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

June 26, 2015

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 Dr. Kelly Gleason Keogh, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, for Access to State Waters to Conduct Maritime Heritage Activities

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument conservation and management permit to Dr. Kelly Gleason Keogh, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, pursuant to § 187A-6, Hawai'i Revised Statutes (HRS), Chapter 13-60.5, Hawai'i Administrative Rules (HAR), and all other applicable laws and regulations.

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

- § Nīhoa Island
- § Mokumanamana (Necker)
- § French Frigate Shoals
- § Gardner Pinnacles
- § Maro Reef
- § Laysan Island
- § Lisianski Island, Neva Shoal
- § Pearl and Hermes Atoll
- § Midway Atoll
- § Kure Atoll

The activities covered under this permit would occur between August 1, 2015 and July 31, 2016.

The proposed activities are a renewal of work previously permitted and conducted in the Monument. New proposed activities in this application include ground truthing selected dive targets at Midway Atoll for potential shipwreck and sunken aircraft sites, and using SCUBA in remote sensing surveys.

INTENDED ACTIVITIES

The Applicant proposes to conduct the following maritime heritage activities:

1. Conduct non-invasive individual wreck site assessment surveys;
2. Continued monitoring of known shipwreck and sunken aircraft sites;
3. Ground-truth selected dive targets for potential shipwreck and sunken aircraft sites at Midway Atoll;
4. Conduct non-invasive remote sensing using a magnetometer, SCUBA, snorkeler tow board surveys, and snorkeler scooters at high potential wreck sites;
5. Conduct non-invasive terrestrial surveys of Lisianski, Laysan, and Kure Atoll;
6. Video documentation of maritime heritage sites

Proposed activities will utilize the following methods:

§ Non-invasive individual wreck site assessment surveys and monitoring will provide the initiation of a site map, including baseline trilateration and measured sketching. During site assessments, the location and position of artifacts and features would be determined and recorded through digital photography. A temporary fixed survey baseline would be established.

§ Remote sensing activities would locate any anomalies and potential maritime heritage resources for subsequent site assessments. Remote sensing surveys will be conducted with a magnetometer in the following ways: SCUBA, diver tow boarding, and/or diver scooter which propel divers forward at a faster pace. The magnetometer has been used previously in 2010, 2012, and 2014 on maritime heritage projects in the Monument.

§ Terrestrial surveys would involve photographs, sketching maps of potential survey areas and running test survey lines with a metal detector in areas where survivor camps were located. No invasive surveys would occur and all sensitive wildlife will be avoided.

§ Monitoring and collecting site/environmental data would require use of slates, tapes, and the temporary deployment of baselines to determine if artifacts or features have moved. Still photography and video would be incorporated into monitoring and site/environmental data surveys.

The activities proposed by the Applicant directly support the Monument Management Plan's priority management need 3.1 – Understanding and Interpreting the NWHI (though action plan 3.1.4 – Maritime Heritage). These activities contribute to ongoing maritime heritage survey and inventory efforts within the Monument.

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

☒ Touching coral, living or dead

☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

REVIEW PROCESS:
The permit application was sent out for review and comment to the following scientific and cultural entities: Hawai'i Division of Aquatic Resources, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Pacific Islands NW Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 16, 2015, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Comments received from the scientific community are summarized as follows:
QUESTIONS:

1. Are there specific areas of the islands that are suspected shipwreck survivor sites? Or will this just be general surveying of broad areas?

Historical reports of shipwreck survivor camps are generally unspecific about the location on the island where they set up camp. Descriptions typically include: items salvaged from the ship, general description of the island, and bearing and distance to the shipwreck site. Surveys proposed for 2015 will be broad area surveys limited to areas that can be accessed safely and with regard to the Best Management Practice guidelines (specifically the Human Hazards to Seabirds Briefing) and all appropriate safeguards for seabirds and wildlife.

At Lisianski: At least two shipwreck survivor camps are reported in historical records. The shipwreck survivors of the whaleship Konohassett spent 3.5 months on the island after wrecking in May of 1846. The shipwreck survivors of the whaleship Holder Borden spent 8 months on the island after wrecking in April of 1844.

At Kure Atoll: At least three shipwreck survivor camps are reported in historical records. The shipwreck survivors of the whaleship Gledstanes spent 6 months on Green Island after wrecking in June of 1837. The shipwreck survivors of the whaleship Parker spent 8 months on Green Island after wrecking in September of 1842. The shipwreck survivors of the Navy gunboat USS Saginaw spent 2 months on the island after wrecking in October of 1870.

At Laysan: At least two shipwreck events occurred that may have led to shipwreck survivor camps on Laysan Island. The wreck of the Ceylon in 1902 and the wreck of the McNear in May of 1900 may have resulted in shipwreck survivor camps.

2. What is the marine archaeology team's experience walking around areas of extremely high density of nesting seabirds, both on the ground and underground?

PI Kelly Gleason Keogh first began conducting research in the NWHI in 2003 during a month long survey of Kure Atoll. Cynthia Vanderlip hosted the team on the island, and thoroughly trained all members (including Keogh) in understanding the appropriate

etiquette and safeguards for transiting and working near seabirds and marine mammals. In subsequent annual maritime heritage surveys, the team always gained permission from Vanderlip to access Kure Atoll, communicate with field staff and tour the island. These have been additional opportunities to gain experience and training in walking around areas of nesting seabirds. Additionally, annual maritime heritage surveys have also included communication with the FWS Refuge Manager at French Frigate Shoals. Due to the significant shipwreck sites located at FFS (Two Brothers, etc.) it has been important for PMNM maritime heritage staff (Keogh, specifically) to interact with and update the FFS field staff about MH activities. The team has also gained permission on multiple occasions (2005, 2008, 2012) to land on Tern Island, communicate with field staff and the refuge manager, and collect video footage for MH documentaries under the guidance of FWS staff. This has provided an additional opportunity for training and better understanding of how to walk around ares of dense nesting seabirds on the ground and underground.

PMNM Education Coordinator Andy Collins will be participating in the land-based survivor camp surveys as part of the Maritime Heritage team. Andy has acted as a resource monitor on sensitive areas at French Frigate Shoals, Midway, and Nihoa and Mokumanamana. He has been on all the islands except Gardener Pinnacles and is very familiar with both protected species protocols and seabird nesting and burrowing protocols. Andy spent three weeks on East Island, FFS as the biological monitor for a BBC Film Crew and enforced both the gear and clothes quarantines as well as protected species and seabird protocols. It is understood that Laysan and Lisanski present more unique challenges due to the greater density of burrowing nesters and any access to areas of dense burrows will be evaluated and if the density is too great access will not take place. Fortunately this activity is requested to take place at a time when ground nesting is at its lowest, though burrows are still omnipresent. Disturbance to ground nesters will be limited by staying close together, keeping noise to a minimum, and continuous movement. A few years ago Andy worked with Dr. Beth Flint to develop a training program/simulation for visitors to high seabird nesting areas and this was used to train educators who were to visit Nihoa and Mokumanamana.

The Maritime Heritage team is requesting Andy Collins be considered to act in the resource monitor role for this project again.

3. How many persons will enter, within and/or near, these shipwreck survivor camp sites? Will one of them be a resource monitor?

