelani: ~June 22, 2026 (Mon)
      - M/V arrival at Honolulu: ~June 27, 2026 (Sun)
  - Native Hawaiian cultural protocol:
    - Kuaihelani (Midway Atoll)
  - Marine debris survey and removal operations:
    - Kuaihelani (Midway Atoll): In-water and shoreline  
*Please see Supplemental Biosecurity Plan for details.*

- **PMDP-2026-02 (2026 Mission #2) – Ship-based mission at Non-NAMZ islands and atolls within Papahānaumokuākea: Nihoa, Mokumanamana (Necker Island), Lalo (French Frigate Shoals), Kamokuokamohoali’i (Maro Reef), Kamole (Laysan Island), Kapou (Lisianski Island)**
  - Tentative Dates: **August 8 (Sat) – August 30 (Sun), 2026 – 23 days**
    - Proposed Vessel: M/V Imua
    - Gear Loading in Honolulu: August 7, 2026 (Fri)
    - Departure from Honolulu: August 8, 2026 (Sat)
    - Arrival in Honolulu: August 30, 2026 (Sun)
    - Gear Offloading in Honolulu: August 31, 2026 (Mon)
  - Native Hawaiian cultural protocol:
    - Nihoa
    - Ke Alanui Polohiwa a Kāne (Tropic of Cancer)
    - Mokumanamana (Necker Island)
    - Lalo (French Frigate Shoals)
    - Kamokuokamohoali’i (Maro Reef)
    - Kamole (Laysan Island)
    - Kapou (Lisianski Island)
  - Marine debris survey and removal operations:
    - Lalo (French Frigate Shoals): In-water and shoreline
    - Kamokuokamohoali’i (Maro Reef): In-water
    - Kamole (Laysan Island): Shoreline and opportunistic in-water
    - Kapou (Lisianski Island): Shoreline and opportunistic in-water

*Please see Supplemental Biosecurity Plan for details.*
  
- **PMDP-2026-03 (2026 Mission #3) – Ship-based mission at NAMZ islands and atolls within Papahānaumokuākea: Manawai (Pearl and Hermes Atoll), Kuaihelani (Midway Atoll), Hōlanikū (Kure Atoll)**
  - Tentative Dates: **September 15 (Tue) – October 9 (Fri), 2026 – 25 days**
    - Proposed Vessel: M/V Imua
    - Gear Loading in Honolulu: September 14, 2026 (Mon)
    - Departure from Honolulu: September 15, 2026 (Tue)
    - Arrival in Honolulu: October 9, 2026 (Fri)
    - Gear Offloading in Honolulu: October 10 and 12, 2026 (Sat and Mon)
  - Native Hawaiian cultural protocol:
    - Ke Alanui Polohiwa a Kāne (Tropic of Cancer)
    - Manawai (Pearl and Hermes Atoll)
    - Kuaihelani (Midway Atoll)
    - Hōlanikū (Kure Atoll)
  - Marine debris survey and removal operations:
    - Manawai (Pearl and Hermes Atoll): In-water and shoreline

- Kuaihelani (Midway Atoll): Shoreline and debris pick-up
  - Hōlanikū (Kure Atoll): In-water and shoreline
- Please see Supplemental Biosecurity Plan for details.*

**Proposed Method of Entry (Vessel/Plane):**

- PMDP-2026-01: Chartered Plane (Resort Air/Mid-Pac Jets)
- PMDP-2026-02: Chartered Vessel (M/V Imua)
- PMDP-2026-03: Chartered Vessel (M/V Imua)

**Proposed Locations:** Marine debris survey and removal efforts will occur across the following islands and atolls within the Papahānaumokuākea National Marine Sanctuary (PNMS) (listed in order from east to west):

- Lalo (French Frigate Shoals)
- Kamokuokamohoali'i (Maro Reef)
- Kamole (Laysan Island)
- Kapou (Lisianski Island)
- Manawai (Pearl and Hermes Atoll)
- Kuaihelani (Midway Atoll)
- Hōlanikū (Kure Atoll)

Native Hawaiian cultural protocols are expected to take place across the following islands and atolls:

- Nihoa Island
- Ke Alanui Polohiwa a Kāne (Tropic of Cancer)
- Mokumanamanama (Necker Island)
- Lalo (French Frigate Shoals)
- Kamokuokamohoali'i (Maro Reef)
- Kamole (Laysan Island)
- Kapou (Lisianski Island)
- Manawai (Pearl and Hermes Atoll)
- Kuaihelani (Midway Atoll)
- Hōlanikū (Kure Atoll)

Hereinafter all islands and atolls will be referred to by their Hawaiian names.

**Estimated number of individuals (including Applicant) to be covered under this permit:**

- PMDP-2026-01: 14 PMDP staff and 8 partners
- PMDP-2026-02: 16 PMDP staff and 7 M/V Imua staff
- PMDP-2026-03: 16 PMDP staff and 7 M/V Imua staff

**Estimated number of days in the Monument: 66**

- PMDP-2026-01: 18 days

- PMDP-2026-02: 23 days
- PMDP-2026-03: 25 days

**Description of proposed activities:** (complete these sentences):

**a.) The proposed activity would...**

“allow for large-scale marine debris survey and removal operations to occur in the Monument in support of priorities identified in Monument management and recovery plans, included but not limited to: 1) [Papahānaumokuākea Marine National Monument \(PMNM\) Management Plan](#) (hereinafter referred to as the MMP) (specifically 3.3: Reducing Threats to Monument Resources – 3.3.1: Marine Debris (MD) Action Plan – “Reduce the adverse effects of marine debris to PMNM resources and reduce the amount of debris entering the North Pacific Ocean”), 2) [Hawai‘i Marine Debris Action Plan \(HI-MDAP\)](#), 3) [Recovery Plan for the Hawaiian Monk Seal](#), 4) [Mai Ka Po Mai: A Guidance Document for Papahānaumokuākea](#), 5) [Endangered Species Act of 1973 \(ESA\)](#) and the 6) [Marine Mammal Protection Act of 1972 \(MMPA\)](#).”

The NOAA Northwestern Hawaiian Islands (NWHI) Marine Debris Project, henceforth referred to as the ‘Project’, commenced its operations in 1996 and was spearheaded by NOAA Fisheries in collaboration with various partner agencies until the year 2021. Over the years, the Project has underscored the imperative of conducting large-scale marine debris removal initiatives to safeguard marine wildlife, notably the endangered Hawaiian monk seal, threatened green sea turtle, and other marine species.

James Morioka (Permittee and PMDP Executive Director) and Kevin O’Brien (PMDP President) previously led and managed the Project under NOAA’s auspices until PMDP took over sole management in 2022. Since 2020, PMDP has led or partnered on thirteen (13) successful large-scale cleanups, successfully removing over 1.23 million pounds of marine debris from sensitive reefs, islands and atolls while rescuing countless entangled animals. In 2025, PMDP removed 184,940 pounds of debris during 66 operational days within PMNM. For 2026, PMDP aims to remove 200,000 pounds of marine debris over 66 days.

**b.) To accomplish this activity, we would ....**

The Papahānaumokuākea Marine Debris Project (PMDP) will concentrate its efforts on achieving the following objectives:

**Marine Debris Survey and Removal:**

- Surveying for and removing derelict fishing gear (DFG) from shallow coral reef environments (0-30 ft depth) at Lalo (French Frigate Shoals), Kamokuokamohoali‘i

- (Maro Reef), Manawai (Pearl and Hermes Atoll), Kuaihelani (Midway Atoll), and Hōlanikū (Kure Atoll). Opportunistically at Kamole (Laysan) and Kapou (Lisianski).
- Surveying for and removing DFG, plastics, and other entanglement hazards from shoreline habitats at Lalo (French Frigate Shoals), Kamole (Laysan Island), Kapou (Lisianski Island), Manawai (Pearl and Hermes Atoll), Kuaihelani (Midway Atoll), and Hōlanikū (Kure Atoll).
  - Evaluating the rates of marine debris accumulation and assessing its abundance and distribution on coral reefs and shorelines.
  - Assessing ecological impacts of DFG on coral reef environments.
  - Rescuing entangled protected wildlife, including Hawaiian monk seals, sea turtles, and sea birds, from marine debris when human intervention is necessary or possible.
  - Conducting Unmanned Aerial Vehicle (UAV) surveys to detect marine debris and assess the abundance and distribution of marine debris on coral reefs and shorelines using an approved UAV platform.
  - Conducting Diver Propulsion Vehicle (DPV) surveys to aid in the detection of marine debris underwater.
  - Field-testing new prototype cutting tools (manual and electric) in-water and on-shore.
  - Field-testing a new heavy-duty net extraction platform.
  - Opportunistically removing large marine debris items such as abandoned derelict vessels (ADVs), FAD/weather/tide buoys, and other material.

**Native Hawaiian Cultural Protocol:**

- Conducting Native Hawaiian cultural protocols (oli (chant) and ‘olelo no‘eau (Hawaiian proverbs)) at all islands and atolls, including Nihoa, Ke Alanui Polohiwa a Kāne, Mokumanamana, Lalo, Kamokuokamohoali‘i, Kamole, Kapou, Manawai, Kuaihelani, and Hōlanikū.
- Conducting Native Hawaiian cultural protocols including ho‘okupu (ceremonial gift offering) consisting of ti leaf and if permitted, wai (freshwater) and pa‘akai (salt) at Nihoa, Ke Alanui Polohiwa a Kāne, Mokumanamana, and Kuaihelani.

**Ancillary (Opportunistic) Projects, including but not limited to:**

- PMDP Field Camp Technician at Manawai supporting NOAA/Cooperative Institute for Marine and Atmospheric Research (CIMAR) Hawaiian monk seal research and marine debris surveys
- Hawaiian monk seal surveys
- Hawaiian monk seal restraining and flipper-tagging
- Coral bleaching surveys
- Maritime archaeology surveys
- Algae distribution surveys

**c.) This activity would help the Monument by ...**

“supporting priorities identified in Monument management and recovery plans, included but not limited to: 1) [Papahānaumokuākea Marine National Monument \(PMNM\) Management Plan](#), 2) [Hawai‘i Marine Debris Action Plan \(HI-MDAP\)](#), 3) [Recovery Plan for the Hawaiian Monk Seal](#), 4) [Mai Ka Po Mai: A Guidance Document for Papahānaumokuākea](#), 5) [Endangered Species Act of 1973 \(ESA\)](#) and the 6) [Marine Mammal Protection Act of 1972 \(MMPA\)](#).”

**1. Papahānaumokuākea Marine National Monument (PMNM) Management Plan (MMP) (Link HERE)**

Led by Monument Management Board (MMB)

Volume 1: December 2008

**3.1: Understanding and Interpreting the NWHI.**

- 3.3.1: Marine Conservation Science Action Plan.
  - Strategy Marine Conservation Science (MCS)-1: Continue and enhance research, characterization and monitoring of marine ecosystems for the life of the plan, as appropriate.
    - Activity MCS-1.1: Continue to characterize type and spatial distributions of shallow-water marine habitats to inform protection and management efforts.
    - MCS-1.2: Continue monitoring of shallow-water coral reef ecosystems to protect ecological integrity.
  - MCS-2: Assess and prioritize research and monitoring activities over the life of the plan.
    - Theme of Natural Resources Science Plan (NRSP): Research on human impacts (marine debris).
  - MCS-3: Communicate results of research and monitoring over the life of the plan.
    - MCS-3.3: Include an educational component in marine research expeditions.
    - MCS-3.4: Use materials gathered and created through research to develop or enhance education and outreach products.
- 3.1.2: Native Hawaiian Culture and History (NHCH) Action Plan.
  - NHCH-2: Conduct, support, and facilitate Native Hawaiian cultural access and research of the NWHI over the life of the plan.
    - NHCH-2.3: Facilitate cultural field research and cultural education opportunities annually.
    - NHCH-2.6: Continue to facilitate Native Hawaiian cultural access.

- NHCH-3: Increase cultural resource management capacity across MMB agencies over the life of the plan.
  - NHCH-3.2: Engage Native Hawaiian practitioners and cultural experts and the Native Hawaiian Cultural Working Group in the development and implementation of the Monument’s management activities.
  - NHCH-3.4: Identify and integrate Native Hawaiian traditional knowledge and management concepts into Monument management.
- NHCH-5: Provide cultural outreach and educational opportunities to serve the Native Hawaiian community and the public over the life of the plan.
  - NHCH-5.1: Integrate Native Hawaiian values and cultural information into general outreach and education programs.
  - NHCH-5.2: Develop a culturally based strategy for education and outreach within the Native Hawaiian community.

### 3.2: Conserving Wildlife and Habitats.

- 3.2.1: Threatened and Endangered Species (TES) Action Plan.
  - TES-1: Support activities that advance recovery of the Hawaiian monk seal for the life of the plan.
    - TES-1.1: Support marine debris removal activities to promote recovery.
    - TES-1.3: Conserve Hawaiian monk seal habitat.
    - TES-1.5: Support outreach and education on Hawaiian monk seals.
  - TES-2: Determine the status of cetacean populations and verify and manage potential threats over the life of the plan.
    - TES-2.3: Monitor, characterize, and address the effects of marine debris on cetaceans in the Monument.
  - TES-3: Ensure that nesting populations of green turtles at source beaches are stable or increasing over the life of the plan.
    - TES-3.2: Protect and manage nesting and basking habitat.
    - TES-3.3: Protect and manage marine habitat, including foraging areas and migration routes.
- 3.2.2: Migratory Birds (MB) Action Plan.
  - MB-2: Minimize the impacts of threats to migratory birds such as habitat destruction by invasive species, disease, contaminants (including oil), and fisheries interactions for the life of the plan.
    - MB-2.5: Work with partners to reduce the impact of commercial and sport fisheries outside the Monument on migratory bird populations.
- 3.2.3: Habitat Management and Conservation (HMC) Action Plan.
  - HMC-1: Within 15 years, develop and implement a strategy for restoring the health and biological diversity of the shallow reefs and shoals where

anthropogenic disturbances are known to have changed the ecosystem, using best available information about pre-disturbance conditions.

- HMC-1.1: Identify and prioritize restoration needs in shallow water reef habitats impacted by anthropogenic disturbances within 5 years.

### 3.3: Reducing Threats to Monument Resources.

- 3.3.1: Hawaii Marine Debris (HIMDAP) Action Plan.
  - MD-1: Remove and prevent marine debris throughout the life of the plan.
    - MD-1.1: Continue working with partners to remove marine debris in the Monument and reduce additional debris entering the Monument.
    - MD-1.2: Catalog, secure, contain, and properly remove hazardous materials that wash ashore in the NWHI.
    - MD-1.3: Develop and implement a 5-year marine debris removal and prevention strategy for the Monument.
  - MD-2: Investigate the sources, types, and accumulation rates of marine debris within 5 years.
    - MD-2.1: Work with partners on marine debris studies.
    - MD-2.2: Develop and standardize marine debris monitoring protocols for marine and terrestrial habitats.
  - MD-3: Develop outreach materials regarding marine debris within 2 years.
    - MD-3.1: Work with partners to continue to develop and implement an outreach strategy for marine debris.
- 3.3.2: Alien Species (AS) Action Plan (specifically for ‘nuisance’ algae, *Chondria tumulosa* at Manawai, Kuaihelani, and Hōlanikū).
  - AS-1: Conduct planning to prioritize by threat level, invasiveness, and practicality of eradication or control all nonnative organisms in the Monument over the life of the plan.
    - AS-1.1: Complete an Integrated Alien Species Management Plan (IASMP).
    - AS-1.2: Develop best management practices to prevent, control, and eradicate alien species.
  - AS-2: Engage in active surveillance to monitor existing infestations and to detect new infestations of alien species over the life of the plan.
    - AS-2.1: Survey distributions and populations of known alien species at regular intervals.
    - Develop and implement monitoring protocols for early detection and characterization of new infestations.
  - AS-3: Establish and enforce quarantine procedures appropriate for each site and habitat (terrestrial and aquatic) in the Monument to prevent the invasion or reinfestation of nonindigenous species over the life of the plan.