4 persons will participate in the shipwreck survivor camp survey, PI Kelly Gleason Keogh, Andy Collins, Jason Raupp, and Melissa Price. We are requesting that Andy Collins act as a resource monitor for these surveys based on his experience described in the question above.

4. What are the specific dates for the propose activity? The proposed activity dates in the application list up to one entire calendar year starting in late July. It would be helpful to know the specific dates in order to consider all potential

impacts to nesting birds and their phases of chick development for each proposed island.

The permitted activities will take place during the 2015 RAMP expedition, scheduled for the dates July 27 through August 25. The expedition is scheduled to be at Kure Atoll on August 11 and 12, Lisianski August 17-19, and Laysan August 20 and 21. All dates are subject to change due to weather or mechanical issues. The goal, in order to minimize any impact is to keep land work to one day at each location. The team will plan to spend approximately five hours on land each day. The team will also be conducting water activities at each atoll and time will be divided between land and water activities.

5. Please elaborate how assessing the feasibility of an activity, survey and study of shipwreck survivor camps, can be conducted with adequate safeguards for protected seabird species and their nesting areas, even if activities are justified and approved to understand the ecosystem and their structural integrity?

All Best Management Practice principles, and protocols will be strictly followed. The team will consult with field staff on all islands prior to entry, in addition to working closely with Andy Collins (based on his experience described earlier) and other subject matter experts to best understand the sensitivities of this type of survey. The team will ask for on-site advice and guidance from field camp staff to best understand any issues or new concerns in the area. The team will be very clear about the details in both PMNM BMP #003 (Human Hazards to Seabirds Briefing) and PMNM BMP #012 (Pre-cautions for Minimizing Human Impacts on Endangered Land Birds). Specifically, with regard to BMP # 003, minimum gear would be brought on land (i.e. one hand held metal detector, notebooks, pencils, cameras, photo scales, pin flags and handheld gps devices) and no gear would be left on land that could potentially attract and/or disturb seabirds; and all team members will be cognizant of seabirds' thermal and biological requirements (as explained in BMP #003) to minimize disturbance while conducting proposed activities on land. With respect to BMP #012, we will not be camping as only daytime operations are requested and therefore we will not require gear that could potentially impact seabirds (i.e. water jugs, tents, tarps, garbage cans, buckets, etc.) All team members will be familiar with BMP #007 (Special Conditions and Rules for Moving Between Islands/Atolls and Packing for Field Camps). All personnel will wear new footwear, new clothes, and new soft gear all frozen for 48 hours prior to landing. All cameras, metal detector and gps handheld devices will be thoroughly cleaned. Most importantly, no survivor camp survey activities will take place if there will be any negative consequences to a seabird or seabird colony.

6. Even if possible shipwreck survivor sites were identified, it raises major concerns about how the activity could move forward without substantial destruction of protected bird species' nesting habitat. How does the end value of the activity outweigh its anticipated adverse impacts on seabird nesting habitats? Are there practicable alternative methods at each of these sites to conduct the activity in order to minimize or avoid adverse impacts on seabird nesting habitats?

Survey proposed in 2015 is meant to be preliminary, in order to assess that it can indeed be done with adequate safeguards for protected species. The team will be open to the determination that after 2015 survey, any further work will not be possible without destruction or adverse impacts to the seabirds nesting habitat. Work proposed in 2015 is meant to assess all possibilities, and return for consultation with the appropriate experts for any future survey with more information and the ability to develop a plan. The team will take every precaution possible to minimize and avoid any impacts to seabirds including following all appropriate BMPs, following designated resource monitor's instructions, discussing activities with field staff, and ceasing any activity that may have any negative impacts to seabirds.

The end value of this activity is the ability to accomplish activities described in the PMNM Management Plan (MH 1.2 and MH 3.2), as well as in the PMNM Maritime Heritage Research, Education and Management Plan (3.3.3) and provide the public with the opportunity to better understand the human connection with this remarkable place. The shipwreck survivor camps were often set up for months at a time, and their impacts upon the environment and the wildlife may have been significant. Many surivor's accounts report extracting dozens of monk seals and albatross as their food source. These surveys will help us to better understand and interpret the impacts humans have had upon this place. The chance for valuable education and outreach related to these types of discoveries cannot be underestimated and serves to actively engage the public in the stewardship of this place. As discussed above, if there are going to be any impacts to seabird nesting colonies or seabird communities, the team will cease activities.

7. The applicant explains that proposed activities would consist of "detailed investigation of a single wreck or archaeological site…" (page 3). Which site/wreck is being proposed?

The site described on Page 3 includes known shipwreck and sunken aircraft sites for which survey is incomplete. The main priority site to complete survey in 2015 is the Iron Knee Shipwreck site at Lisianski. This activity is also meant to include any new shipwreck or sunken aircraft sites that may be discovered during the 2015 30 day survey in PMNM.

8. The application describes collaboration as part of the 2015 project with a number of different programs (NPS, ECU, ONMS Northeast Region, Flinders University, Woods Hole, TBNMS). Please discuss these collaborative efforts and the role in which these programs and agencies play in 2015.

National Park Service (NPS): NPS Submerged Resources Center will provide, if possible, technical expertise, equipment and personnel. This was funding dependent at the time of the permit application.

East Carolina University (ECU): ECU will provide personnel and equipment support

ONMS Northeast Region: At the time of permit application, ONMS Northeast Region was going to support the mission with personnel. This may no longer occur due to personnel changes.

Flinders University: Flinders University will provide personnel support
Woods Hole: At the time of permit application, Woods Hole was going to provide technical support contingent upon PMNM ability to procure outside funding for 3-D imagery project.

TBNMS: At the time of permit application, TBNMS was going to support the project with personnel.

9. Monitoring is proposed, and reference made to Derek Smith's interdisciplinary surveys parameters and Susie Holst's climate change study parameters. Please describe these parameters and what are the methods being used to focus on those fish surveys and benthic habitat surveys?

Monitoring of all maritime heritage sites in PMNM takes place opportunistically, rather than at regular intervals, which affects the methodology and parameters of survey. As a result, PMNM MH staff continues to research the optimal strategy with the appropriate partners. Collaboration with Smith and Holst in previous years provided an opportunity to test potential methods and parameters, but neither has been adopted as a finalized strategy. Instead, these have served as pilot studies that test the feasibility and relevance of collecting specific parameters at maritime heritage sites.

Team members will conduct presence/absence surveys for fish and coral species identified during 2009/2010 work. Additionally, similar presence/absence type of observational surveys are used to assess the integrity of the shipwreck structure, and any changes in the overall site appearance. For example, rapid coral growth at sites such as the Two Brothers at French Frigate Shoals have dramatically changed the site's appearance and what artifacts are visible during non-invasive survey.

Monitoring in 2015 will focus on participating in integrated global observing networks for Ocean Acidification (http://www.pmel.noaa.gov/co2/OA2012Workshop/WorkshopHome.html). This type of survey is more feasible due to the uncertainties of field work in the NWHI (logistical constraints, etc.).

Derek Smith's 2009-2010 surveys included the installation of oceanographic sensors that measure parameters such as temperature and phH. These instruments are still maintained at sites where Smith deployed them in 2009.

10. How are some of the listed applicant's publications (i.e. studies on mesophotic black corals and Oahu corals), directly related to the proposed 2015 maritime project? Is deep technical diving proposed for 2015?

Deep, technical diving will take place during a 2015 Biogeography cruise on the Hi'ialakai. Keogh may participate in that expedition. During the 2015 RAMP/MH cruise taking place from July 27-August 25 no technical diving will take place.

All publications listed speak to the diverse experience and wide range of projects that PMNM Maritime Heritage Coordinator Kelly Gleason Keogh has actively participated in over the course of over 12 years working in the Northwestern Hawaiian Islands. Maritime heritage work proposed includes multidisciplinary approaches to monitoring and documentation and in addition to collaborative work with specialists of other disciplines, Keogh has been actively involved in multiple PMNM projects acting as a benthic diver for deep, technical diving projects. Experience with diverse methodology and different protocols emphasize the PI's ability to conduct research in PMNM specifically when a multidisciplinary approach is proposed.

11. Personnel listed in the application are described in Finding f (Provide information demonstrating that you are qualified to conduct and complete the activity) as having "extensive experience with all archaeological and ecological methods,". Please describe the applicant's and/or other team member's experience as appropriate.

Applicant: Kelly Gleason Keogh, PI. Keogh has been PMNM's Maritime Heritage Coordinator for 9 years and has conducted maritime heritage research in PMNM for over 12 years including over 15 research expeditions to PMNM on the NOAA vessel Hi'ialakai. She participated in an extensive terrestrial archaeological survey of historical resources at Midway Atoll in collaboration with LuAnn Spuelda-Drews at Midway Atoll in 2009. She has served as chief scientist for five research expeditions, and PI for 8 expeditions. Her experience includes assembling and supervising interdisciplinary teams to conduct research on maritime heritage sites. In addition to extensive maritime heritage experience in PMNM, she has participated in five biogeography cruises as a member of the deep, technical diving team conducting benthic surveys. Her work includes the production of two documentary films and two exhibits focusing on maritime heritage in PMNM. Prior to her current work with NOAA in the Pacific, Keogh worked with NOAA's Biogeography Team in Silver Spring, MD to assist with surveys characterizing the ecosystem in St. John, USVI and at Gray's Reef National Marine Sanctuary.

Jason Raupp: Team Member Jason Raupp is currently a PhD candidate at Flinders University in Australia and will complete his doctorate work in July of 2015. Raupp has participated in four research expeditions to PMNM on the NOAA vessel Hi'ialakai and has done extensive research in archives relative to PMNM Maritime Heritage. He has extensive experience as a maritime archaeologist with over 15 years working as an archaeologist. His doctorate research addresses the important topic of whaling heritage in PMNM and he has presented his research at several professional conferences. His participation in the 2010 and 2012 NWHI expeditions exposed him to the type of multidisciplinary survey referenced in the permit application. His contribution to PMNM's maritime heritage program through his research and field participation has

been invaluable and he has contributed to the discovery, documentation and identification of several significant maritime heritage sites in PMNM. In addition to his work in PMNM, Raupp has been involved in dozens of archaeological survey projects throughout the Pacific and Atlantic Coast of North America. Jason Raupp is a NOAA scientific diver.

Andy Collins: Team member Andy Collins has been the Education Coordinator at PMNM for over 13 years. Collins has extensive experience in the field and has led several education focused expeditions to PMNM. Collins has participated in multiple interdisciplinary expeditions and has been a team member of a maritime heritage survey project at Midway Atoll in 2003. His extensive experience, and his broad knowledge and understanding of the resources in PMNM will make him an invaluable member of the team. He will also help to serve in the critical role as the team's resource monitor based upon his previous experience acting in this role for a BBC production filmed at French Frigate Shoals. Activities proposed for 2015 require a resource monitor and Andy's ability to serve in this capacity make him an invaluable team member. Additionally, his skills as a photographer will provide important assistance for all outreach efforts.

Melissa Price: Team member Melissa Price is a masters candidate with the Program of Maritime Studiesat East Carolina University. Her participation provides an opportunity for graduate student research on important PMNM maritime heritage topics that need further research. Melissa has been chosen by ECU faculty for her qualifications and character and also assists with partnership efforts between PMNM and ECU. Her field experience includes work in the Biscayne National Park in Homestead, FL, Tranters Creek, Washington, North Carolina, and as a crew chief on a field school in Costa Rica. Price is a certified AAUS scientific diver.

12. Regarding land surveys for potential shipwreck sites, please clarify what the difference is between a "feasibility study" and simply "a survey," (e.g. simply proposing a non-invasive surface recon with metal detector, photo/video).

Feasibility Study: Prior to any survey, it will be determined if this survey can be conducted in a manner that will cause no harm to any nesting seabirds (ground or underground), wildlife or the environment. Field staff and experts will be consulted, and all BMPs relative to seabirds and marine mammals will be followed. The scene will be surveyed visually from a distance, and then region of possible survey will be defined once at the site. Only when all factors have been considered and evaluated, and it is determined that no impact will take place, will a survey continue. The feasibility study determines if a survey is possible.

Survey: If no impact has been determined during the feasibility study a survey may take place with careful consideration of any sensitive areas for nesting seabirds, marine mammals and the environment. All survey proposed for 2015 is non-invasive. Survey will include the collection of data and development of a preliminary map with which future, more extensive survey will be determined if possible in future years.

13. For the proposed tow board and scooter methods, the application refers to "established tow boarding and scooter diving protocols". Please provide more information on what these protocols are.

Protocols for towboarding and scooters have been adopted from NOAA NMFS and are attached. Both have been submitted previously.

COMMENTS:

1. The applicant mentions that they will avoid protected species, such as haul out sites of monk seals and turtles, but fails to mention Federally listed migratory birds at the proposed sites, such as the Laysan finches, Nihoa millerbirds, and Laysan teals. Additionally, all native seabirds are protected species under the MBTA. We are concerned because having any applicant conduct activities on these islands greatly increases the probability of disturbance and damage to burrows of nesting seabirds. Many areas of the proposed terrestrial sites have very high densities of Bonin petrels, wedge-tail shearwaters, and Tristram's storm petrels, all of which are very vulnerable to being crushed underfoot. Some areas, particularly beach crest areas (which I suspect are of high interest in surveys of shipwreck survivor camps), are so fragile due to the sandy substrate that it is simply not possible to traverse an area without destroying burrows. As such, determined nesting habitat areas by the resource monitor should be avoided as well from entry for listed seabirds.

Agreed that I (the applicant) was remiss in leaving out references to Federally listed migratory birds to be avoided at proposed sites. All applicants will be very familiar with the Best Management Practices documents relevant to seabirds in PMNM (#003 and #012) and will strictly adhere to all protocol and proceed with the strictest sensitivity to these birds, in addition to the other protected species mentioned earlier. If the designated resource monitor (Andy Collins) determines any potential harm caused by the terrestrial survey, it will not continue. Non-invasive survey will ONLY take place if the area to be surveyed will not be adversely impacted by the study.