- AS-3.1: Enforce the use of existing quarantine protocols to prevent the introduction of invasive terrestrial species to the Monument.
  - AS-8: Conduct and facilitate research designed to answer questions regarding invasive species detection, effects on ecosystems, and alien species prevention, control, and eradication over the life of the plan.
    - AS-8.1: Support and conduct research on alien species detection and the effects of invasive species on native ecosystems.
    - AS-8.2: Support and conduct research on invasive species prevention, control methods, and eradication techniques.
  - AS-9: Engage Monument users and the public in preventing the introduction and spread of alien species.
    - AS-9.2: Integrate alien species information into general Monument outreach materials.
  - AS-10: Participate in statewide and Pacific regional alien species efforts.
    - AS-10.1: Build relationships with other resource managers and invasive species experts in the State, nation, and other countries based on shared challenges concerning invasive species.
- 3.3.4: Emergency Response and Natural Resource Damage Assessment (ERDA) Action Plan.
  - ERDA-1: Create a Monument Emergency Response and Assessment Team within 1 year.
    - ERDA-1.4: Participate in damage assessment programs and training throughout the life of the plan.

### 3.5: Coordinating Conservation and Management Activities.

- 3.5.1: Agency Coordination (AC) Action Plan.
  - AC-2: Establish and support cooperative management agreements with agency partners.
    - AC-2.2: Establish agreements for coordinated management and conduct cooperative management operations.
    - AC-2.3: Develop interagency agreements, grants, and memoranda of agreement as needed to carry our specific program priorities.
  - AC-3: Promote international, national, and local agency collaborations to increase capacity building and foster networks that will improve management effectiveness.
    - AC-3.2: Network with other marine protected areas in the Pacific.
- 3.5.2: Constituency Building and Outreach Action Plan.
  - CBO-1: Develop and implement an integrated communications strategy, based on assessment of ongoing activities and future needs, to coordinate outreach and engage Monument constituencies within 5 years.

- CBO-1.1: Develop an integrated communications strategy based on an assessment of ongoing activities and future needs.
- CBO-1.2: Continue to refine and implement the Monument Media Communications Protocol to engage news media in informing the public about the Monument’s resources and activities.
- CBO-1.4: Incorporate new perspectives for understanding the value of NWHI ecosystems, including socioeconomic studies, to increase ocean ecosystems literacy and conservation in the Monument within 5 years.
- CBO-1.5: Research and implement new technologies and tools to increase public understanding of the NWHI ecosystems within 5 years.
- CBO-2: Continue to develop and disseminate materials and improve and update tools that help inform Monument constituencies about the Monument over the life of the plan.
  - CBO-2.2: Continue to develop and update printed materials to aid Monument constituencies in understanding key aspects of the Monument.
  - CBO-2.3: Support other entities’ efforts to broaden knowledge of and appreciation for Monument resources and management priorities.
- CBO-3: Continue initiatives that allow Monument constituencies to be more involved in the Monument and enhance opportunities for long-term engagement over the life of the plan.
  - CBO-3.1: Continue to seek out and participate in events that reach a broader audience and provide constituents with knowledge of the Monument.
  - CBO-3.3: Continue to seek out and support partnership opportunities that focus on Oceania-related issues.
  - CBO-3.6: Continue to support the Native Hawaiian Cultural Working Group through the Office of Hawaiian Affairs.
  - CBO-3.8: Continue to convene the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) through NOAA’s Office of National Marine Sanctuaries until the Monument Alliance is established.
- 3.5.3: Native Hawaiian Community Involvement (NHCI) Action Plan.
  - NHCI-2: Develop and annually maintain partnerships with Native Hawaiian organizations and institutions.
    - NHCI-2.1: Continue to expand and explore opportunities to partner with institutions serving Native Hawaiians,
  - NHCI-3: Identify and integrate Native Hawaiian traditional knowledge and management concepts into Monument management annually for the life of the plan.

- NHCI-3.1: Engage the Native Hawaiian community to identify how traditional knowledge will be integrated into Monument activities.
- NHCI-3.2: Use and integrate Native Hawaiian traditional knowledge in Monument management activities.
- 3.5.4: Ocean Ecosystems Literacy (OEL) Action Plan.
  - OEL-1: Develop and implement educational programs in Hawai'i to increase ocean ecosystems literacy and promote stewardship values within 5 years.
    - OEL-1.3: Develop an ocean stewardship program for middle school and high school students within 5 years.
  - OEL-2: Develop and implement new tools to “bring the place to the people”, with a focus on students, within 3 years.
    - OEL-2.1: Identify and prioritize research and development projects to increase ocean ecosystems literacy and conservation in the NWHI.
    - OEL-2.2: Use telepresence for educational and outreach activities within 5 years.

### 3.6: Achieving Effective Monument Operations.

- 3.6.3: Coordinated Field Operations (CFO) Action Plan.
  - CFO-2: Enhance interagency planning and coordination for field operations in support of Monument protection and management and develop protocols and processes that will be utilized throughout the life of the plan.
    - CFO-2.1: Develop interagency agreements to facilitate effective field coordination throughout the Monument.
    - CFO-2.2: Develop and implement standardized field operations protocols.
    - CFO-2.4: Annually coordinate field operations to efficiently deploy personnel and share resources among agency partners.

## **2. Hawai'i Marine Debris Action Plan (HI-MDAP) ([Link HERE](#))**

Led by NOAA Marine Debris Program (MDP)  
March 2024

### Goal 1: Prevention.

- Strategy 1.1: Change consumer behavior through outreach and education.
  - Action 1.1.1: Use social media as a platform for outreach.
  - 1.1.2: Conduct education and outreach to the public, residents, military community, and visitors through, but not limited to, presentations, news events, featured speakers, and film screenings.
  - 1.1.6: Conduct education and outreach at schools and universities.

- 1.1.6: Provide education on alternative products, make them accessible, and promote their use.
- 1.1.8: Work with Hawai'i Marine Debris Action Plan (HI-MDAP) researchers to support one another in sharing accurate scientific information to the local community.
- 1.1.9: Educate the public on marine debris generated through the commercial fishing industry, encourage increased understanding of where seafood comes from and how to support local fishers.

#### Goal 2: Ocean-based Marine Debris.

- 2.1: Conduct education and outreach to ocean users on proper and legal waste management at sea.
  - 2.1.5: Educate and promote consumer understanding of the marine debris costs associated with certain fisheries and seafood choices.
- 2.2: Identify funding and provide low-cost and convenient disposal options for fishing gear and solid waste.
  - 2.2.6: Partner in the Hawai'i Nets-to-Energy program.
- 2.3: Identify fishing materials and practices designed to reduce marine debris.
  - 2.3.1: Gather and share best management practices for coastline fishing gear and methods.
  - 2.3.2: Learn more about smart fish aggregating devices (FAD).
- 2.4: Create public-private partnerships to develop industry standards for reducing marine debris.
  - Engage with fisheries and gear manufacturers that are determined to be the source of derelict fishing gear washing into Hawai'i.
- 2.7: Effectively respond to abandoned and derelict vessels.
  - 2.7.2: Enhance interagency coordination for addressing abandoned and derelict vessels and maintain an abandoned and derelict vessel inventory for remote or difficult to access coastlines.

#### Goal 3: Removal.

- 3.1: Utilize effective methods to locate marine debris accumulation.
  - 3.1.1: Continue to support the advancement of at-sea detection for marine debris through remote sensing.
  - 3.1.2: Continue monitoring efforts in the Papahānaumokuākea Marine National Monument to identify accumulation sites.
  - 3.1.6: Conduct annual aerial shoreline surveys and ground truthing (if UAS aerial surveys are permitted).
  - 3.1.7: Tag derelict fishing gear with GPS buoys to determine their location and potential marine debris accumulations.

- 3.3: Use available information to prioritize cleanup sites.
  - 3.3.2: Continue engagement with county, state and federal marine wildlife representatives regarding their high-priority regions/seasons by island.
- 3.4: Develop capacity for marine debris removal and disposal.
  - 3.4.1: Create and update island-specific flow chart options depicting the disposal and collaboration process.
  - 3.4.3: Expand the development and capacity to repurpose and recycle salvaged marine debris into infrastructure, materials, and products across all islands.
  - 3.4.8: Create a shared understanding within and outside of the Hawai'i Marine Debris Action Plan community, on what happens to debris after disposal.
- 3.5: Increase communication and collaboration to efficiently remove marine debris.
  - 3.5.4: Provide financial and logistical support for large-scale marine debris removal in the Papahānaumokuākea Marine National Monument.
  - 3.5.6: Develop and maintain a network of nongovernmental organizations and other partner on-water resources that can perform regular near-shore debris mass surveys, removal training, and removal operations, and coordinate disposal of debris found with shore-based cleanup partners.

#### Goal 4: Research

- 4.1: Develop an understanding of marine debris physical and chemical traits, life cycle, sources, transport, fate, quantity, and accumulation rate.
  - 4.1.1: Conduct shoreline and in-water surveys regularly and share data and survey methods to determine accumulation rates.
  - 4.1.4: Use spatial mapping to compare areas of high removal effort to standing debris accumulations to evaluate the impact of cleanups and site monitoring.
  - 4.1.7: Better identify sources of hagfish traps to determine the best prevention efforts.
  - 4.1.8: Create a database of derelict fishing gear types and metrics in Hawai'i to try and identify the fishery or manufacturer sources.
  - 4.1.11: Identify funding to continue sourcing derelict fishing gear marine debris and scaling up a centralized detection, removal, research, and repurposing program.
- 4.2: Develop or identify standardized methods or best management practices for applicable aspects of research to ensure data can be meaningfully analyzed.
  - 4.2.5: Identify standardized shoreline and in-water monitoring protocols throughout Hawai'i.
  - 4.2.8: Develop a method to identify gear types from derelict fishing gear.
- 4.3: Enhance and advance research on the ecological impacts of marine debris.
  - 4.3.1: Research the interaction of invasive species with marine debris, including species identification, impacts, transport, and fate.

- 4.3.3: Monitor and assess information on the impacts of entanglement on wildlife.
- 4.3.4: Monitor and assess information on the impacts of marine debris to habitats.
- 4.3.6: Use structure-from-motion (SFM) imagery to quantify the volume of coral reef damage by derelict fishing gear strikes in Kaneohe Bay.
- 4.4: Improve research on the economic impacts of marine debris.
  - 4.4.5: Research the economic impacts of derelict fishing gear in Hawai'i.
- 4.5: Evaluate the effectiveness of mitigation, outreach, and removal efforts of marine debris.
  - 4.5.2: Investigate the effectiveness of marine debris and plastic education and outreach.
- 4.6: Support communication and collaboration of research to all stakeholders.
  - 4.6.1: Improve collaboration and data sharing amongst the local marine debris community through the publishing, compiling, and sharing of marine debris research completed in Hawai'i state and regional waters.
  - 4.6.4: Explore and share funding opportunities and develop partnerships to approach funding opportunities.
  - 4.6.5: Collaborate with international partners for marine debris research.
  - 4.6.6.: Participate in international conferences, partnerships, and other avenues of information sharing to highlight the relevance of marine debris in Hawai'i.

### 3. **Recovery Plan for the Hawaiian Monk Seal (*Monachus schauinslandi*)** ([Link HERE](#))

August 2007

Led by NOAA National Marine Fisheries Service

Recovery Goal: The goal of this revised recovery plan is to assure the long-term viability of the Hawaiian monk seal in the wild, allowing initially for reclassification to threatened status, and, ultimately, removal from the List of Endangered and Threatened Wildlife.

Significant threats that face this species: Entanglement of seals in marine debris has and continues to result in significant levels of seal mortality.

- Strategy 1: Improve the survivorship of females, particularly juveniles, in sub-populations of the NWHI. To do this requires:
  - Continuing actions to remove marine debris and reduce mortality of seals due to entanglement.

Recommended short-term actions:

- Strategy 2: Prevent entanglements of monk seals.
  - Action 2.1: Continue programs that facilitate the disentanglement of animals.
  - 2.2: Continue removing potentially hazardous debris.
    - 2.2.1: Continue focused clean-up effort on high entanglement risk zones in the water.
      - 2.2.1.1: Monitor marine debris accumulation rates and identify areas of greatest potential risk.
      - 2.2.1.2: Remove debris from beaches.
  - 2.3: Reduce the amount of debris.
    - 2.3.2: Implement education and marine debris reduction programs targeting identified sources.

4. **Mai Ka Pō Mai: A Native Hawaiian Guidance Document for the Management of Papahānaumokuākea Marine National Monument** ([Link HERE](#))

2021, Office of Hawaiian Affairs (added as a PMNM Co-Trustee in 2017)

Ho'oku'i: Papahānaumokuākea represents the rich Hawaiian heritage, cultural experiences, and wisdom that have cultivated healthy relationships among places and their peoples through time and space.

- Na Kuhikuhi (Strategies) Ho'oku'i-2: Ensure that policies and programs incorporate relevant cultural knowledge.
- Ho'oku'i-3: Use Hawaiian knowledge, language, values, traditions, and concepts throughout all areas of management and activities.
- Ho'oku'i-4: Manage data to support Monument and community-based management.

Kūkulu 1. Ho'omana: Papahānaumokuākea is a living spiritual foundation and natural environment for Hawaiian existence.

- Ho'omana 1-1: Manage the natural-cultural landscape through the practice of aloha 'āina.
- Ho'omana 1-2: Perpetuate Hawaiian cultural practices, knowledge, and values.
- Ho'omana 1-3: Enhance protections through access for Native Hawaiians.
- Ho'omana 1-4: Amplify the cultural and spiritual experience.

Kūkulu 2. Hō'ike: Papahānaumokuākea is an abundant source of ancestral knowledge and a place where experts demonstrate excellence and advance knowledge systems.

- Hō'ike 2-1: Conduct research and monitoring in a manner that incorporates multiple perspectives, knowledge systems, and values.
- Hō'ike 2-2: Support, facilitate, and conduct Hawaiian methods of science and research.

- Hō'ike 2-4: Promote alignment of research initiatives of the co-managing agencies and permittees to advance Hawaiian research agenda items.

Kūkulu 3. Ho'oulu: Inspire and grow thriving communities.

- Ho'oulu 3-1: Engage and collaborate with communities and leaders involved in mālama 'āina work.
- Ho'oulu 3-3: Develop partnerships and collaborations with other organizations to support Papahānaumokuākea programs and initiatives.
- Ho'oulu 3-4: Develop and support initiatives that focus on next-generation capacity building for leadership succession.