2. During the course of surveys and other associated activities, the research team should attempt to minimize contact with any corals and other benthic habitats. If there are corals or other sessile benthic organisms attached to any artifacts that are recovered, those corals or other benthic sessile organisms should be carefully removed and transplanted to a suitable hard bottom site in close proximity to its current location.

All survey proposed for 2015 is non-invasive. All team members will follow strict guidelines to minimize any and all potential contact with corals and/or the benthic habitat.

3. The methods, used within marine environments, by the applicant are usually non-invasive, for both exploration and ground truthing.

Noted.

4. No issue with the use of scooters for human/diver underwater assistance.

Noted.

5. The proposal will likely require MMB approval of a resource monitor, who is a seabird expert, on the terrestrial portions. Seabird behavior is quite variable between the various nesting colonies in the northwestern Hawaiian islands and we cannot necessarily expect the same experience at each site.

Noted. Please see request above to have Andy Collins designated as a resource monitor as he has been designated as one in the past.

Comments received from the Native Hawaiian community are summarized as follows:

Cultural reviews support the acceptance of this application. No concerns were raised.

Comments received from the public are summarized as follows:

No comments were received from the public on this application.

Additional reviews and permit history:

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐
If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- Coordination and consultation pursuant to section 106 of the National Historic Preservation Act is underway to ensure that all actions carried out by the applicant would have no adverse effect on historic properties. The outcome of this consultation may require the applicant to adhere to other State Historic Preservation Division-prescribed conditions or other related considerations to protect maritime heritage resources and/or cultural sites and practices.
- An informal consultation pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §1531 et seq.) was initiated on May 22, 2014 with the National Marine Fisheries Service (NMFS). NMFS concurred with NOS ONMS determination that the proposed in-water activities may affect, but is not likely to adversely affect ESA-listed marine species, including Hawaiian monk seals (Monachus schauinslandi), green sea turtles (Chelona mydas), hawksbill sea turtles (Eretmochelys imbricata), North Pacific loggerhead sea turtles (Caretta caretta), olive ridley sea turtles (Lepidochelys olivacea), leatherback sea turtles (Dermochelys coriacea), humpback whales (Megaptera novaeangliae), sperm

whales (Physeter macrocephalus), fin whales (Balaenoptera physalus), blue whales (Balaenoptera musculus), sei whales (Balaenoptera borealis), and north pacific right whales (Eubalaena japonica) (NMFS letter of concurrence received June 6, 2014 and valid through 2018). The NMFS determination was based on the finding that the effects of the proposed action are expected to be insignificant, discountable, or beneficial as defined in the joint USFWS-NMFS Endangered Species Consultation Handbook1.

- The National Marine Fisheries Service (NMFS) provided a letter of concurrence dated June 6, 2014 in regards to a Section 7 informal consultation pursuant to the Endangered Species Act of 1973 is which analyzed the effects of conducting the proposed activities on protected species and monk seal within designated critical habitat See Attachment (Letter to David Swatland from Michael Tosatto dated June 6, 2014).
- The Department has made an exemption determination for this permit in accordance chapter 343, HRS, and Chapter 11-200, HAR. See Attachment ("DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT CONSERVATION AND MANAGEMENT PERMIT TO DR. KELLY GLEASON KEOGH, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT, FOR ACCESS TO STATE WATERS TO CONDUCT SHIPBOARD SUPPORT ACTIVITIES UNDER PERMIT PMNM-2015-015.")

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐
If so, please summarize past permits:

- The Applicant was granted permits PMNM-2008-037, PMNM-2009-028, PMNM-2010-016, PMNM-2011-024, PMNM-2012-036, PMNM-2014-017, for similar activities in 2008, 2009, 2010, 2011, 2012, and 2014 respectively.
- In addition, similar work has been conducted under NWHI06R015 issued to Gregory Johnson in 2006.

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

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

STAFF OPINION

PMNM staff is of the opinion that Applicant has properly demonstrated valid justifications for his 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 Permit General Conditions. All

suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

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 PMNM staff.

RECOMMENDATION

That the Board authorize and approve a Conservation and Management Permit to Dr. Kelly Gleason Keogh, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, with the following special conditions:

1. 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 the Monument for obtaining patent or intellectual property rights.

2. 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.

3. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.

4. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.

5. 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.

6. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

7. If there is any Hawaiian monk seal or any other protected species in the area when performing any permitted activity, the activity shall cease until the animal(s) depart the area.

Respectfully submitted,

Maria Carnevale
State Co-Manager
Papahānaumokuākea Marine National Monument

APPROVED FOR SUBMITTAL

Suzanne Case
Chairperson

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:
Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
nwhipermit@noaa.gov
PHONE: (808) 397-2660 FAX: (808) 397-2662

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: Dr. Kelly Gleason Keogh
Affiliation: Papahanaumokuakea Marine National Monument

Permit Category: Conservation and Management
Proposed Activity Dates: 7/25/2015-7/24/2016
Proposed Method of Entry (Vessel/Plane): Vessel and Plane
Proposed Locations: Nihoa, Mokumanamana, Lisianski, Laysan, French Frigate Shoals, Pearl and Hermes Atoll, Midway Atoll, Kure Atoll, Maro Reef, Gardner Pinnacles

Estimated number of individuals (including Applicant) to be covered under this permit: 5
Estimated number of days in the Monument: 30

Description of proposed activities: (complete these sentences):

a.) The proposed activity would…
This activity aims to achive goals to manage, interpret and protect maritime heritage resources in PMNM. In 2015 work will include maritime heritage efforts during an annual research expedition. Maritime heritage will act as a "piggyback" mission on the annual, PMNM-led RAMP expedition.

Annual PMNM maritime heritage resource management activities conducted during the expedition will fulfill Monument management activities including: 1) non-invasive wreck site assessment survey of selected maritime heritage sites, and 2) continued monitoring of known shipwreck and sunken aircraft sites for the purposes of understanding impacts and changes to maritime heritage sites.

Acitivites will also focus on survey and exploration for new maritime heritage sites including: 3) ground truthing of selected dive targets for potential shipwreck and sunken aircraft sites at Midway Atoll, 4) exploration for new maritime heritage sites through non-invasive remote sensing survey (magnetometer) and/or snorkeler towboard survey, and SCUBA and snorkeler suvery using scooters in high potential wreck site areas (at all islands and atolls listed on this permit), and 5) non-invasive terrestrial survey of Lisianski Island, Laysan and Kure Atoll for the

purposes of determining the feasibility of future archaeological survey of areas of propable shipwreck survivor camps.

Activities will also be conducted for the purpose of site identification, education and outreach relative to research objectives including 6) the video documentation of maritime heritage sites in order to create edited short videos about maritime heritage in PMNM and broadcast to shore based audiences, and share this very remote place with the public.

The first activity is a detailed investigation of a single wreck or archaeological site. It will assist in the creation and distribution of important outreach and education products related to maritime heritage sites that will aid in interpretation, protection and preservation of the significant sites. Additionally, this activity will assist in the continued development of PMNM maritime heritage themed exhibits and other outreach products. The second activity will work to test archaeological, observational and ecologically based methods of interpreting and monitoring maritime heritage sites in the NWHI.