Kūkulu 4. Ho'olaha: Papahānaumokuākea provides cultural pathways and ancestral wisdom that extends through time and space.

- Ho'olaha 4-1: Develop educational programs and initiatives that are based on Hawaiian cultural values, concepts, and traditional resource management stewardship.
- Ho'olaha 4-2: Identify, share, and promote innovative research and other place-based activities in PMNM that can serve as models to inform resource management in the main Hawaiian Islands.
- Ho'olaha 4-4: Incorporate Hawaiian values, traditions, and histories into Monument communication strategies to better connect the public to the Monument.

**5. Endangered Species Act, 1973 ([Link HERE](#))**

Implemented by NOAA Fisheries and the U.S. Fish and Wildlife Services.

- Section 4: Designates critical habitat for the conservation of the species (endangered Hawaiian monk seal and threatened green sea turtle).
- Section 4: Developing and implementing recovery plans for listed species (endangered Hawaiian monk seal and threatened green sea turtle).
- Section 10: Cooperating with non-federal partners to develop conservation plans, safe harbor agreements, and candidate conservation agreements with assurances for the long-term conservation of species.
- Section 10: Issuing permits that authorize scientific research to learn more about listed species, or activities that enhance the propagation or survival of listed species.

**6. Marine Mammal Protection Act, 1972 ([Link HERE](#))**

Implemented by NOAA Fisheries, the U.S. Fish and Wildlife Services, and Marine Mammal Commission.

- NOAA Fisheries performs the following conservation and management actions:
- Develops and implements conservation plans for species designated as depleted.
- Develops and implements take reduction plans to minimize dead and seriously injured marine mammals in commercial fishing gear.

**Other information or background:**

The Hawaiian Archipelago, specifically the Papahānaumokuākea National Marine Sanctuary (PNMS) is centrally located within the world’s largest ocean gyre, known as the North Pacific Gyre. This gyre comprises a system of clockwise ocean currents that gather marine debris originating from the North Pacific Ocean, including East Asia, the Aleutian Islands, the North American West Coast, and the equatorial region. The debris from these regions converge into the gyre’s convergence zones, located just north of the Hawaiian Islands. Coupled with prevailing northeast tradewinds and significant north swells, the PNMS becomes a substantial repository for marine debris.

The PNMS encompasses all the Northwestern Hawaiian Islands (NWHI), including its islands, atolls, coral reefs, shoals, and seamounts. This area holds 70% of all shallow-water coral reef habitats (<200 m) in the United States. Designated a World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 2010, PMNM is home to more than 7,000 marine species, with 25% being endemic, found only in the Hawaiian Archipelago.

Papahānaumokuākea is deeply significant in the ancestry of Kānaka Maoli (Native Hawaiian people), representing an extension of their genealogy tracing back to the elemental energies that birthed the Pae‘āina Hawai‘i (Hawaiian archipelago). Venturing into Papahānaumokuākea means reconnecting with Hawaiian ancestral ties, transitioning from Ao (light, day; the realm of humans) to Pō (dark, night; the realm of the gods). This place, frequented by kūpuna (elders) for thousands of years, holds profound cultural and genealogical significance, as reflected in the Kumulipo, a Hawaiian cosmogonical genealogy chant.

In line with the Kumulipo, the chant conveys the interconnectedness of realms, underscoring that “He ali‘i ka ‘āina, He kauwa ke kanaka” (“The land is the chief, man is the servant”). As humans, it is our kūleana (responsibility and privilege) to mālama (care for) Papahānaumokuākea, maintaining balance within the system. Our endeavors to clean marine debris uphold our cultural and genealogical connection to not only Papahānaumokuākea but to all Hawai‘i.

Since 1996, the Project has conducted large-scale marine debris removals to mitigate the entanglement and ingestion threat to protected wildlife and damage to coral reefs and has successfully removed over 3 million pounds of marine debris from the PNMS. The Project has also disentangled numerous marine animals. Of the estimated 1,600 remaining Hawaiian monk seals (which face the highest documented entanglement rate of any pinniped species), approximately 75% call PNMS home, and 32% are alive today due to marine debris removal efforts, disentanglements, and rehabilitation endeavors (Harting et al., 2014). The [NOAA NMFS Recovery Plan for the Hawaiian Monk Seal \(2007\)](#) highlights a minimum of 2.3 serious injuries or deaths annually due to fishery-related marine debris.

Marine debris and derelict fishing gear have pervasive impacts across the Hawaiian Archipelago, affecting all inhabitants – both human and wildlife. Whether entangling marine animals (seals, turtles, whales, fish, and invertebrates) or adversely impacting corals, marine debris poses a serious threat to fragile coral ecosystems, particularly within the PNMS, known for being among the most biologically diverse and economically valuable ecosystems globally (Bryant et al., 1997). The entanglement of monk seals remains a critical concern, particularly in the absence of a formal Project led by NOAA. However, recent research shows a significant decrease in Hawaiian monk seal entanglements where large-scale marine debris removal efforts are concentrated (Baker et al., 2024). PMDP continues to fulfill its role in safeguarding the marine environment and ocean wildlife from the adverse effects of marine debris by continuing large-scale marine debris removal operations within the PNMS.

“Papahānaumokuākea’s ecosystems are increasingly under pressure from threats such as marine debris, invasive species, and climate change,” said Rick Spinrad, Ph.D., NOAA Administrator. “Designation of the monument’s waters as a national marine sanctuary would complement the efforts of the four co-trustees to safeguard the Monument’s (Sanctuary’s) natural, cultural, and historic values.”

NOAA Considers Sanctuary off Hawaiian Islands – (November 19, 2021)

<https://www.noaa.gov/news-release/noaa-considers-marine-sanctuary-off-hawaiian-islands>

**Section A - Applicant Information**

**1. Applicant**

Name (last, first, middle initial): Morioka, James, M.

Title: Executive Director, Papahānaumokuākea Marine Debris Project (PMDP)

**1a. Intended field Principal Investigator (See instructions for more information):**

James Morioka (CV attached)  
Executive Director  
Papahānaumokuākea Marine Debris Project (PMDP)

Kevin O'Brien (CV attached)  
President  
Papahānaumokuākea Marine Debris Project (PMDP)

**2. Mailing address (street/P.O. box, city, state, country, zip):**

Papahānaumokuākea Marine Debris Project (PMDP)

For students, major professor's name, telephone and email address: N/A

**3. Affiliation (institution/agency/organization directly related to the proposed project):**

Papahānaumokuākea Marine Debris Project (PMDP) – U.S. 501(c)(3) non-profit organization.

**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, Research Diver; Jane Doe, Field Technician):**

Note: 14 PMDP staff from the list below will participate in PMDP-2026-01, and 16 PMDP staff from the list below will participate in PMDP-2026-02 and PMDP-2026-03. 7 HRG staff (M/V Imua chartered vessel) will participate in PMDP-2026-02 and PMDP-2026-03.

PMDP Staff:

1. James Morioka (Executive Director) – Mission Lead PMDP-2026-01 and PMNM-2026-02 – Lead Diver and Lead Small Boat Operator
2. Kevin O’Brien (President) – Mission Lead PMDP-2026-03 – Lead Diver and Lead Small Boat Operator
3. Derek LeVault – Lead Diver and Lead Small Boat Operator
4. Andrew Sullivan-Haskins – Expedition Photographer, UAS Pilot, Lead Diver and Lead Small Boat Operator
5. Lauren Fraser – Lead Diver and Lead Small Boat Operator
6. Charlotte Frank – Diver and Small Boat Operator
7. Sydney Luitgaarden – Diver and Small Boat Operator
8. Kamali’i Andrade – Diver and Small Boat Operator
9. Kau’i Aguiar – Diver and Small Boat Operator
10. Charlotte Bond – Diver and Small Boat Operator
11. Matt McDole – Diver and Small Boat Operator
12. John (JJ) Freier – Diver and Small Boat Operator
13. Darrian Kahealani Muraoka – Diver and Small Boat Operator
14. Cascade Mayer – Diver and Small Boat Operator
15. Ossian Nichols – Diver and Small Boat Operator
16. Kealohi Sabate – Diver and Small Boat Operator
17. Laura Eliza Beckwith – Diver and Small Boat Operator
18. Matthias Kala’i Sim – Diver and Small Boat Operator
19. Bryson Kaimana Kau – Diver and Small Boat Operator
20. Neha Acharya-Patel – Diver and Small Boat Operator
21. Owen Pyle – Diver and Small Boat Operator
22. Jesse Moonier – Diver and Small Boat Operator
23. TBD – Diver and Small Boat Operator
24. TBD – Diver and Small Boat Operator
25. TBD – Diver and Small Boat Operator

M/V Imua Staff:

1. Dennis Hans Bishop (Hawai’i Resource Group – HRG), Captain, M/V *Imua*
2. TBD (HRG), First Mate, M/V *Imua*
3. TBD (HRG), Second Mate, M/V *Imua*
4. TBD (HRG), Lead Engineer, M/V *Imua*
5. TBD (HRG), Deckhand, M/V *Imua*
6. TBD (HRG), Deckhand, M/V *Imua*
7. TBD (HRG), Cook, M/V *Imua*

**Section B: Project Information**

**5a. Project location(s):**

**Ocean Based**

<input checked="" type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> French Frigate Shoals	<input checked="" type="checkbox"/> Land-based	<input checked="" 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 checked="" type="checkbox"/> Maro Reef	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Laysan Island	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Lisianski Island, Neva Shoal	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Pearl and Hermes Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Midway Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Kure Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" 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:**

- PMDP-2026-01: All PMDP staff will overnight on Sand Island at Midway Atoll for the duration of the shore-based mission.
- PMDP-2026-02: No staff will remain onshore on any island or atoll. All PMDP staff will overnight aboard the M/V Imua.
- PMDP-2026-03: No staff will remain onshore on any island or atoll. All PMDP staff will overnight aboard the M/V Imua.

**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:**

All activities described in this application are directed towards the betterment of the Papahānaumokuākea Marine National Monument and the wildlife that reside there. All of the information is then compiled to develop, implement, and assess strategies to support management and recovery plans, included but not limited to: 1) [Papahānaumokuākea Marine National Monument \(PMNM\) Management Plan](#), 2) [Hawai'i Marine Debris Action Plan \(HI-MDAP\)](#), 3) [Recovery Plan for the Hawaiian Monk Seal](#), 4) [Mai Ka Po Mai: A Guidance Document for Papahānaumokuākea](#), 5) [Endangered Species Act of 1973 \(ESA\)](#) and the 6) [Marine Mammal Protection Act of 1972 \(MMPA\)](#)."

\*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

All BMPs will be strictly enforced. All multimedia (photos and videos) can be provided to the four Co-Managing agencies (NOAA, U.S. Fish and Wildlife Services (USFWS), State of Hawai'i Department of Land and Natural Resources (DLNR), Office of Hawaiian Affairs (OHA)) upon return from PNMS.

**If so, please list the species you specifically intend to target.**

PMNP is committed to capturing imagery (photos and videos) of protected wildlife, such as the Hawaiian monk seals, sea turtles, and sea birds, interacting with or impacted by marine debris while adhering strictly to all PNMS Best Management Practices (BMPs). In cases where protected wildlife becomes entangled in marine debris, PMNP staff will communicate directly with NOAA National Marine Fisheries Service (NMFS) Pacific Islands Fisheries Science Center

(PIFSC) Protected Species Division (PSD), U.S. Fish and Wildlife Services and Midway Atoll National Wildlife Refuge, and/or the State of Hawai'i Department of Land and Natural Resources and Kure Atoll Wildlife Conservancy, to assess the threat to the animal and implement risk mitigation strategies. If the animal is deemed to be critically entangled and endangered, PMDP staff may be given guidance and authority (with appropriate NOAA NMFS permits) to intervene to prevent potentially fatal outcomes through disentanglement.

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:**

All activities described in Section 7. Findings (below) refer to specific Best Management Practices (BMPs) or programmatic assessment/guidance documents that include, but are not limited to:

1. [PMNM BMP #001 – Marine Alien Species Inspection Standards for Maritime Vessels](#)
2. [PMNM BMP #004 – Best Management Practices for Boat Operations and Diving Activities](#)
3. [PMNM BMP #007 – Best Management Practices for Terrestrial Biosecurity](#)
4. [PMNM BMP #010 – Marine Wildlife Viewing Guidelines](#)
5. [PMNM BMP #020 -- Minimize the Spread of Nuisance Algae](#)
6. [NOAA PIFSC CRED Programmatic Ecological Assessment \(PEA\) under National Environmental Policy Act \(NEPA\)](#)
7. [NOAA PIFSC CRED PEA Signatures](#)
8. [NOAA PIFSC CRED Finding of No Significant Impact \(FONSI\)](#)
9. [Cultural-based Strategy for Marine Debris Removal Operations](#)

**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?**

All activities proposed by the Papahānaumokuākea Marine Debris Project (PMDP) in this PMNM Conservation and Management permit application will be executed with stringent safeguards to protect the natural, cultural, and historic resources of the Monument as required by [Presidential](#)

[Proclamation 8031](#), and other applicable laws, agency policies, and standard operating procedures. PMDP will provide detailed field protocols and best management practices (BMP) to all involved agencies. These practices and procedures will effectively reduce or eliminate disturbances to wildlife, flora, habitat, and cultural and historic resources. All PMDP staff listed in the permit are returning PMDP staff with prior field experience with marine debris survey and removal operations within PNMS.

PMDP conducts comprehensive training for the PNMS (biological, environmental, and cultural aspects), ship operations, small boat operations, and free-dive/snorkel operations prior to at-sea field operations. This training regimen mirrors the rigorous training led by James Morioka (PMDP Executive Director) and Kevin O'Brien (PMDP President) at NOAA for all field staff conducting field work in the PMNM between 2007-2021. This training encompasses marine debris removal activities as well as the safeguarding and minimizing of impacts on other natural and cultural resources. It will be supplemented by PMNM pre-access and cultural briefings for all staff. Furthermore, a PMDP staff will serve as the PMNM-approved Resource Monitor (Morioka, O'Brien, and Sullivan-Haskins have all served in the PMNM Resource Monitor role) to oversee and ensure compliance with permit conditions and BMPs.

PMDP proposes to conduct Unmanned Aerial Vehicle (UAV) surveys of coral reefs and shorelines for marine debris, using an approved UAV platform ([approved UAV platform list](#)). In previous years, UAV surveys helped successfully detect entangled wildlife (sea turtles) in large floating nets to disentangle and rescue. Trained and certified UAV FAA part 107 pilots will operate the UAV, following all rules, regulations and relevant PNMS BMPs and protocols, specific to the deployment, retrieval, and operations of the UAV. Interactions with birds and other wildlife will be closely monitored, and UAV operations will be halted should significant interactions occur.

PMDP will conduct Diver Propulsion Vehicle (DPV) surveys in shallow-water coral reef environments to survey more coral reefs, detect more marine debris, conserve more energy, and remove more debris safely. DPV trained divers will integrate DPV surveys and will follow all rules, regulations, and relevant PNMS BMPs and protocols.

Stringent biosecurity quarantine procedures (outlined under [PMNM BMP 007](#)) will be adhered to and enforced at each island where personnel land on shore or boats and divers enter the water. This includes use of bio-secure quarantined gear, which is inspected, cleaned, stored, and dedicated for each island and atoll (and even islands within atolls). Strict protocols are adhered to and enforced.

**ADD field testing new cutting tools and extraction platform.**

**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?**

The Project has been actively engaged in extensive marine debris removal operations and other conservation and management initiatives within the NWHI since 1996. NOAA and its partners have diligently crafted and refined protocols for surveying, mitigating, and removing marine debris, a critical threat to wildlife and vital habitats. While these operations carry the potential for negative impact on cultural and natural resources, NOAA conducted a Programmatic Environmental Assessment (PEA or EA) under the National Environmental Policy Act (NEPA), resulting in a Finding of No Significant Impact (FONSI) in June 2005 (valid indefinitely) for the Project. PMDP’s operation strictly adheres to all existing NOAA protocols and procedures, ensuring the safe execution of the mission.

Additional Consultations:

- Endangered Species Act (ESA) Consultation and Conference on Papahānaumokuākea Marine Debris Project Activities, 2023-2027 (PIRO-2025-01834/ I-PI-25-2519-DG)

Previous Permits:

- 2025: PMNM-2025-004 and PMNM-2025-005
- 2024: PMNM-2024-003 and PMNM-2024-005
- 2023: PMNM-2023-005
- 2022: PMNM-2022-008

For particularly sensitive activities, such as addressing a nuisance algal outbreak like *Chondria tumulosa* at Kuaihelani (Midway Atoll), Manawai (Pearl and Hermes Atoll), and Hōlanikū (Kure Atoll), PMDP will proactively communicate and collaborate with PNMS Co-managers, and provide clear justification for each activity. If more nuisance algae are discovered, PMDP will clearly communicate what is observed in the field and request expert guidance and suggestions for next steps.

Papahānaumokuākea epitomizes ‘āina momona (fat lands, fertile or rich lands). It serves as a tangible example of how our ‘āina should abundantly produce resources, holding immense cultural significance. From the perspective of Kānaka Maoli worldview, understanding these mauka to makai (mountain to sea, land to ocean) connections is vital for indigenous knowledge. The flourishing ecosystems and habitats of Papahānaumokuākea act as a living testament, aiding in comprehending the stories, history, and relationships practiced by kūpuna (ancestors). It provides a living space for Kānaka Maoli to reconnect and expand upon cultural practices. The

removal of marine debris becomes a crucial aid to safeguard, perpetuate, and enhance this special place, its ecosystem, and its cultural resources for future generations.

PMDP actively collaborates with the Native Hawaiian community, specifically the Papahānaumokuākea Cultural Working Group (CWG) and intends to continue this collaboration indefinitely. Specifically, PMDP has partnered to develop a [culture-based strategy](#) for the Project. This strategy aims to enhance inclusivity and collaboration with the Native Hawaiian community, facilitating access to the PMNM as demonstrated in PMDP-2024-01 in 2024 and PMDP-2025-01 in 2025, creating culture-based outreach materials, and adhering to traditional protocols and procedures while in the field.

**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.**

Marine debris remains and will persist as a significant threat to the PMNM without a comprehensive annual large-scale marine debris removal effort (requiring removal of >57 tons or 115,000 pounds annually). Marine debris, in general, poses substantial risks and threats to wildlife and essential habitat in Hawai'i. However, the marine debris challenges facing PNMS differ significantly from those of the Main Hawaiian Islands (MHI).

The PNMS is composed of islands and atolls with ancient origins, formed over Hawai'i's hotspot (underwater geological volcanic island formation) as early as 30 million years ago (Hōlanikū – Kure Atoll). These islands have moved northwest (nearly 3,000 km or 1,900 miles) due to the Pacific tectonic plate's movement and have sunk back into the ocean, transforming large volcanic islands into shallow atolls, shoals, and expansive reef areas.

The emergent land mass in the PNMS is about 15 square kilometers, whereas shallow reef area (between 0-30 ft depth) is estimated to be 350 square kilometers (greater than 200 times the area of land mass). In contrast, the MHI is estimated to have over 16,000 square kilometers of emergent land area but only ~320 square kilometers of shallow reef area. The MHI consists of high volcanic islands with steep reef drop-offs from shore, whereas the PNMS landscape is dominated by isolated clusters of low-lying islands, barrier reefs, and calm lagoons with expansive shallow reef formations. Consequently, the issue of in-water or underwater marine debris, particularly derelict fishing gear (DFG), has a significantly more adverse impact on the PNMS compared to the MHI (as nets become snagged on shallow corals rather than washing onto the shorelines). Research co-authored by K. O'Brien and J. Morioka demonstrated that reefs in PNMS experiencing interactions with DFG have a higher occurrence of bare (dead) substrate (Suka, et al. 2020). The abundance and concentration of wildlife compared to the relative risk and threat of marine debris in the PNMS greatly exceeds that of the MHI. Without

annual efforts to remove marine debris and rescue wildlife, the sensitive habitats and animals will continue to be at great risk.

**d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?**

The primary goal of all proposed activities is to safeguard PNMS and its natural, historical, and cultural assets by eradicating anthropogenic threats to coral reefs, wildlife and their crucial habitats. PMDP aspires to embody an organization that upholds the stringent standards necessary for access to the PNMS. Numerous safeguards are meticulously implemented to minimize the potential negative impacts on the PNMS' resources, encompassing biosecurity measures, specific marine debris removal criteria, and nuisance algae Best Management Practices (BMPs). The Project has, to date, made a significant positive impact on PNMS resources and we anticipate this impact will persist in the future.

PMDP firmly believes that fostering a sense of community vested in a positive outcome for Papahānaumokuākea is the most effective model for stewardship of protected resources. Given the incredibly diverse community here in Hawai'i, nurturing an understanding and affection for PNMS can establish genuine and enduring support for these activities. The outreach and education aspect of the proposed marine debris removal activities cannot be understated. Since the public is unable to visit PNMS due to its protected status, the oral, written, and visual narratives brought back to our community from PNMS hold significant importance in building and nurturing a stewardship community. Additionally, we aspire to facilitate Native Hawaiian access to PNMS, offering opportunities for Native Hawaiians to participate as members of the marine debris field team. This approach is pivotal in forging a novel model that integrates Western science-based projects, indigenous knowledge, and conservation efforts.

**e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.**

The Project, formerly led by NOAA in collaboration with other agency partners, commenced in 1996. Its initial objective was to conduct large-scale operations aimed at eliminating the accumulated marine debris on shallow coral reef environments. This was achieved through multi-month, multi-vessel large-scale cleanup operations annually between 1999-2004. By 2005, NOAA determined the backlog of accumulated marine debris had been successfully cleared and transitioned to a "maintenance mode" approach in 2006 with the goal of removing 52 metric tons (57 tons or 115,000 pounds) of marine debris annually (Dameron et al., 2007). However, between 2006-2019, due to diminishing funding and resources available for annual removal missions, the removal of marine debris fell behind the accumulation rate, resulting in an estimated backlog of 1 million pounds of debris in the PNMS in 2020.

PMDP took the initiative in 2022 to address the legacy, backlogged marine debris, while also keeping pace with the annual accumulation of 115,000 pounds (57 tons) of new marine debris. PMDP anticipates a continued trend of removing more than 115,000 pounds of marine debris from PNMS each year through the end of 2026. It is PMDP’s goal to eliminate the backlog of marine debris and then focus efforts on shoreline marine debris cleanups and regular coral reef maintenance cleanups.

A typical 25-day mission to the PNMS can yield approximately 18 operational days, subject to weather conditions, scheduling, and project scope. With a team of 16 PMDP staff (comprising 4 boat teams of 4 divers), each operational day can effectively remove an estimated 5,000 pounds of marine debris. Therefore, aligning all the elements optimally, each PMDP 25-day mission can potentially remove 90,000 pounds of marine debris. With the goal of conducting three large-scale cleanups and removing 200,000 pounds of debris annually, PMDP hopes to remove the historical backlog by the end of 2026 and transition into “maintenance mode” in 2027. PMDP is also currently researching and developing innovative tools and technologies to detect, cut, and lift large marine debris, which may allow for a quicker timeline and transition.

The above description of accumulation and backlog specifically refers to in-water Derelict Fishing Gear (DFG). Shoreline DFG and plastics are not encompassed in these estimates, presenting another significant challenge in terms of time and resources required for their effective management. Thus, unlike many other proposed projects within PNMS, the effectiveness of our proposed approach directly corresponds to the project’s duration.

**f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.**

PMDP is well-equipped to continue leading this project safely and efficiently, benefiting from the expertise of individuals overseeing both management and field operations. PMDP has led these marine debris expeditions exclusively since 2022 and has since removed nearly 1 million pounds from the PNMS over ten independently led and managed cleanups (202,950 pounds in 2022, 212,160 pounds in 2023, 330,250 pounds in 2024, and 184,940 pounds in 2025).

Prior to 2022, James Morioka, PMDP Executive Director, led and managed the NOAA Marine Debris Project in the PNMS from 2015 to 2021, and Kevin O’Brien, PMDP President, spearheaded field operations for the Project from 2013 to 2018.

PMDP has demonstrated a strong commitment to safety, successful project outcomes, meticulous attention to detail, and extensive knowledge of marine debris removal operations. PMDP continues to support the development of protocols and best practices for safeguarding

PNMS as well as improving small boat and dive operations. PMDP strives to contribute to research and data regarding nuisance algae, *Chondria tumulosa*.

**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.**

PMDP was established in 2019 with the explicit purpose of relieving the Government and the PNMS Co-Trustees from the sole responsibility of funding and conducting marine debris removal efforts in Papahānaumokuākea. As governmental resources dwindled between 2006-2019, it became necessary to devise an additional mechanism to broaden the funding base, including sources that were not accessible to NOAA during the Project's tenure. This was aimed at creating an organization that could act as a focal point for collaborative planning and execution of these crucial missions. PMDP now possesses the essential elements – staff, facilities, and assets – to independently conduct full-scale removal missions.

In fiscal year 2025, PMDP successfully executed three field missions, with an operational budget that exceeded \$3.5 million. The majority of funding was (and still is) provided by the National Fish and Wildlife Foundation (NFWF) at the level of \$2.28 million annually, which has helped remove nearly 1 million pounds of marine debris over the last 4 years.

**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.**

All activities proposed by PMDP in this permit application will strictly adhere to established NOAA protocols from prior years. PMDP is committed to not only complying with but also enhancing all PNMS Best Management Practices (BMPs) and regulations that align with our activities.

**i. Has your vessel been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?**

Yes, the vessel (M/V Imua) facilitating the proposed activities are outfitted with the mobile transceiver.

**j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.**

All other approvals have been obtained for the proposed activities, and all permit applicants have maintained compliance with previous PNMS permits, primarily facilitated through NOAA channels.

## **8. Procedures/Methods:**

The following list of activities aims to promote the PNMS and its resources:

### **Marine Debris Survey and Removal Operations:**

Note: A Supplemental Biosecurity Plan for marine debris survey and removal operations is attached to this permit to supplement BMP 020 and other guidance for operations around nuisance algae.

### **In-Water Marine Debris Survey and Removal Operations:**

Three (3) methods are used for in-water or underwater survey and removal of derelict fishing gear (DFG):

- **Swim Surveys (60%):** This is PMDP’s primary method for surveying and detecting marine debris. Swim surveys are used within atoll lagoons around reticulated complex reefs where boat maneuvering to tow divers is ineffective.
- **Diver Propulsion Vehicle (DPV) Surveys (30%):** DPVs are utilized to accelerate swim surveys, covering more reef area and conserving more energy, which aids in safer, more efficient marine debris detection and removal operations.
- **Tow-board Surveys (10%):** This method allows for rapid visual surveys in shallow water between 0 and 30 feet deep, typically in large sand flats or backreef areas (within the atoll’s barrier reef). This method uses the 19-ft inflatable boat to tow two freedivers (snorkelers) 100-ft behind the boat moving at 1-2 knots.

For all three methods (detailed above), divers conduct visual in-water surveys for marine debris until a net is visually located entangled on the reef. Once located, data regarding the net location/coordinates (latitude, longitude), net characteristic (fishery and material type, size, depth, buoyancy, foul level) and impact to the habitat and wildlife are collected. “Standard Operating Procedures for In-Water Cleanups” (included in the attached Supplemental Biosecurity Plan) is used to determine whether net removal is appropriate and won’t cause additional reef damage. If removal is deemed appropriate, divers cut the DFG free from the substrate while minimizing impact to the entangled coral and surrounding reef habitat. The DFG is then manually loaded into inflatable boats for transport back to the ship. The marine debris is stored aboard the ship and transported back to Honolulu, Hawai’i for proper disposal at the end of each mission.

Shoreline Marine Debris Survey and Removal Operations:

- Shoreline Surveys: PMDP staff will conduct surveys by walking the shorelines (between water and vegetation lines on shore) of the islands and atolls within PNMS to collect and remove marine debris. The Project primarily focuses on collecting and removing entanglement and ingestion hazards to wildlife. A new pilot project has been proposed to collect a small collection of glass, during PMDP-2026-01 (2026 Mission #1) and PMDP-2026-02 (2026 Mission #1). No metal, lumber, tires, or other hazardous or abrasive/jagged material is removed without an appropriate risk assessment. All appropriate marine debris is collected and staged at a small boat ‘pick-up point’, where PMDP’s 19-ft inflatable boats can approach the shorelines and safely load the marine debris to transport back to the ship. The marine debris is stored aboard the ship and transported back to Honolulu, Hawai’i for proper disposal at the end of each mission.

Aerial Marine Debris Survey Operations:

- Unmanned Aerial Vehicle (UAV) Surveys: These surveys will be conducted using an approved UAV platform over coral reefs and shorelines at all islands and atolls and deployed and recovered from the inflatable boats when possible. The goal is to detect large, floating, entangling marine debris over coral reefs (which pose the greatest threat to wildlife), detect wildlife entangled and endangered in these nets, identify areas of high-density debris accumulation, and capture imagery to help detect anomalies in the habitats that would often get overlooked (like large sand flats). Strict UAV rules, regulations, protocols (FAA Part 107 regulations) and BMPs will be followed and enforced for aerial survey operations.

Wildlife Disentanglement Operations:

The Project often encounters marine wildlife entangled in marine debris. Marine wildlife in the PNMS is protected and managed by the State and Federal governments, and are protected by laws, rules and regulations that prohibit the interaction and intervention with wildlife. When necessary, PMDP staff who are fully qualified, certified, trained and authorized to handle, restrain, and disentangle marine wildlife will communicate with State and Federal agencies to assess the situation and develop risk mitigation strategies. If human intervention is necessary to prevent potentially fatal outcomes to marine wildlife, PMDP staff will work with the appropriate offices for guidance and next steps.

- Hawaiian Monk Seal Disentanglement Operations: Hawaiian monk seals are often entangled in marine debris, necessitating intervention and disentanglement for their survival. When an entangled Hawaiian monk seal is identified, PMDP staff will promptly notify the NOAA NMFS PIFSC Protected Species Division (PSD) Hawaiian Monk Seal Research Program (HMSRP) of the situation. A full assessment of the seal’s health and surrounding habitat will be conducted and relayed to the HMSRP office. James Morioka (PMDP Executive Director), Andrew Sullivan-Haskins, and Cascade Mayer are

professionally trained Hawaiian monk seal handlers with extensive experience. They have all assisted in handling and disentangling numerous seals in the PNMS. NOAA NMFS authorizes PMDP staff as Co-Investigators on the Hawaiian monk seal permit NMFS ESA Permit #27552, to lead the handling, restraining, and disentanglement of endangered seals using established protocols, procedures, equipment and supplies, including manual restraint, hoop-net restraint, or stretcher-net restraint methods.