The third and fourth activities describe efforts towards broader searches for previously un-located and undiscovered resources and allows for identification and inventory of maritime heritage sites. These activities are non-invasive underwater survey for new shipwreck and sunken aircraft sites. Ground truthing will only take place at Midway Atoll, and survey for new sites and continued survey of known sites will take place at all atolls listed on this permit application.

The fifth activity will assess the feasibility of an activity (survey and study of shipwreck survivor camps) that is described in the PMNM Maritime Heritage Research, Education and Management Plan that will add an important land dimension to the maritime heritage stories of Lisianski Island, Laysan and Kure Atoll. Archival research has shown these three islands (Kure, Lisianski and Laysan) to have had reported shipwreck survivor camps. To date, no field research has been conducted to survey or document these potential sites since a survey in 2002, and this project proposes a feasibility study for survey at the reported areas of these shipwreck survivor camps on land. All potential survey sites are at the highest level of ground within the island and no survey will take place near any grounds where protected species (monk seals or turtles) may haul out. This survey will avoid any areas where monk seals or turtles are resting or swimming nearby.

The final (6^{th}) activity to develop short film pieces builds upon ongoing efforts to bring this very remote "place to the people" through the medium of film.

b.) To accomplish this activity we would ....
This project is part of a continued effort to conduct maritime heritage management activities in the Monument including exploration for new sites that will contribute to the PMNM inventory (an ONMS annual Maritime Heritage performance measure requirement), and documentation and interpretation of known maritime heritage sites. Comprehensive non-invasive assessment surveys of previously located wreck sites allow managers to compile an inventory of critical and non-renewable maritime heritage resources. Of the possible 126 shipwreck and historic aircraft lost in the area, 22 have been confirmed by field investigation. To date, surveys of twelve of

these 22 have been completed in the NWHI. Maritime heritage summaries of site surveys are available at http://www.papahanaumokuakea.gov/maritime/welcome.html and upon request to the Monument Maritime Heritage Coordinator. A simple low impact technique known as "baseline trilateration" is used to map wreck sites (see Methods) in addition to extensive photo and video documentation of all sites.

Remote sensing survey (the fourth activity described), locates anomalies and potential maritime heritage resources for subsequent "ground-truth" site assessments. Data gathered from remote sensing work in 2010 and 2012 will be used for the purposes of mapping seafloor habitat in addition to survey for maritime heritage resources. Generally areas in the seaward vicinity of the reef crest are chosen for initial remote sensing survey due to the high potential for wreck remains in those areas. Specific reef crest zones are determined by historical records of wreck events. Alternatively, snorkeler tow boarding or SCUBA diving or snorkeling with a scooter may be used to locate potential heritage resource sites in a similar manner in the event that funding for magnetometer survey does not happen. (Magnetometer work is funding and personnel dependent). Snorkel towboarding has been a highly successful survey method in the NWHI to date. Scooter survey is a newer method that will allow divers to eliminate being tethered to the small boat, in hopes of improving safety and effectiveness of survey.

To date, minimal terrestrial survey has taken place primarily due to time constraints while on these expeditions. In 2015, the team will carefully examine the terrestrial environment for the feasibility of future archaeological surveys at Lisianski, Laysan and Kure Atll. With guidance from field camp staff, the team will look to add an interesting terrestrial dimension to the shipwreck survivor stories of the Northwestern Hawaiian Islands. All survey will be non-invasive and focus on developing low impact methods of gathering data from a ground survey. The team will run test survey lines with a metal detector and take photographs, video and create site maps.

Monitoring activities will be conducted in 2015 utilizing archaeological, observational, and environmental parameters. The annual assessment and monitoring of maritime heritage sites for change is an important component of long term protection. The 2009 and 2010 surveys conducted by Derek Smith on shipwreck sites in the Monument helped to establish an important baseline dataset to advance interdisciplinary monitoring efforts at maritime heritage sites in the NWHI. Efforts in 2012 by Susie Holst of NOAA's CRCP helped to develop parameters for monitoring activities that will help to inform the investigation of such issues as the effects of climate change on heritage sites.

c.) This activity would help the Monument by …

2015 maritime heritage project data (site survey, outreach product development, exploration, and monitoring) will contribute to the management inventory for the PMNM, as well as provide the program invaluable material for ongoing education and outreach efforts. Exploratory survey, specifically the terrestrial survey will assist in meeting goals and objectives describes in the

Monument's Maritime Heritage Research, Education and Management Plan. Monitoring work at maritime heritage sites in 2015 will assist managers in better understanding the interaction between these sunken sites and the ecosystem, as well as help to develop an understanding of their structural integrity. 2015's monitoring efforts at shipwreck sites will continue a project initiated in 2009 and will assist in better understanding the changes occuring at these sites. Certain data generated by the survey is sensitive and will be protected from unregulated public distribution as determined by the PMNM (also see NHPA section 304). Maritime heritage survey will be conducted in compliance with the appropriate preservation regulations (National Historic Preservation Act, Archaeological Resources Protection Act, Antiquities Act, Sunken Military Craft Act et al) and satisfies federal and state mandates for heritage resource inventory of controlled waters.

Other information or background:

The 2015 maritime heritage survey is a multidiciplinary project including efforts to further inventory and assess shipwreck sites in the NWHI, and share these findings with the public in a responsible manner.

Currently, NOAA's Maritime Heritage Program is the only agency engaged in maritime heritage survey in PMNM.

Over 60 shipwrecks have been reported lost in PMNM, some dating back to 1805. Many of these wrecks may be important cultural or historical resources, capturing information about the maritime history of the region. Sites may furnish information about western seafaring, as well as Native Hawaiian seafaring, for many historic ships (such as whalers) recruited Native Hawaiians as skilled crew members. Due to the time required for careful site survey and the logistical constraints of research cruises, often only portions of the required mapping/survey work at each site can be completed during each season. Completed site assessments are the most effective heritage resource survey tool because they allow managers to fully understand the sites they are mandated to protect, and determine appropriate action for protection and public outreach.

Survey work in 2015 will continue upon annual efforts initiated in 2002 with the first maritime heritage resource survey in the Northwestern Hawaiian Islands. Subsequent work continued in 2003, before becoming annual in 2005. The planned survey work to be conducted in 2015 will continue these efforts, and focusing on non-invasive data recording at selected heritage sites at Midway, Pearl and Hermes Atoll, Lisianski, Kure Atoll, Maro Reef, Laysan and French Frigate Shoals. Specifically, efforts in 2015 will follow up on work initiated in 2014 and focus on further exploration and survey for Battle of Midway related resources in order to work towards completing the inventory of resources at Midway Atoll, as well as the completion of the documentation of a mystery shipwreck site at Lisianski Island. Work at other atolls will focus upon the continued survey for new maritime heritage sites.

Midway survey will continue to explore sunken aircraft associated with the Battle of Midway adding an important maritime heritage component to our understanding of the broader history of

World War II in the Pacific. The material culture associated with this Battle is critical to understanding connections and making comparisons between Pacific regions, and better comprehending the Pacific Front of WWII. Sunken aircraft represent the tangible evidence of our nation's naval maritime and aviation legacy and hold potential for engaging the public as well as the application of cutting edge technology and multidisciplinary survey. This project proposes to investigate remaining magnetometer anomalies, potentially collect and ground-truth additional magnetometry data, survey for new sites utilizing scooters and/or towboarding survey and make discoveries that enrich the maritime and aviation history of Midway Atoll. The success of this project's exploration is increased through a newly applied refined methodology of combined oral history research and remote sensing. Further, the multidisciplinary nature of the project is exemplary in the comprehensive nature of the research, from exploration to interpretation and dissemination, and inclusive of remote sensing, archaeological, and biological survey through advanced technologies.

Work at Lisanski Island will continue work that was incomplete during the 2014 field season due to time constraints in the field. This includes non-invasive, in situ documentation of a mystery shipwreck site discovered in 2010, exploration for several shipwreck sites lost around the Island, and the investigation of Lisianski Island for the future potential of non-invasive terrerstrial archaeological survey for remains of at least two shipwreck survivor camps reported there (whaling ships Holder Borden and Konohasset). Terrestrial survey in 2015 is important in order to determine the feasibiliy of planning for a more thorough future terrestrial survey of Lisianski Island in subsequent years.

Without an understanding of the resource base, without an accurate inventory of significant heritage material, maritime heritage resource management is impossible. Historic shipwrecks are subject to natural deterioration as well as intentional or inadvertent damage (dredging, looting, re-use). The first step in management is to create a resource inventory by confirming identification of sites. The next step is to conduct site assessment, characterizing the nature of the resource. Inventory and assessment are heritage preservation actions common to a number of federal and state programs. The 2015 research therefore supports cultural and historical management efforts on behalf of the different agencies of the Monument Management Board. This survey specifically addresses mandates for maritime heritage resource inventory as stated in the the PMNM Management Plan and PMNM Maritime Heritage Research, Education and Management Plan. 2015 work will also include significant education and outreach initiatives and a focus on exploration at Midway Atoll and the connection between submerged and terrestrial sites at Lisianski and Kure Atoll.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Keogh, Kelly, A. G.

Title: Maritime Heritage Coordinator, Papahanaumokuakea Marine National Monument

1a. Intended field Principal Investigator (See instructions for more information):
Dr. Kelly Gleason

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

[redacted]

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

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

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):
1) Andy Collins (education outreach/support diver)
2) TBD (research diver/maritime archaeologist
3) TBD (research diver/maritime archaeologist)
4) TBD (research diver/maritime archaeologist)

Section B: Project Information

5a. Project location(s):

		Ocean Based	
☒ Nihoa Island	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Necker Island (Mokumanamana)	☐ Land-based	☒ Shallow water	☐ Deep water
☒ French Frigate Shoals	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Gardner Pinnacles	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Maro Reef			
☒ Laysan Island	☒ Land-based	☒ Shallow water	☐ Deep water
☒ Lisianski Island, Neva Shoal	☒ Land-based	☒ Shallow water	☐ Deep water
☒ Pearl and Hermes Atoll	☐ Land-based	☒ Shallow water	☐ Deep water
☒ Midway Atoll	☒ Land-based	☒ Shallow water	☐ Deep water
☒ Kure Atoll	☒ Land-based	☒ Shallow water	☐ Deep water
☐ Other			

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:

Special note: specific location (latitude/longitude) for historically significant heritage resources is sensitive data—not to be distributed publicly. Locations for 2015 maritime heritage work have been provided to the Monument Permit Coordinator.

All survey (land and underwater) will only take place during daylight hours.

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:***

The Monument's ongoing efforts to inventory, document, and protect its maritime heritage sites have been instrumental in opening a window into the NWHI's seafaring past, and they have contributed materially to a growing body of knowledge about humans' historical interaction with the sea. Research and exploration is a critical maritime heritage activity that is called out in the Monument Management Plan. In addition to fulfilling mandates for inventory of maritime heritage resources, field research provides the body of knowledge that supports education and outreach efforts.

Over 60 shipwrecks have been recorded in the NWHI, some dating back to 1805. Many of these wrecks are important heritage resources, capturing the maritime history of the region. Furthermore, state and federal preservation legislation mandate the surveying of historic shipwreck sites and the production of submerged cultural resource management plans for historically significant material. Due to time constraints in the NWHI, surveys of any sites can only be partially completed during any single season. The work to be conducted in 2015 will continue upon investigation from previous years, explore for new historic resource sites, and collect long term monitoring data at shipwreck sites.

The proposed work is part of the long term archaeological survey for maritime heritage resources in the Papahanaumokuakea Marine National Monument. Federal preservation initiatives mandate the inventory, assessment and protection of cultural, archaeological, and historical resources within federally managed waters. 2015 proposed survey features non-invasive recording techniques for the discovery, identification and assessment of submerged heritage resources as part of this mandate.

The purpose of the 2015 survey is to better understand the existing maritime heritage resources in the Monument. Inventory and site assessment are critical parts of resource management and ocean stewardship. The Maritime Heritage Survey team plans to

continue non-invasive survey of selected maritime heritage resource sites initiated in previous field seasons in the NWHI and attempt to identify unknown sites, and survey for new shipwreck and sunken aircraft sites, as well as determine the feasibility for terrestrial survey for shipwreck survivor camps on Lisianski, Laysan and Kure Atoll. Additionally, the 2015 survey will continue efforts with multidisciplinary survey and monitoring of the shipwreck and sunken aircraft sites in the NWHI. The collection of video, and potential diagnostic artifacts assists with site identification, as well as research, education and management of heritage sites in PMNM.

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

The activity will be conducted with adequate safeguards for the resources and ecological integrity of the Monument. This project is part of a continuing effort to identify, interpret and protect maritime heritage resources in the Papahanaumokuakea Marine National Monument. Proposed work will be led by PMNM maritime heritage program staff, who have been involved in Northwetsern Hawaiian Islands maritime heritage research (archival as well as field) for over twelve years. Methodology and research continues to improve annually as the team's experience grows. Proposed heritage work in the NWHI emphasizes a low-impact approach, to an extent consistent with the Monument's conservation goals and objectives. Section 106 NHPA compliance will be submitted to the State Historic Preservation Office and OHA for review. NEPA permit is pending for this activity.

All maritime heritage scientists will participate in a cultural briefing prior to entering the Monument. The team will respect all resources both natural and cultural. The primary permittee will consult with OHA and the Native Hawaiian Coordinator at the PMNM on

cultural sensitivies, as well as the applicability of these activities to OHA and the Native Hawaiian Coordinator's efforts for the PMNM. No archaeological work will take place near any known native Hawaiian archaeological sites. If any native Hawaiian sites should be discovered, the proper experts will be notified and consulted immediately. Plans to collaborate with Native Hawaiian Program staff at PMNM will allow for further understanding and interpretation of the cultural significance of the Monument.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?

The proposed project will have minimal impact on the resources of the region. The research consists primarily of non-invasive visual surveys. This research is being conducted in concert with the priorities listed in the Maritime Heritage Action Plan of the Monument's Management Plan (inventory and assessment, as well as education and outreach) and the Monument's Maritime Heritage Research, Education and Management Plan. The strategies proposed are designed to increase our understanding of maritime heritage resources and foster effective and protective management in the Monument. This project will also include multidisciplinary and partnership efforts towards increasing stewardship and enhancement of Monument goals and resources. Additionally, this project will facilitate the Monument's effort to "bring the place to the people, rather than the people to the place" through outreach and education efforts that will share PMNM resources with a broad audience.