- **Marine Turtle Disentanglement Operations:** Marine turtles are frequently entangled in marine debris, particularly in shallow water coral reef environments. When a turtle is identified as entangled, the team will assess the turtle and its surrounding environment. If permitted, and the disentangling scenario does not cause further risk to the staff and Project, the team will handle the rescue of turtle, ensuring the turtle’s head remains above water for effective breathing, and proceed with the disentanglement and release process. NOAA NMFS authorizes PMDP staff as Co-Investigators on the NMFS ESA Permit #21260, to lead the handling, restraining, and disentanglement of marine turtles using established protocols, procedures, equipment and supplies.

**Marine Debris Transport and Disposal:**

Marine debris collected from within Papahānaumokuākea will be managed as follows (for more details, please refer to the Supplemental Biosecurity Plan):

All marine debris will be contained in PMDP’s specialized marine debris storage bins or secured in super sacks.

1. **Storage Bins:** When derelict fishing nets are contained in **PMDP’s marine debris storage bins**, they will be cut to appropriate sizes (3-ft by 3-ft by 3-ft) in the field. These nets will remain securely contained in the bins until they arrive in Honolulu. Upon arrival, the marine debris storage bins will be craned off the ship whole and transported directly to:
  - a. **H-Power/Covanta Energy** for direct incineration through Hawaii’s “Waste to Energy” initiative, or
  - b. **Plastic Research Recycling Facility (PRRF) Center for Marine Debris Research (CMDR)** for recycling through HPU’s “Nets to Roads” initiative.
2. **Supersacks:** Marine debris not stored in PMDP’s marine debris storage bins, will be stored in **supersacks** on the ship’s deck until they reach Honolulu. Upon arrival in Honolulu, this debris will be craned off the ship and placed in roll-off containers provided by Radius Recycling (previously known as Schnitzer Steel Corp.). These containers will be transported to H-Power/Covanta for incineration and disposal.

**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):**

N/A (Not Applicable)

Common name:

Scientific name:

# & size of specimens:

Collection location:

Whole Organism  Partial Organism

**9b. What will be done with the specimens after the project has ended?**

N/A

**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?**

N/A

**11. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:**

N/A

**12. List all specialized gear and materials to be used in this activity:**

N/A

**13. List all Hazardous Materials you propose to take to and use within the Monument:**

A complete list of hazardous materials will be included in the supplemental material, but in general, is limited to:

- Liquid bleach
- Concentrated powdered or puck bleach
- Gasoline (non-ethanol 89 grade gasoline)
- Hypalon glue (for inflatable boats)
- Motor oil (for small boats)
- Other applicable small boat support chemicals and supplies (i.e., grease, adhesives, etc.)

**14. Describe any fixed installations and instrumentation proposed to be set in the Monument:**

N/A

**15. Provide a timeline for sample analysis, data analysis, write-up and publication of information:**

N/A

**16. List all Applicant’s publications directly related to the proposed project:**

Four decades of Hawaiian monk seal entanglement data reveal the benefits of plastic debris removal  
Baker, J.D., Johanos, T.C., Ronco, H., Becker, B.L., **Morioka, J., O’Brien, K.**, Donohue, M.J.  
(September 2024) Science: <https://www.science.org/doi/10.1126/science.ado2834>

Large floating abandoned, lost or discarded fishing gear (ALDFG) is frequent marine pollution in the Hawaiian Islands and Palmyra Atoll.

Royer, S., Corniuk, R., McWhirter, A., Lynch IV, H.W., Pollack, K., **O’Brien, K.**, Escalle, L., Stevens, K.A., Moreno, G., Lynch, J.M.

(November 2023) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2023.115585>

Coral cover remains suppressed three years after derelict net removal in a remote shallow water coral reef ecosystem.

Halperin, A., Lichowski, F., **Morioka, J., O’Brien, K.**, Suka, R., Huntington, B.

(February 2023) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2023.114703>

Movement and retention of derelict fishing nets in Northwestern Hawaiian Island reefs.

McCoy, K., Huntington, B., Kindinger, T., **Morioka, J., O’Brien, K.**

(January 2022) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2021.113261>  
<https://www.sciencedirect.com/science/article/pii/S0025326X21012959>

Successful application of a novel technique to quantify negative impacts of derelict fishing nets on Northwestern Hawaiian Island reefs.

Suka, R., Huntington, B., **Morioka, J., O’Brien, K.**, Acoba, T.

(August 2020) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2020.111312>

<https://www.sciencedirect.com/science/article/abs/pii/S0025326X20304306>

Building evidence around ghost gear: Global trends and analysis for sustainable solutions at scale.  
Richardson, K., Asmutis-Silvia, R., Drinkwin, J., Gilardi, K.V.K., Giskes, I., Jones, G., **O'Brien, K.**, Pragnell-  
Raasch, H., Ludwig, L., Antonelis, K., Barco, S., Henry, A., Knowlton, A., Landry, S., Mattila, D.,  
MacDonald, K., Moore, M., Morgan, J., Robbins, J., van der Hoop., J., Hogan, E.  
(January 2019) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2018.11.031>

**The following publications are referenced throughout the document and are related to the proposed project:**

Four decades of Hawaiian monk seal entanglement data reveal the benefits of plastic debris removal  
Baker, J.D., Johanos, T.C., Ronco, H., Becker, B.L., **Morioka, J.**, **O'Brien, K.**, Donohue, M.J.  
(September 2024) Science: <https://www.science.org/doi/10.1126/science.ado2834>

Marine debris accumulation in the Northwestern Hawaiian Islands: An examination of rates and  
processes.  
Dameron, O.J., Parke, M., Albins, M., Brainard, R.  
(May 2007) Marine Pollution Bulletin: <https://doi.org/10.1016/j.marpolbul.2006.11.019>

Benefits derived from opportunistic survival-enhancing interactions for the Hawaiian monk seal: the  
silver BB paradigm.  
(September 2014) Endangered Species Research: <https://doi.org/10.3354/esr00612>

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.



1/20/2026

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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



## **Supplemental Biosecurity Plan**

### PMDP Marine Debris Survey and Removal Operations

This Supplemental Biosecurity Plan accompanies PMDP's Conservation and Management Permit Application and summarizes biosecurity protocols for three proposed marine debris cleanup missions in 2026.

**Purpose:** Prevent the spread of nuisance algae, particularly *Chondria tumulosa* and *Acanthophora spicifera* during marine debris survey and removal operations within the Papahānaumokuākea National Marine Sanctuary.

#### **1. PMDP-2026-01 - (2026 Mission #1)**

- Tentative Dates: April 27 (Monday) – May 14, 2026 (Thursday) – 18 days
- Island/Atoll: Kuaihelani
- Proposed Operations: In-water and shoreline marine debris survey and removal

#### **2. PMDP-2026-02 - (2026 Mission #2)**

- Tentative Dates: August 8 (Saturday) – August 30 (Sunday), 2026 – 23 days
- Tentative Islands/Atolls: Nihoa, Mokumanamana, Lalo, Kamokuokamohoali'i, Kamole, Kapou
- Proposed Operations: In-water and shoreline marine debris survey and removal

#### **3. PMDP-2026-03 - (2026 Mission #3)**

- Tentative Dates: September 15 (Tuesday) – October 9 (Friday), 2026 – 25 days
- Tentative Islands/Atolls: Manawai, Kuaihelani, Hōlanikū
- Proposed Operations: In-water and shoreline marine debris survey and removal

#### **Ancillary Project - Marine Debris Surveys at Joint Hawaiian Monk Seal Research Program Field Camp**

- Tentative Dates: May 1 (Friday) – August 4 (Tuesday), 2026 – 96 days
- Tentative Islands/Atolls: Manawai
- Proposed Operations: Small boat surveys for in-water marine debris and staging of shoreline marine debris

**Biosecurity Zones:**

**Nuisance Algae Mitigation Zones (NAMZ):** Manawai, Kuaihelani, Hōlanikū

**Non-NAMZ:** Nihoa, Mokumanamana, Lalo, Kamokuokamoali'i, Kamole, Kapou

Enhanced biosecurity protocols are required in NAMZ locations to prevent the spread of nuisance algae such as *Chondria tumulosa* and *Acanthophora spicifera*.

**General Biosecurity Principles:**

- Prevent transfer of nuisance algae, debris fragments, and terrestrial pests between islands and vessels.
- Stop work immediately and notify the Co-Managers if nuisance algae are suspected.
- Follow Best Management Practices (BMPs), specifically BMP 020 at all times.
- Use containments, cleaning, and disinfection protocols for boats, gear, and debris.

## **PMDP-2026-01 - 2026 Mission #1**

**Project Summary:** This project consists of a fly-in, fly-out, shore-based mission conducted exclusively at Kuaihelani (Midway Atoll), a designated Nuisance Algae Mitigation Zone (NAMZ). PMDP proposes to conduct both in-water and shoreline marine debris cleanup activities, including the removal of in-water derelict fishing nets from coral reef habitats, even in areas where *Chondria tumulosa* is **present** on the net or in the surrounding reef environment. All in-water debris staged at Kuaihelani and **will not** be transported to Honolulu for disposal unless authorized by the Co-Managers following viability testing, approved bleach treatment protocols, and/or completion of additional research on *Chondria tumulosa*. All shoreline debris collected will be **high and dry** (above the tide line and fully desiccated), double-bagged in supersacks, and staged on pallets at Kuaihelani for pick-up during PMDP's third mission of the year (PMDP-2026-03). To further reduce the potential spread of algae within the atoll, a catchment apron and a designated visual spotter will be used during daily offloading operations at Sand Island's inner harbor dock, and all debris will be stored in a USFWS-designated location on the tarmac.

**Island:** Kuaihelani (Midway Atoll)

**NAMZ Status:** NAMZ

### **Operations Proposed:**

- In-water marine debris survey and removal operations within the interior of the atoll
  - Swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys
  - Field-testing of new cutting tools (manual and electric)
  - Removal of derelict fishing nets with visible *Chondria tumulosa* and transport to the inner harbor at Sand Island for safe storage (see *In-Water Operations* section for details)
- Shoreline marine debris survey and removal operations across Sand, Eastern, and Spit islands
  - Collection of derelict fishing gear, plastic debris greater than 5 centimeters in length, and opportunistically glass
- Native Hawaiian cultural protocols on Sand Island, including oli (chant) and ho'okupu (ceremonial gift offering) of wai (water) and pa'akai (salt), inspected and previously frozen in accordance with biosecurity requirements
- Unmanned Aerial Vehicle (UAV) aerial surveys using an approved UAV platform in accordance with permit conditions
- Staging of all shoreline marine debris in double-bagged supersacks for transport back to Honolulu for disposal during PMDP's third mission of the year (PMDP-2026-03)

### **In-Water Operations:**

1. PMDP divers conduct swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys to locate derelict fishing nets within coral reef environments.
2. Upon locating a net (free-floating or attached to the substrate), divers conduct visual surveys for nuisance algae on the net and in the surrounding area, collect data on the net and associated benthic habitat, photo-document conditions as necessary, and complete depth, stability, and entanglement hazard assessments prior to any removal activity.
  - a. If nuisance algae is absent, the net is carefully removed from the coral reef environment in a manner that avoids additional damage to the benthic habitat.
  - b. If nuisance algae is **present**, the location is recorded using GPS, conditions are photo-documented, and the **net is carefully removed** from the coral reef environment in a manner that avoids additional damage to the benthic habitat.
3. Once removed from the coral reef environment, the net is manually loaded into a PMDP small boat. The small boat is equipped with a helicopter sling cargo net to secure the marine debris, which is placed on a heavy-duty tarp within the small boat.

4. Upon completion of in-water operations for the day, small boats transit from the reef areas to Sand Island's inner harbor.
5. Prior to entering Sand Island's inner harbor, **transom plugs are inserted** into the small boats to ensure all water within the small boat is fully contained.
6. Small boats dock inside Sand Island's inner harbor near the Boathouse, where a **nuisance algae catchment apron** is secured to fully cover the gap between the dock and the small boat.
7. PMDP staff operate the telehandler to secure and offload the marine debris from the small boat, using a designated **visual spotter** to ensure that no net fragments, debris, or algae enter the water during offloading operations.
8. Marine debris is transported from the dock to a designated tarmac storage location for **long-term staging**. Transport of in-water marine debris from Kuaihelani to Honolulu is **not** currently approved and would require additional research, treatment using approved disinfection protocols (e.g., bleach), and/or authorization from the PNMS Co-Managers.
9. At the conclusion of daily operations, each small boat is removed from the water at the small boat ramp and transported to the designated small boat staging area by the Boat House.
10. Any remaining water within the small boat is drained and collected into buckets (by removing the transom plugs), contained, and treated with a bleach solution in accordance with approved disinfection protocols prior to disposal. All small boats, dive equipment, and associated marine debris survey and removal gear are subsequently cleaned, disinfected using bleach, and thoroughly inspected before being approved for reuse in subsequent operations.

#### **Shoreline Operations:**

1. PMDP staff systematically clean the shorelines of Sand, Eastern, and Spit islands, removing only marine debris that is **"high and dry"**, meaning debris located above the high-tide line and fully desiccated. Materials collected include derelict fishing nets, plastic debris greater than 5 centimeters in length, and opportunistically glass. Metal, lumber, and hazardous items, including materials that could puncture PMDP small boats, are not collected.
2. Marine debris is staged at designated shoreline pick-up locations, with materials separated into "nets" and "non-nets".
3. All marine debris is double-bagged in supersacks and loaded into PMDP small boats, which are lined with a helicopter sling cargo net and a heavy-duty tarp to contain debris and fragments.
4. Once a small boat is fully loaded (typically containing two to three double-bagged supersacks secured in the deck area), the small boat transits from the shoreline to Sand Island's inner harbor.
5. Small boats dock inside Sand Island's inner harbor near the Boathouse, where PMDP staff operate a telehandler to secure and offload the supersacks of marine debris from the small boat.
6. Offloaded supersacks are transported from the dock to a designated tarmac storage location using a telehandler and staged on pallets until they are **retrieved during PMDP's third mission of the year** (PMDP-2026-03).
7. At the conclusion of daily operations, each small boat is removed from the water at the small boat ramp and transported to the designated small boat staging area by the Boathouse.
8. All small boats, dive equipment, and associated marine debris survey and removal gear are cleaned, disinfected using approved bleach protocols, and thoroughly inspected before being approved for reuse in subsequent operations.

## **PMDP-2026-02 - 2026 Mission #2**

**Project Summary:** This project is a ship-based marine debris cleanup mission conducted within Non-Nuisance Algae Mitigation Zone (**Non-NAMZ**) areas of the Papahānaumokuākea National Marine Sanctuary. The project includes **standard** in-water and shoreline marine debris survey and removal activities conducted in accordance with approved PMDP operational protocols. Native Hawaiian cultural protocols and small boat launch and recovery exercises are planned at Nihoa and Mokumanamana. In-water marine debris cleanup activities will be conducted at Lalo and Kamokuokamohoali'i, with opportunistic in-water cleanup activities at Kamole and Kapou. Shoreline cleanup activities will be conducted at Lalo, Kamole and Kapou. All marine debris collected during the mission will be transported to the Hawai'i Pacific University Center for Marine Debris Research (CMDR) (pending availability) for recycling, research, and repurposing following completion of the mission. If CMDR is unable to receive the marine debris, it will be transported directly to H-Power/Covanta for incineration.

**Islands:** Nihoa, Mokumanamana, Lalo, Kamokuokamohoali'i, Kamole, and Kapou

**NAMZ Status:** Non-NAMZ

### **Operations Proposed:**

- In-water marine debris survey and removal operations at Lalo, Kamokuokamohoali'i, and opportunistically at Kamole and Kapou
  - Swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys
  - Field-testing of new cutting tools (manual and electric)
- Shoreline marine debris survey and removal operations at Lalo, Kamole, and Kapou
  - Collection of derelict fishing gear, plastic debris greater than 5 centimeters in length, and opportunistically glass
- Small boat launch and recovery exercise only at Nihoa and/or Mokumanamana
- Native Hawaiian cultural protocols at Nihoa, Ke Alanui Polohiwa a Kāne (Tropic of Cancer), and Mokumanamana, including oli (chant) and ho'okupu (ceremonial gift offering) of ti leaf lei, wai (water) and pa'akai (salt), inspected and previously frozen in accordance with biosecurity requirements
- Unmanned Aerial Vehicle (UAV) aerial surveys using an approved UAV platform in accordance with permit conditions
- Opportunistic Hawaiian monk seal and green sea turtle surveys, disentanglement, and/or restraining and tagging activities (Hawaiian monk seals only), conducted under appropriate authorizations

### **In-Water Operations:**

1. PMDP divers conduct swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys to locate derelict fishing nets within coral reef environments.
2. Upon locating a net (free-floating or attached to the substrate), divers conduct visual surveys for nuisance algae on the net and in the surrounding area, collect data on the net and associated benthic habitat, photo-document conditions as necessary, and complete depth, stability, and entanglement hazard assessments prior to any removal activity.
  - a. If nuisance algae is absent, the net is carefully removed from the coral reef environment in a manner that avoids additional damage to the benthic habitat.
  - b. If nuisance algae is **present**, the location is recorded using GPS, conditions are photo-documented, and the **net is left in place**. The Permit Coordinator will be notified immediately, and the information will be shared with the Co-Managers. If the suspected algae is deemed to be *Chondria tumulosa* or *Acanthophora spicifera*, the island or atoll of operation will be considered NAMZ, and all operations will need to conform to NAMZ rules and regulations for the duration of the mission.

3. Once removed from the coral reef environment, the net is manually loaded into a PMDP small boat. The small boat is equipped with a helicopter sling cargo net to secure the marine debris, which is placed on a heavy-duty tarp within the small boat.
4. Upon completion of in-water operations for the day, small boats transit from the reef areas to the support vessel, M/V Imua.
5. Small boats tie up alongside the support vessel, M/V Imua. Using the support vessel's crane, the marine debris is offloaded from the small boat and onto the vessel's deck.
6. The marine debris load is weighed on deck and transferred into PMDP's custom marine debris storage bins.
7. At the conclusion of daily operations, each small boat is craned from the water onto the support vessel's deck. All small boats, dive equipment, and associated marine debris survey and removal gear are cleaned, disinfected using approved bleach protocols, and thoroughly inspected before being approved for reuse in subsequent operations.
8. At the conclusion of field operations for the mission, the support vessel, M/V Imua, transports all marine debris to Honolulu for offloading.
9. Upon arrival at Honolulu Harbor, PMDP's custom marine debris storage bins are craned off the support vessel and placed onto the dock.
10. Each storage bin is transported by truck to the Center for Marine Debris Research (CMDR)'s Plastic Research Recycling Facility (PRRF) for further processing. If CMDR is unable to receive all marine debris, remaining material will be transported to H-Power/Covanta for incineration.

### **Shoreline Operations:**

1. PMDP staff systematically clean the shorelines, collecting derelict fishing nets, plastic debris greater than 5 centimeters in length, and opportunistically glass. Metal, lumber, and hazardous items, including materials that could puncture PMDP small boats, are not collected.
2. Marine debris is staged at designated shoreline pick-up locations, with materials separated into "nets" and "non-nets".
3. Derelict fishing nets are loaded into a helicopter sling cargo net, placed on a heavy-duty tarp within the small boat.
4. Non-nets (typically plastic debris) is loaded into supersacks and placed into the PMDP small boats, which are lined with a helicopter sling cargo net and a heavy-duty tarp to contain debris and fragments.
5. Once a small boat is fully loaded (typically containing up to 4,000 pounds of derelict fishing nets or two to three supersacks secured in the deck area), the small boat transits from the shoreline to the support vessel, M/V Imua.
6. Small boats tie up alongside the support vessel, M/V Imua. Using the support vessel's crane, the marine debris is offloaded from the small boat and onto the vessel's deck.
7. The marine debris load is weighed on deck. Nets are transferred into PMDP's custom marine debris storage bins, and non-net debris in supersacks are staged on the vessel's deck.
8. At the conclusion of daily operations, each small boat is craned from the water onto the support vessel's deck. All small boats, dive equipment, and associated marine debris survey and removal gear are cleaned, disinfected using approved bleach protocols, and thoroughly inspected before being approved for reuse in subsequent operations.
9. At the conclusion of field operations for the mission, the support vessel, M/V Imua, transports all marine debris to Honolulu for offloading.
10. Upon arrival at Honolulu Harbor, PMDP's custom marine debris storage bins are craned off the support vessel and placed onto the dock.
11. Each storage bin is transported by truck to the Center for Marine Debris Research (CMDR)'s Plastic Research Recycling Facility (PRRF) for further processing. If CMDR is unable to receive all marine debris, it will be transported to H-Power/Covanta for incineration.

## **PMDP-2026-03 – 2026 Mission #3**

**Project Summary:** This project is a ship-based marine debris cleanup mission conducted within Nuisance Algae Mitigation Zone (**NAMZ**) areas of the Papahānaumokuākea National Marine Sanctuary, including Manawai, Kuaihelani, and Hōlanikū. Due to the elevated risk of spreading *Chondria tumulosa*, this mission will be implemented under PMDP's most stringent biosecurity protocols. In-water marine debris cleanup of coral reef habitats will occur at Manawai and Hōlanikū. Any in-water debris observed with *Chondria tumulosa* **present** on the net of in the surrounding area will be **left in place**, photo-documented, and recorded. All in-water debris without *Chondria tumulosa* will be cut into approximately 3-ft x 3-ft sections and carefully transported to the support vessel, M/V Imua, using enhanced handling procedures during loading, craning from small boats, and placement into PMDP's custom marine debris storage bins. Once full, storage bins will be **treated using approved biosecurity protocols, including soaking in a 10% bleach solution for a minimum of four hours**. All small boats, dive equipment, operational gear, and the working deck, including the special Chondria runway and staging areas, will be cleaned, disinfected, and inspected in accordance with PNMS BMP guidelines. Shoreline marine debris collected at Manawai and Hōlanikū will be **high and dry** (above the tide line and fully desiccated), double-bagged in supersacks, and stored on the deck of the support vessel for transport to Honolulu. This mission will also retrieve shoreline marine debris previously staged in double-bagged supersacks at Kuaihelani during PMDP's first mission (PMDP-2026-01). All marine debris collected during PMDP-2026-03 will be transported to Honolulu and delivered directly to H-Power/Covanta Energy for disposal via incineration.

**Islands:** Manawai, Kuaihelani, Hōlanikū, and opportunistically Kapou

**NAMZ Status:** NAMZ

### **Operations Proposed:**

- In-water marine debris survey and removal operations at Manawai, Hōlanikū, and opportunistically at Kuaihelani and Kapou (if operations are conducted at Kapou, it will be before any NAMZ locations are visited)
  - Swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys
  - Field-testing of new cutting tools (manual and electric)
  - Field-testing of a new heavy-duty net extraction platform
- Shoreline marine debris survey and removal operations at Manawai, Hōlanikū, and opportunistically at Kuaihelani and Kapou
  - Collection of derelict fishing gear, plastic debris greater than 5 centimeters in length, and opportunistically glass
- Opportunistic maritime archaeology surveys at Kapou (pending funding)
- Native Hawaiian cultural protocols at Ke Alanui Polohiwa a Kāne (Tropic of Cancer) including oli (chant) and ho'okupu (ceremonial gift offering) of ti leaf lei, wai (water) and pa'akai (salt), inspected and previously frozen in accordance with biosecurity requirements
- Unmanned Aerial Vehicle (UAV) aerial surveys using an approved UAV platform in accordance with permit conditions
- Opportunistic Hawaiian monk seal and green sea turtle surveys, disentanglement, and/or restraining and tagging activities (Hawaiian monk seals only), conducted under appropriate authorizations
- Pick-up of staged marine debris from PMDP-2026-01 (2026 Mission #1)

### **In-Water Operations:**

1. PMDP divers conduct swim surveys, diver propulsion vehicle (DPV) surveys, and towed-diver surveys to locate derelict fishing nets within coral reef environments.

2. Upon locating a net (free-floating or attached to the substrate), divers conduct visual surveys for nuisance algae on the net and in the surrounding area, collect data on the net and associated benthic habitat, photo-document conditions as necessary, and complete depth, stability, and entanglement hazard assessments prior to any removal activity.
  - a. If nuisance algae is absent, the net is carefully removed from the coral reef environment in a manner that avoids additional damage to the benthic habitat.
  - b. If nuisance algae is **present**, the location is recorded using GPS, conditions are photo-documented, and the **net is left in place**. All small boats are notified immediately of its location within the atoll, and operations are redirected to an alternative location.
3. Once removed from the coral reef environment, the net is manually loaded into a PMDP small boat. The small boat is equipped with a helicopter sling cargo net to secure the marine debris, which is placed on a heavy-duty tarp within the small boat.
4. Upon completion of in-water operations for the day, small boats transit from the reef areas to the support vessel, M/V Imua.
5. Small boats tie up alongside the support vessel, M/V Imua, and using the support vessel's crane, the marine debris is offloaded from the small boat, suspended over the water to allow excess water to drain, and then craned over the designated "**Chondria runway**" (tarp with lifted edges designed to capture all excess water and net fragments along its path) before being staged on a designated **staging tarp** with raised edges.
6. The marine debris load is weighed and then transferred into PMDP's custom marine debris storage bins for additional treatment.
7. At the conclusion of daily operations, each small boat is craned from the water onto the support vessel's deck. Any remaining water within the small boat is drained and collected into buckets, contained, and treated with a bleach solution in accordance with approved disinfection protocols prior to disposal. All small boats, dive equipment, and associated marine debris survey and removal gear are cleaned, disinfected using bleach, and thoroughly inspected before being approved for reuse in subsequent operations. The "Chondria runway", staging area, and working deck of the support vessel are inspected, cleaned, and disinfected with a bleach solution on a daily basis.
8. At the conclusion of in-water operations for the mission, each PMDP custom marine debris storage bin is filled with a **10% bleach solution for a minimum of four hours**. Bleach concentration is monitored, tested, and adjusted as necessary throughout the treatment process. The bleach solution is then diluted and drained overboard over deep water in bleach disposal zones (3 nautical miles from shore and in 1,000 feet of water) in accordance to permit conditions.
9. Following completion of treatment, the support vessel, M/V Imua, transports all treated marine debris back to Honolulu for offloading.
10. Upon arrival at Honolulu Harbor, PMDP's custom marine debris storage bins are craned off the support vessel and placed onto the dock.
11. Each storage bin is transported by truck directly to H-Power/Covanta Energy for direct incineration, accompanied by a PMDP escort vehicle.

### **Shoreline Operations:**

1. PMDP staff systematically clean the shorelines, removing only marine debris that is "**high and dry**", meaning debris located above the high-tide line and fully desiccated. Materials collected include derelict fishing nets, plastic debris greater than 5 centimeters in length, and opportunistically glass. Metal, lumber, and hazardous items, including materials that could puncture PMDP small boats, are not collected.
2. Marine debris is staged at designated shoreline pick-up locations, with materials separated into "nets" and "non-nets".

3. All marine debris is double-bagged in supersacks and loaded into PMDP small boats, which are lined with a helicopter sling cargo net and a heavy-duty tarp to contain debris and fragments.
4. Once a small boat is fully loaded (typically containing two to three double-bagged supersacks secured in the deck area), the small boat transits from the shoreline to the support vessel, M/V Imua.
5. Small boats tie up alongside the support vessel, M/V Imua. Using the support vessel's crane, the marine debris is offloaded from the small boat and onto the vessel's deck.
6. The supersacks of marine debris are weighed on deck and staged and secured on the vessel's deck.
7. At the conclusion of daily operations, each small boat is craned from the water onto the support vessel's deck. All small boats, dive equipment, and associated marine debris survey and removal gear are cleaned, disinfected using approved bleach protocols, and thoroughly inspected before being approved for reuse in subsequent operations.
8. At the conclusion of field operations for the mission, the support vessel, M/V Imua, transports all marine debris to Honolulu for offloading.
9. Upon arrival at Honolulu Harbor, the double-bagged supersacks of debris are craned off the support vessel and placed directly into roll-off dumpsters.
10. Each roll-off dumpster is transported by truck to H-Power/Covanta for incineration.

## **Ancillary Projects**

### **Marine Debris Surveys at Manawai (Joint Hawaiian Monk Seal Research Program Field Camp)**

**Project Summary:** This ancillary project will be conducted by PMDP and Cooperative Institute for Marine and Atmospheric Research (CIMAR) staff at Manawai as part of a joint Hawaiian monk seal research and marine debris survey field camp. All activities will be conducted under the PMNM Co-Manager's Permit, PMNM-2026-001. A PMDP Field Camp Technician will work alongside CIMAR staff to locate derelict fishing nets within the atoll and record its location using GPS from small boats. Additional objectives include staging high and dry marine debris at designated shoreline pick-up locations. All staged debris will remain uncontained to prevent wildlife entrapment and will be double-bagged and picked up during PMDP's third mission of the year, PMDP-2026-03 (see PMDP-2026-03 for details).

**Islands:** Manawai

**NAMZ Status:** NAMZ

#### **Operations Proposed:**

- Small boat surveys to locate and GPS-mark derelict fishing nets in coral reef environments (conducted exclusively from the small boats; no in-water activities)
- Shoreline marine debris staging at islands within Manawai
  - Collection of derelict fishing gear, plastic debris greater than 5 centimeters in length, and opportunistically glass

#### **Small Boat Operations:**

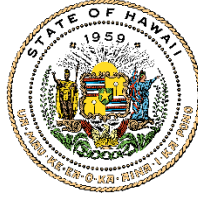
1. PMDP and CIMAR staff will jointly operate small boats along pre-planned routes within coral reef environments, to locate and GPS-mark derelict fishing nets for future survey and removal during PMDP's third mission, PMDP-2026-03. No marine debris will be removed or transported during this ancillary project.