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.

There is no practicable alternative to conducting the activities in the Monument. Annual maritime heritage surveys are necessary to indentify, document and protect the maritime heritage resources in the Papahanaumokuakea Marine National Monument. Additionally, these surveys contribute to education and outreach efforts regarding maritime heritage resources in the PMNM. These activities directly relate to activities in

the Monument's management plan and the Monument's Maritime Heritage Research, Education and Management Plan.

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 proposed activities have been identified as vital to the future management of the Monument and and will have no adverse impact on the resources, qualities and ecological integrity of the Monument. Additionally, the opportunity to conduct important education and outreach activities through the development of a short film, exhibits, web presence, presentations and articles will assist in Monument's efforts to promote stewardship and protection of resources, both natural and cultural. This project will serve to continue ongoing efforts to develop a multi-dimensional approach to understanding these maritime heritage sites in the NWHI. Work to develop a monitoring program based upon multidisciplinary parameters will help to better understand if there are impacts up on maritime heritage sites from climate change and other natural events.

Prior work by PMNM maritime archaeologists has demonstrated the broad, long term value of maritime heritage work in the NWHI. Annual expeditions have resulted in documentary films, magazine, journal and newspaper articles, graduate student research projects, television news coverage, award winning museum exhibits and websites conveying the research and findings to the public.

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

A minimal amount of time will be spent at each location depending on weather and oceanographic conditions during research cruises.

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

Personnel included in this permit application have extensive experience conducting research in the Monument, and with all archaeological and ecological methods that will

be utilized. This is a continuance of a multi-year project. All methods are primarily non-invasive. PMNM Native Hawaiian staff, as well as OHA and cultural practitioners will be consulted in order to further avoid any potential impacts.

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.

This cruise and subsequent data analyses are supported by an allocation of 30 days at sea aboard the NOAA ship HIIALAKAI from NOAA's Office of Marine and Aviation Operations, a line item in the budget of NOAA's Papahanaumokuakea Marine National Monument, and an allocation of funds from NOAA's Coral Reef Conservation Program to NOAA Pacific Islands Fisheries Science Center.

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.

The research consists primarily of non-invasive surveys (both archaeological and ecological) and will always follow proper protocol (Conditions for the Custody and Care of Navy Historical Property, Annexed Rules of the UNESCO Convention on the Protection of Underwater Cultural Heritage) and undergo Section 106 and NEPA clearance. PMNM Native Hawaiian Program staff, OHA and cultural practitioners will be consulted in order to further avoid any potential impacts.

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

The NOAA research vessel Hi'ialakai has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of the Presidential Proclamation 8031.

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

There are no other factors that would make the issuance of a permit for the activities inappropriate.

8. Procedures/Methods:

Methods:

Individual site assessment survey, remote sensing survey, towboarding and scooter survey, terrestrial survey of survivor camp areas, still photography and video are primary objectives, and monitoring and site/environmental data are secondary objectives, of the proposed 2015 maritime heritage project. Where possible, survey locations are prioritized, providing flexible alternatives in case of rough weather, other mission priorities, etc. The following methods will be employed for each of the five proposed 2015 objectives:

1) site assessment survey

Baseline trilateration and measured sketching will provide data for the initiation of the site map. Trilateration and the creation of a site map consists of sketching major features and measuring distances between artifacts in reference to a fixed temporary baseline, and is a time-consuming task. Divers deploy a temporary baseline, replicating previous surveys by attaching the baseline to fixed stainless steel datums. Survey tapes, slates with mylar "paper," and pencils and then used to triangulate the position of all artifacts in reference to the fixed reference line. In addition, digital photography are used to document feature and artifact details, as well as record the survey process itself. Artifacts and features are temporarily tagged with numbers and photographed in-place. Also, hand-held metal detectors are used to confirm/eliminate the presence of iron within sediments or substrate, and limited hand fanning of loose sediments and limited sediment probing is used to record details of artifacts and site boundaries. Typically, remote sensing survey methods are also employed in the vicinity when available to help determine site boundaries during individual site survey.

Equipment: Underwater slates
Transect tapes
Pencils
Folding rulers
Gear bags
Open-circuit scuba
Photo scales
Plastic artifact tags
Garmin GPS units and waterproof boxes
Site buoy

2) remote sensing survey

Exploration for new maritime heritage sites requires the use of remote sensing tools to cover large areas of the seafloor in the limited time allotted during research expeditions. This is an important component of the complete inventory of maritime heritage resources in PMNM. Remote sensing survey locates anomalies and potential maritime heritage resources for subsequent site assessments. The surface vessel tows a remote magnetometer at approximately 4 knots/hour on linear parallel tracks at or near the surface for shallow zones, recording variations in the localized magnetic field (gamma). The data is processed shipboard. This work will build upon magnetomter work conducted in 2010 and 2012. 2015 methodology for magnetometer work will not change from 2010 and 2012 work (reports from prior remote sensing survey work available upon request). Because magnetometer survey is dependent on partnerships and funding in 2015, a second alternative, diver tow boarding has been identified for the purposes of exploration of large survey areas. Though not technically "remote sensing" (divers in the water doing real-time visual survey), this method is sometimes used to supplement normal remote sensing. Diver survey is particularly helpful in shallow areas of extreme topographical variation. Any potential diver tow boarding operations during

2015 will be conducted only following established training provided by NOAA NMFS and along established NOAA NMFS tow boarding protocols for the NWHI. Diver will be towed at appoximately 3 knots/hour. A third alternative identified for 2015 work is survey utilizing dive scooters, which will allow the divers to be propelled at a pace faster than swimming with dive gear, and enable long surveys of reef areas of probably ship and aircraft losses. Any diving/snorkeling activities utilizing scooters will be conducted utilizing established NOAA NMFS scooter diving protocol, and scooters will go no faster than 1 knots/hour. Scooters will be the Bladefish 7000, borrowed from NOAA NMFS (photos attached). These scooters are low maintenance, lightweight, and low profile, causing no impact to the surrounding environment and posing no risk to divers.

Equipment: Marine Magnetics Explorer Mini Magnetometer
Tow boards
Laptop
HyPack survey software
Honda eu2000i generator or marine 12v batteries
Towboards
Bladefish 7000 scooters

3) Terrestrial survey for survivor camp sites

Terrestrial surveys on Kure, Lisianski and Laysan Islands in 2015 will explore the potential for future surveys on these islands for survival camps. Historical records and survivor accounts describe shipwreck survivor camps on these islands, and their discovery, or the discovery of associated artifacts could add an exciting dimension to the maritime heritage survey underwater. For example, the sailors from the shipwreck of the whaling ship Konohasset landed on Lisianski to set up a survivors camp and found the cookhouse and wreckage of another whaling ship, the Holder Borden. All survey will be conducted with minimal impact, during daylight hours and include taking photographs, sketching maps of potential survey areas and running test survey lines

with a metal detector in areas where survivor camps were located on maps. No invasive survey will take place in 2015, and all sensitive wildlife will be avoided. Survey will not take place near or around any protected species (monk seals, turtles, etc.). If there are monk seals hauled out nearby any potential survey areas, the survey will not take place. This will be a valuable opportunity to assess the feasibility of future terrestrial archaeological survey for potential survivor camps, and methodology will be developed that will avoid any impact upon the environment.