#### **Shoreline Operations:**

1. PMDP and CIMAR staff will work together to stage marine debris that is **"high and dry"**, defined as debris located above the high-tide line and fully desiccated. Materials staged include derelict fishing nets, plastic debris greater than 5 centimeters in length, and opportunistically glass. Metal, lumber, and hazardous items, including materials that could puncture PMDP small boats, will not be collected.
2. Marine debris will be staged at designated shoreline pick-up locations, with materials separated into "nets" and "non-nets", for bagging and removal during PMDP's third mission, PMDP-2026-03. No marine debris will be removed or transported during this ancillary project.

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

**SYLVIA LUKE**  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
1151 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813

**DAWN N.S. CHANG**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

**RYAN K.P. KANAKA'OLE**  
FIRST DEPUTY

**CIARA W. K. KAHAHANE**  
DEPUTY DIRECTOR - WATER


AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

April 10, 2026


TO:

Division of Aquatic Resources File

THROUGH:

Ryan K. P. Kanaka'ole, Acting Chairperson 

FROM:

Brian J. Neilson, Administrator  
Division of Aquatic Resources 

SUBJECT:

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200.1 HAR, FOR A PAPAĀNAUMOKUĀKEA CONSERVATION AND MANAGEMENT PERMIT TO JAMES MORIOKA, PAPAĀNAUMOKUĀKEA MARINE DEBRIS PROJECT, FOR ACCESS TO STATE WATERS TO SURVEY AND REMOVE MARINE DEBRIS AND DISENTANGLE MARINE LIFE AS NEEDED.

SUMMARY

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200.1, HAR:

Project Title:

Papahānaumokuākea Marine National Monument (PMNM) Conservation and Management Permit to Mr. James Morioka, Papahānaumokuākea Marine Debris Project (PMDP), for Access to State Waters to Survey and Remove Marine Debris and Disentangle Marine Life as Needed

Permit Number:

PMNM-2026-007

Project Description:

The Conservation and Management Permit, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (PMNM) for the purposes of large-scale marine debris survey and removal operations, including the Northwestern Hawaiian Islands State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Lālo (French Frigate Shoals)
- Kamokuokamohoali‘i (Maro Reef)
- Kamole (Laysan Island)
- Kapou (Lisianski Island)
- Manawai (Pearl and Hermes Atoll)
- Kuaihelani (Midway Atoll)
- Hōlanikū (Kure Atoll)

Cultural protocol including oli, ‘ōlelo no‘eau, and ho‘okupu (limited) will also occur in open ocean surrounding Nihoa, Mokumanamana, and Ke Alanui Polohiwa a Kāne (Tropic of Cancer) when passing through.

The activities covered under this permit would be authorized to occur via three separate missions, two cruises and one flight, between April 27, 2026 and October 10, 2026. The flight will travel to Kuaihelani on April 27, 2026 and return on May 14, 2026, with gear traveling to Kuaihelani on M/V Imua February 3-8, 2026 and returning to Honolulu on the M/V Imua June 22-27, 2026. The first cruise will take place between August 8, 2026 and August 30, 2026. The second cruise will take place between September 15, 2026 and October 9, 2026. Expedition dates may vary if unforeseen interruptions or delays occur..

## INTENDED ACTIVITIES

The proposed permit activities would allow for large scale marine debris survey and removal operations within PMNM and imagery collection for fundraising purposes.

Similar permits were issued in 2025 (PMNM-2025-004 and PMNM-2025-005). New modifications/activities to the 2026 permit application include the following: (1) field testing new marine debris cutting and processing tools such as a heavy-duty net extraction platform, (2) a pilot project to collect glass on the first and second mission, and (3) ancillary projects including coral bleaching surveys, archaeological surveys, algae distribution surveys, and expanded support for NOAA field camps. A biosecurity plan has not been finalized but will be coordinated between subject-matter experts at DAR and other co-managing agencies in coordination with PMDP for the permit to be considered valid for activities in the nuisance algae mitigation zones (NAMZ).

The National Oceanic and Atmospheric Administration (NOAA) NWHI Marine Debris Project (Project) began in 1996 and was led by NOAA National Marine Fisheries Service (NMFS) and other agency partners through 2021. The Project has demonstrated over time the necessity of large-scale marine debris removal operations for the protection and safety of marine wildlife, specifically the endangered Hawaiian monk seal and threatened green sea turtle. Between 2015 and 2021, the Project was co-led and co-managed by James Morioka (Executive Director, PMDP, and Kevin

O'Brien (President and Founder, PMDP), while still operating under NOAA, prior to the creation of PMDP in 2019. PMDP is leading the Project in Papahānaumokuākea indefinitely after completing successful missions in 2020-2021 under NOAA auspices.

Since 2020, PMDP has led or partnered on thirteen (13) successful large-scale cleanups, successfully removing over 1.23 million pounds of marine debris from sensitive reefs, islands and atolls while rescuing countless entangled animals. In 2025, PMDP removed 184,940 pounds of debris during 66 operational days within PMNM. For 2026, PMDP aims to remove 200,000 pounds of marine debris over 66 days.

Specific objectives of the Papahānaumokuākea Marine Debris Project (PMDP) can be found in the BLNR submittal and detailed explanations can be found in the application.

PMDP intends to film/photograph protected wildlife (including Hawaiian monk seals, sea turtles, and seabirds) interacting or being affected by the threats of marine debris, while strictly following all PMNM BMPs. All footage (film/photograph) will be provided to the four Co-Trustees (NOAA, U.S. Fish and Wildlife Service (USFWS), State of Hawai'i, and the Office of Hawaiian Affairs (OHA)) upon return from PMNM. PMDP also intends to capture images for fundraising purposes.

## METHODS/PROCEDURES

### In-Water Marine Debris Survey and Removal Operations:

Three (3) methods are used for in-water or underwater survey and removal of derelict fishing gear (DFG):

- Swim Surveys (60%): This is PMDP's primary method for surveying and detecting marine debris. Swim surveys are used within atoll lagoons around reticulated complex reefs where boat maneuvering to tow divers is ineffective.
- Diver Propulsion Vehicle (DPV) Surveys (30%): DPVs are utilized to accelerate swim surveys, covering more reef area and conserving more energy, which aids in safer, more efficient marine debris detection and removal operations.
- Tow-board Surveys (10%): This method allows for rapid visual surveys in shallow water between 0 and 30 feet deep, typically in large sand flats or backreef areas (within the atoll's barrier reef). This method uses the 19-ft inflatable boat to tow two freedivers (snorkelers) 100-ft behind the boat moving at 1-2 knots.

### Shoreline Marine Debris Survey and Removal Operations:

Shoreline Surveys: PMDP staff will conduct surveys by walking the shorelines (between water and vegetation lines on shore) of the islands and atolls within PMNM to collect and remove marine debris. The Project primarily focuses on collecting and removing entanglement and ingestion hazards to wildlife. A new pilot project has been proposed to collect a small collection of glass, during PMDP-2026-01 (2026 Mission #1) and PMDP-2026-02 (2026 Mission #1). No metal, lumber, tires, or other hazardous or abrasive/jagged material is removed without an appropriate risk assessment. All appropriate marine debris is collected and staged at a small boat 'pick-up point', where PMDP's 19-ft inflatable boats can approach the shorelines and safely load the marine debris

to transport back to the ship. The marine debris is stored aboard the ship and transported back to Honolulu, Hawai'i for proper disposal at the end of each mission

#### Aerial Marine Debris Survey Operations:

Unmanned Aerial Systems (UAS) Surveys: These surveys will be conducted using an approved UAV platform over coral reefs and shorelines at all islands and atolls and deployed and recovered from the inflatable boats when possible. The goal is to detect large, floating, entangling marine debris over coral reefs (which pose the greatest threat to wildlife), detect wildlife entangled and endangered in these nets, identify areas of high-density debris accumulation, and capture imagery to help detect anomalies in the habitats that would often get overlooked (like large sand flats). Strict UAV rules, regulations, protocols (FAA Part 107 regulations) and BMPs will be followed and enforced for aerial survey operations.

#### Wildlife Disentanglement Operations:

The Project often encounters marine wildlife entangled in marine debris. When necessary, PMDP staff who are fully qualified, certified, trained and authorized to handle, restrain, and disentangle marine wildlife will communicate with State and Federal agencies to assess the situation and develop risk mitigation strategies. If human intervention is necessary to prevent potentially fatal outcomes to marine wildlife, PMDP staff will work with the appropriate offices for guidance and next steps.

- **Hawaiian Monk Seal Disentanglement Operations:** Hawaiian monk seals are often entangled in marine debris, necessitating intervention and disentanglement for their survival. When an entangled Hawaiian monk seal is identified, PMDP staff will promptly notify the NOAA NMFS PIFSC Protected Species Division (PSD) Hawaiian Monk Seal Research Program (HMSRP) of the situation. A full assessment of the seal's health and surrounding habitat will be conducted and relayed to the HMSRP office. James Morioka (PMDP Executive Director), Andrew Sullivan-Haskins, and Cascade Mayer are professionally trained Hawaiian monk seal handlers with extensive experience. They have all assisted in handling and disentangling numerous seals in PMNM. NOAA NMFS authorizes PMDP staff as Co-Investigators on the Hawaiian monk seal permit NMFS Endangered Species Act (ESA) Permit #27552, to lead the handling, restraining, and disentanglement of endangered seals using established protocols, procedures, equipment and supplies, including manual restraint, hoop-net restraint, or stretcher-net restraint methods.
- **Marine Turtle Disentanglement Operations:** Marine turtles are frequently entangled in marine debris, particularly in shallow water coral reef environments. When a turtle is identified as entangled, the team will assess the turtle and its surrounding environment. If permitted, and the disentangling scenario does not cause further risk to the staff and Project, the team will handle the rescue of turtles, ensuring the turtle's head remains above water for effective breathing, and proceed with the disentanglement and release process. NOAA NMFS authorizes PMDP staff as Co-Investigators on the NMFS ESA Permit #21260, to lead the handling, restraining, and disentanglement of marine turtles using established protocols, procedures, equipment and supplies.

#### Marine Debris Transport and Disposal:

Marine debris collected from within the Papahānaumokuākea Marine National Monument will be managed as follows (for more details, please refer to the Supplemental Biosecurity Plan and application):

- All marine debris will be stored in PMDP’s specialized marine debris storage bins or placed in super sacks.
- When derelict fishing nets are stored in PMDP’s marine debris storage bins, they will be cut to appropriate sizes in the field (3-ft by 3-ft by 3-ft). These nets will remain contained in the bins until they arrive in Honolulu. Upon arrival, the marine debris storage bins will be craned off the ship wholesale and transported directly to either:
  - H-Power/Covanta Energy through Hawaii’s “Waste to Energy” initiative for direct incineration, or
  - Plastic Research Recycling Facility Center for Marine Debris Research for recycling through Hawaii Pacific University’s “Nets to Roads” initiative.
- All other marine debris not stored in PMDP’s marine debris storage bins will be stored in supersacks on the ship’s deck until they reach Honolulu. Upon arrival in Honolulu, this debris will be craned off the ship and placed in roll-off containers provided by Radius Recycling. These containers will then be transported to HPower/Covanta for incineration and disposal.

More detailed information about this project can be found in the attached application.

#### ADHERENCE TO FINDINGS CRITERIA, BMPs, AND OTHER SAFETY PROTOCOLS:

The activities described above may require the following regulated activities to occur in State waters:

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- Anchoring a vessel
- 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
- Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

#### Monument Management Plan Strategies

The activities proposed by the applicants directly support the Monument Management Plan (PMNM MMP Vol. 1, 2008), including but not limited to the following priority management needs:

- Strategy MD-1: Remove and prevent marine debris throughout the life of the plan:
  - Activity MD-1.1: Continue working with partners to remove marine debris in the

- Monument and reduce additional debris entering the Monument;
- Activity MD-1.2: Catalog, secure, contain, and properly remove hazardous materials that wash ashore in the NWHI;
- Strategy MD-2: Investigate the sources, types, and accumulation rates of marine debris within 5 years;
  - Activity MD-2.1: Work with partners on marine debris studies;
  - Activity MD-2.2: Develop and standardize marine debris monitoring protocols for marine and terrestrial habitats;
- Strategy MD-3: Develop outreach materials regarding marine debris within 2 years.
  - Activity MD-3.1: Work with partners to continue to develop and implement an outreach strategy for marine debris.

Additional management needs this project addresses can be found in the application.

**Best Management Practices (BMPs)**

To safeguard Monument resources the applicants will abide by all PMNM BMPs while conducting the aforementioned activities within PMNM:

<b>BMP Number</b>	<b>Title</b>	<b>Download</b>
001	Marine Alien Species Inspection Standards for Maritime Vessels	<a href="#">PDF</a>
002	Protocol for Acquiring Avian Blood Samples	<a href="#">PDF</a>
003	Human Hazards to Seabirds Briefing	<a href="#">PDF</a>
004	Best Management Practices for Boat Operations and Diving Activities	<a href="#">PDF</a>
005	Protocols to Reduce Impact to the Laysan Finch	<a href="#">PDF</a>
006	General Storage and Transport Protocols for Collected Samples	<a href="#">PDF</a>
007	Best Management Practices for Terrestrial Biosecurity	<a href="#">PDF</a>
008	Seabird Protocols Necessary for Conducting Trolling Research and Monitoring in Papahānaumokuākea Marine National Monument	<a href="#">PDF</a>
009	Best Practices for Minimizing the Impact of Artificial Light on Sea Turtles	<a href="#">PDF</a>
010	Marine Wildlife Viewing Guidelines	<a href="#">PDF</a>
011	Disease and Introduced Species Prevention Protocol for Permitted Activities in the Marine Environment, Papahānaumokuākea Marine National Monument (Monument)	<a href="#">PDF</a>
012	Precautions for Minimizing Human Impacts on Endangered Land Birds	<a href="#">PDF</a>
015	Nonnative Species Inspection Requirements at Midway Atoll	<a href="#">PDF</a>
016	Best Management Practices for Activities on Nihoa	<a href="#">PDF</a>
017	Best Management Practices for Maritime Heritage Sites	<a href="#">PDF</a>
018	Rodent Prevention and Inspection Standards for Permitted Vessels	<a href="#">PDF</a>

019	Best Management Practices for Activities on Mokumanamana (Necker Island)	<a href="#">PDF</a>
020	Best Management Practices to minimize the spread of nuisance alga	<a href="#">PDF</a>

For activities related to the nuisance algal outbreak of *Chondria tumulosa* at Kuaihelani (Midway Atoll), Manawai (Pearl and Hermes Atoll), and Hōlanikū (Kure Atoll), BMP #20 requires a biosecurity plan for activities within the NAMZ which is currently under review. Permitted activities at these atolls will be subject to this plan once it is approved by all co-managing agencies. Activities at these atolls will not occur without an approved biosecurity plan.

PMDP has actively collaborated with the Native Hawaiian community and intends to continue this collaboration indefinitely. Specifically, PMDP has partnered with the Office of Hawaiian Affairs (OHA) and NOAA to develop a culture-based strategy for the Project. This strategy aims to enhance inclusivity and collaboration with the Native Hawaiian community, facilitating access to the PMNM, creating culture-based outreach materials, and adhering to traditional protocols and procedures while in the field.

#### REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific and cultural entities: DAR, DOFAW, NOAA Office of National Marine Sanctuaries Papahānaumokuākea National Marine Sanctuary, NOAA National Marine Fisheries Service, USFWS Refuges, USFWS Ecological Services, and the Office of Hawaiian Affairs (OHA). In addition, the permit application was posted on the Monument website within 40 days of its receipt, in accordance with the Monument’s Public Notification Policy giving the public an opportunity to comment.

#### Monument Management Board (MMB) Agency Reviewer Questions and Applicant Responses

Below are some of the questions, comments, and responses received during the review process at the time of drafting the BLNR submittal. The review process will be completed before the permit will be issued.

#### Comments

1. Amend the plan to treat shoreline debris from the NAMZ the same as in-water debris from the NAMZ or to propose a new hot water treatment with minimum parameters of 50 degrees Celsius for 10 minutes.

##### Response:

We would like to respectfully decline the recommendation to treat shoreline debris from the NAMZ the same as in-water debris from the NAMZ, or to apply an alternative treatment such as hot water. Instead, we would like to discuss returning to the previous approach. We genuinely believe the shoreline marine debris targeted at the NAMZ Islands (specifically Manawai and Hōlanikū) poses an extremely minimal risk of spreading *Chondria*, as the debris target and remove is surveyed and identified beforehand to ensure that *Chondria* is not associated with it.

Additionally, the shoreline marine debris collected at Kuaihaleni last year that had *Chondria* present was determined to contain non-viable algae. Based on this finding, we believe there is sufficient justification to revert to the 2024 biosecurity protocol. That protocol allowed PMDP to target and remove shoreline debris that is high and dry, double-bag it, and transport it by ship back to Honolulu for proper disposal.

2. In the Biosecurity plan on page 2, any plants used for lei (including ti leaf) as ho‘okupu must be washed, cleaned, and frozen for biosecurity measures. The same may need to be mentioned on page 6 of the conservation and management permit.

Response:

Ti leaf lei used as ho‘okupu will be washed, cleaned, and frozen as part of our biosecurity measures. This process will only occur on Missions #2 and #3 aboard the chartered vessel, at Ke Alanui Polohiwa a Kāne, in the open ocean when transitioning from Ao to Pō. No ti leaf lei ho‘okupu is requested for Mission #1 (Kuaihelani) or any other islands or nearshore environments due to biosecurity concerns. No ti leaf lei material will be discharged into the environments outside of this specified open-ocean transit location.

## Questions

1. Regarding the shoreline debris protocol for Non-NAMZ - will there be inspections for nuisance algae on shoreline debris?

Response:

Yes. Following the 2024 biosecurity protocol, if *Chondria tumulosa* is identified on the marine debris itself or in the surrounding shoreline area, the debris will be left in place (or moved further up the shoreline to prevent it from re-entering the ocean) and not removed.

2. Could we get more information about the new heavy-duty net extraction platform?

Response:

The heavy-duty net extraction platform (CAD file link- <https://drive.google.com/file/d/1G9gv279BC3W6-ExOgahMHvZO3lw-4NSf/view>) is still under development and has not yet been custom built or pilot tested. The current concept is a modular pontoon platform featuring:

- A drop-down landing-craft style bow gate
- A series of powered winches capable of pulling the largest nets out of the water
- A large working deck where nets can be cut into manageable sections
- A saltwater pump system to rinse nets prior to bagging

After cutting and rinsing, the net sections would be placed into double supersacks (double containment) and then transferred into a clean Zodiac small boat for transport.

Importantly, this platform will not be used for any nets that have *Chondria*. Instead, it will serve as a pilot study to test whether large nets can be safely cut, cleaned, and contained offshore, minimizing the possibility that any hypothetical algae fragments could enter the small boats.

3. What is the plan for in-water debris with *Chondria* left on Kuaihelani?

Response:

All in-water marine debris collected at Kuaihelani that may contain *Chondria* will be staged on the tarmac on Sand Island. The material will remain there until additional research or testing confirms that all algae present are non-viable, or until further treatment (e.g., bleach or hot water treatment) is applied to ensure the algae is fully neutralized before transport to the Main Hawaiian Islands.

We truly appreciate DAR's partnership in helping ensure these operations are conducted as safely as possible for Hawaii's ecosystems. Our goal is to maintain a precautionary approach while still allowing the removal of hazardous marine debris that continues to accumulate on the reefs and shorelines.

Please let us know if it will be helpful to discuss this further. We are happy to meet, chat, and revise the plan together to ensure DAR's concerns are fully addressed.

4. Could you provide additional detail on the custom marine debris storage bins proposed for use? Specifically:

*What material are the bins made of?*

Response:

Steel

*What is the thickness/specification of the bin walls?*

Response:

10-gauge thick steel (roughly 9/64-inches)

*Are the bins watertight?*

Response:

Yes, the bins are designed to be fully watertight to contain the bleach solution during the soak period

*Are the bins fully enclosed on top (e.g., with a lid or other cover)?*

Response:

The bins are not fully enclosed on top. They consist of a base and four side walls, with no lid or cover

5. During the 4-hour bleach soak, is there any intentional movement, repositioning, or agitation of debris within the bins to help ensure the bleach solution reaches enclosed spaces, crevices, or other hard-to-access areas?

Response:

Yes, there is intentional movement and repositioning of the debris within the bins during the 4-hour bleach soak to help ensure that the solution reaches enclosed spaces, crevices, and other hard-to-access areas. Additionally, the natural movement of the vessel at sea causes the bleach solution within the bins to circulate and mix, helping ensure the solution is well distributed and that the marine debris remains fully saturated throughout the treatment period.

6. In section 5b of the Conservation and Management Permit application, "Discharging or depositing any material or matter into the Monument" and "Anchoring a vessel" are identified as activities to be covered. Could you clarify when, where, and under what circumstances these activities may occur?

With respect to anchoring, could you clarify:

*Whether the anchoring would involve small boats, the R/V, or both;*

Response:

Small boats only

*Whether anchoring would occur only during operations or also overnight;*

Response:

Daytime operations only, no overnight

*Whether anchoring would occur only in sandy areas; and*

Response:

Anchoring would only occur in sandy areas

*The general locations or situations in which anchoring may be needed.*

Response:

Stabilizing the small boat while positioning alongside a large net during freediving and cutting operations before lifting, mandatory safety breaks during cutting and heavy lifting operations for large nets, operational breaks while remaining near an active debris site

7. With respect to “discharging or depositing any material or matter,” could you clarify: *Whether this is intended to refer to discharge associated with the bleach soak process for marine debris, or whether any other discharge/deposit activities are proposed?*

Response:

This is intended only to cover discharge associated with the bleach treatment process used for marine debris and operational equipment. Specifically, this includes bleach water solution used to disinfect marine debris, gear, boats, and deck areas at the end of each operational day. No other discharge or deposition activities are proposed.

8. On page 9 of the Special Ocean Use Permit application, the application states that “All field-based activities associated with imagery capture and marine debris removal will be conducted under a separate Conservation and Management Permit.” However, in section 5b, several fieldwork-related activities are also checked. Could you clarify which activities are intended to be covered under the SOU permit versus the Conservation and Management Permit?

Response:

All field-based activities associated with imagery collection and marine debris collection will be conducted under the Conservation and Management Permit. The Special Ocean Use Permit is intended solely to allow the use of imagery and debris collected during those operations for fundraising and outreach purposes. The intent is to enable the organization to share imagery from permitted operations in order to support future fundraising efforts that help sustain marine debris survey and removal work in subsequent years.

9. On page 3, the application states that the activity would help Papahānaumokuākea by “providing critical, supplemental funding.” Could you clarify whether the intent is instead to describe how the proposed activity would support fundraising or solicitation efforts, rather than directly provide funding through the permit activity itself?

Response:

The application language referring to "providing critical, supplemental funding" is intended to describe how the imagery and associated storytelling from the work may support fundraising efforts, rather than funding being generated directly through the permit activity itself. As part of this effort, we are proposing a small pilot project involving the collection of glass marine debris. This would be the first time we test whether recovered glass debris could potentially be repurposed into new items, which could then be sold during fundraisers to support future marine debris removal work. If imagery or recovered materials are used in fundraising, all proceeds would be directed toward supporting additional operational days at sea in future years, allowing us to remove more debris from Papahānaumokuākea.

#### Note on the Supplemental Biosecurity Plan

All MMB agencies aside from DAR have expressed support and endorsement of the PMDP biosecurity plan. According to BMP #020, all MMB agencies must approve of the supplemental biosecurity plan. DAR has provided numerous comments to PMDP regarding the plan and a meeting occurred on March 7th to further discuss DAR's concerns directly with PMDP. DAR comments that are specific to the biosecurity plan are not included here but the comments made so far are included as an attachment. Future comments and questions will be incorporated in the final biosecurity plan that will be approved prior to validity of this permit and PMDP's departure for PMNM. The first unapproved version of the biosecurity plan is also attached.

#### ENVIRONMENTAL COMPLIANCE

##### NEPA / HEPA:

Categorical Exclusion / Exempt Class: HEPA Exemptions 1 & 5  
EA: June 2005 Programmatic EA under NEPA  
EIS: n/a

##### Other Consultations: (ESA/MMPA Section 7; NHPA Section 106, etc.)

- An informal review of all aforementioned activities following section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA; 16 U.S.C. 1855(b)) was conducted. The outcome of this review may have required the applicant to adhere to other NMFS-prescribed conditions; such conditions would be reflected in the PMNM permit, prior to issuance.
- The proposed activities are covered under PMNM's programmatic ESA Section 7 informal consultation with National Marine Fisheries Service (NMFS). The outcome of this consultation may have required the applicant to adhere to other NMFS-prescribed conditions; such conditions would be reflected in the PMNM permit, prior to issuance.
- NOAA previously conducted a Programmatic Environmental Assessment (PEA or EA) under the National Environmental Policy Act (NEPA), resulting in a Finding of No Significant Impact (FONSI) in June 2005 (valid indefinitely) for the Project. PMDP's operation strictly adheres to all existing NOAA protocols and procedures, ensuring the safe execution of the mission.

- ESA monk seal disentanglement permit NMFS ESA Permit #27552
- ESA turtle disentanglement permit NMFS ESA Permit #21260

Has Applicant been granted a permit from the State in the past? Yes

If so, please summarize past permits:

Conservation and Management Permits (marine debris removal): PMNM 2022-06, 2023-05, 2024-02, 2025-004  
 Special Ocean Use: PMNM-2025-005

Have there been any violations: No  
 b) Late/incomplete post-activity reports: No

Are there any other relevant concerns from previous permits? No

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: DAR, DOFAW, NOAA Office of National Marine Sanctuaries Papahānaumokuākea National Marine Sanctuary, NOAA National Marine Fisheries Service, USFWS Refuges, USFWS Ecological Services, and the Office of Hawaiian Affairs (OHA). In addition, the permit application was posted on the Monument website within 40 days of its receipt, in accordance with the Monument’s Public Notification Policy giving the public an opportunity to comment.

Exemption Determination:

After reviewing §11-200.1-15, HAR, including the criteria used to determine significance under §11-200.1-13, HAR, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit have been evaluated as a single action. Since this permit involves an activity that is precedent to a later planned activity, i.e., the same methodology used throughout the permit period, the categorical exemption determination here will treat all planned activities under this permit as a single action under §11-200.1-10, HAR.
2. The General Exemption Type #1 for Operations, Repairs or Maintenance of Existing Structures, Facilities, Equipment, or Topographical Features, Involving Minor Expansion or Minor Change of Use Beyond That Previously Existing and The General Exemption Type #5 for Basic Data Collection, Research and Experimental Management with no Serious or Major Environmental Disturbance Appears to Apply. §11-200.1-16 (a) (1) and §11-200.1-16 (a) (2), HAR, exempts the class of actions that involve the “operations, repairs or maintenance of existing structures, facilities, equipment, or topographical features, involving minor expansion or minor change of use beyond that previously existing” and “basic data collection, research, experimental management, and resource evaluation activities which do

not result in a serious or major disturbance to an environmental resource.” This exemption type has been interpreted to include activities related to the surveying and removal of marine debris, and disentanglement of marine wildlife, as needed and as described above.

The proposed activities here appear to fall squarely under the general exemption type identified under HAR §11-200.1-16 (a) (1) and §11-200.1-16 (a) (2), as described under the revised 2020 DLNR Exemption List (Concurred on by the Environmental Council on November 10, 2020), under the general exemption type #1 (Part 1), items #1, #2 and #31 and under the general exemption type #5 (Part 1), items #13 and #15 and (Part 2), item #4:

Type #1 (Part 1), items #1, #2 and #31, includes, respectively, the “removal of boulders, rocks, hazardous trees, marine debris, and other similar hazards necessary to maintain lands and waters in a safe condition” and the “rescue of threatened or endangered species”, and the removal and disposal of rubbish and debris from lands and waters”.

Type #5 (Part 1), items #13 and #15 and (Part 2), item #4, includes, respectively, “research that the Department declares is designed specifically to monitor, conserve, or enhance native species or native species' habitat”, “game and non-game wildlife surveys, vegetation and rare plant surveys, aquatic life surveys, inventory studies, new transect lines, photographing, recording, sampling, collection, culture, and captive propagation” and “experimental management actions that the Department declares are designed specifically to monitor, conserve, or enhance native species or native species' habitat.”

As discussed below, no significant disturbance to any environmental resource is anticipated. Thus, so long as the considerations below are met, the general exemption types should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” §11-200.1-15 (d), HAR. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. 11-200.1-13, HAR.

The applicant would abide by the PMNM BMPs as listed in earlier section above while conducting the aforementioned activities within the PMNM. PMDP’s operation follows all existing NOAA protocols and procedures in place for this same Project when it was operated by NOAA (for which a Finding of No Significant Impact (FONSI) in June 2005 was determined), for the safe execution of the mission.

All Papahānaumokuākea Marine Debris Project (PMDP) activities proposed will be carried out with strict safeguards for the natural, cultural, and historic resources of the Monument as required by Presidential Proclamation 8031, and other applicable policies and standard operating procedures. All agencies will receive PMDP's detailed field protocols and best management practices (BMP). These practices and procedures will minimize or avoid disturbance to wildlife, flora, habitat, and cultural and historic resources.

PMDP conducts rigorous PMNM (biological and environmental), ship, small boat, and freedive/snorkel operational training before conducting at-sea field operations. This training regimen emulates the rigorous training that James Morioka (PMDP Executive Director) and Kevin O'Brien (PMDP President) led at NOAA for all field staff in preparation for field operations between 2007- 2021 and continued with PMDP in from 2022 to 2024. This includes all marine debris removal activities, but also how to safeguard and minimize impacts to other natural and cultural resources. This will be further supported through PMNM pre-access and cultural briefings for all staff. In addition, James Morioka has conducted Resource Monitor duties on past expeditions; either this member of the personnel or another member of the personnel who has been trained in PMNM Resource Monitor duties will accompany all permitted activities to provide oversight and ensure compliance with permit conditions and BMPs.

Careful biosecurity quarantine procedures (outlined under PMNM BMP 007) will be followed and enforced at each island where personnel land on shore or boats and divers are put in the water. This includes use of gear purchased new and dedicated to each island/atoll. Thorough cleaning, biosecurity, and safe storage protocols are followed between field missions and adherence to biosecurity procedures outlined under PMNM BMP 020 is applied in water or zones where applicable.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably have a Minimal or No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all conservation and management activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures.

#### Conclusion

Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above-listed project as provided by Chapter 343, HRS and Chapter 11-200.1 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.