Equipment: Aquapulse handheld metal detector
Cameras
Slates and notebooks
Tape reels
Compasses

4) Monitoring sites

Monitoring sites employs a small subset of the same methods used for initial site survey. Slates, tapes, and (if necessary) temporary re-deployment of the baseline are used to confirm possible movement of features or artifacts. Digital photography is used to generate comparative data on the condition of features and changes to the natural environment (sediment level, etc.). Utilizing environmental parameters generated through Smith's 2009-2010 surveys of maritime heritage sites in the Hawaiian Islands, data will be collected about environmental changes in the sites over time. Additionally, work by NOAA CRCP staff in 2012 (Susie Holst) assisted with additional parameters for monitoring surveys in subsequent years. All surveys will be non-invasive and include collecting data along transect lines. Data will include fish surveys and benthic habitat assessments. All surveys will be non-invasive and will not include any collections or deployment of instruments.

Equipment: Underwater slates
Transect tapes
Pencils
Gear bags
Camera
Site buoy

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name:

Scientific name:

& size of specimens:

Collection location:

☐ Whole Organism ☐ Partial Organism

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

9c. Will the organisms be kept alive after collection? ☐ Yes ☐ No

• General site/location for collections:

• Is it an open or closed system? ☐ Open ☐ Closed

• Is there an outfall? ☐ Yes ☐ No

• Will these organisms be housed with other organisms? If so, what are the other organisms?

• Will organisms be released?

10. If applicable, how will the collected samples or specimens be transported out of the Monument?

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

Currently, NOAA's Maritime Heritage Program is the only agency engaged in maritime heritage survey in the PMNM. 2015 project work includes collaboration with the National Park Service's Submerged Resources Center (NPS/SRC), East Carolina University, ONMS Northeast Region Staff, Flinders University in Australia, Woods Hole, and NOAA ONMS's Thunder Bay National Marine Sanctuary. In addition, work will be conducted in collaboration with the PMNM resource protection specialist.

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

Equipment:
Underwater slates
Transect tapes
Pencils
Folding rulers
Gear bags
Open-circuit scuba
Photo scales
Plastic artifact tags
Garmin GPS units and waterproof boxes
Site buoy
Marine Magnetics Explorer Mini Magnetometer
Towboards
Bladefish 7000 scooters
Wire brush, wooden scraper,

Mesh bag and towels.

Aquapulse metal detector

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

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

N/A

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

Initial results will be reported in the Cruise Report. Site reports resulting from this cruise will be finalized by June 2016. Data from this project will consist of site and artifact inventory development, site maps, digital still images and digital video products. A summary descriptive project report (activity report) including abstract, major accomplishments, participants, activity log, results of work to date, and proposed schedule of final report will be completed by December 31, 2015. A final report including heritage background, site descriptions, methodology, results, project evaluation and recommendations for maritime heritage resource management will be completed by July 2016. Data and report from this proposal will be sufficient to provide presentations at annual maritime history and maritime archaeology symposiums (for example Society for Historical Archaeology, Society for Hawaiian Archaeology, Symposium on the Maritime Archaeology and History of Hawai`i and the Pacific), and presentations will be made available upon request. Preservation-related data from the 2014 field season will also contribute to heritage preservation material on the Monument's Maritime Heritage Program web page (www.papahanaumokuakea.gov). .

16. List all Applicant's publications directly related to the proposed project:
Gleason, Kelly . A Sounding Lead on a Distant Reef: Captain Pollard's Lessons Learned. Historic Nantucket, In Press

Gleason, K. (2014), A Monumental Distance: Education and Outreach from the Most Remote Archipelago on Earth. In D.A. Scott-Ireton (ed.), Between the Devil and the Deep, When the Land Meets the Sea (pp141-153). New York, NY: Springer Science and Business Media.

Wagner D, Toonen RJ, Papastamatiou YP, Kosaki RK, Gleason KA, McFall GB, Boland RC, & Pyle RL (2013). Mesophotic surveys of the Northwestern Hawaiian Islands with new records of black coral species. Proceedings of the 2013 AAUS/ESDP Curaçao Joint International Scientific Diving Symposium: 341-345.

Kosaki RK, Wagner D, Leonard JC, Hauk, BB & Gleason KA (2013). First report of the table coral Acropora cytherea (Scleractinia: Acroporidae) from O'ahu Island (Main Hawaiian Islands). Bulletin of Marine Science 89(3): 745-746.

Papahānaumokuākea Marine National Monument. 2011. Maritime Heritage Research, Education, and Management Plan: Papahānaumokuākea Marine National Monument. Honolulu, Hawai'i. 97 pages.

Wagner D, Papastamatiou YP, Kosaki RK, Gleason KA, McFall GB, Boland RC, Pyle RL & Toonen RJ (2011). New records of commercially valuable black corals (Cnidaria: Antipatharia) from the Northwestern Hawaiian Islands at mesophotic depths. Pacific Science 65: 249-255.

Delgado, J.P. and K. Gleason. Lighting Strikes Twice. The Explorers Journal. 89:1, Spring 2011.

Raupp, Jason and Kelly Gleason. Submerged whaling heritage in Papahānaumokuākea Marine National Monument. Bulletin of the Australian Institute for Maritime Archaeology (2010), 34: 66-74.

Kelly Gleason and Jason Raupp. Lost and Found In Papahānaumokuākea Marine National Monument: The Possible Wreck Site of the Nantucket Whaleship Two Brothers. Historic Nantucket, (Volume 60, No. 3) Fall 2010.

Gleason, K. 2010. Activity Report: Maritime Heritage Resources Survey HA-010-03. Submitted to National Oceanic and Atmospheric Administration/ Papahānaumokuākea Marine National Monument.

Wagner, Daniel, Yannis P. Papastamatiou, Randall K. Kosaki, Kelly A. Gleason, Greg B. McFall, Raymond C. Boland, Richard L. Pyle and Robert J. Toonen. New records of commercially valuable black corals (Cnidaria: Antipatharia) from the Northwestern Hawaiian Islands. Pacific Science, in press.

Gleason, K. 2009. Activity Report: Maritime Heritage Resources Survey HA-08-04. Submitted to National Oceanic and Atmospheric Administration/ Papahānaumokuākea Marine National Monument.

Gleason, Kelly. NHC Supports Saginaw Search. Pull Together, Naval Historical Foundation. (Volume 47, No. 2). Fall/Winter 2008/2009.

Gleason, K. 2008. Activity Report: Maritime Heritage Resources Survey HA-08-04. Submitted to National Oceanic and Atmospheric Administration/ Papahānaumokuākea Marine National Monument.

Waddell, J.E. (ed). 2005. The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2005. NOAA Technical Memorandum NOS NCCOS 11. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD. .

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

Signature 3/5/2015
Date

SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

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

Papahānaumokuākea Marine National Monument
Compliance Information Sheet

1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):

1. Kelly Keogh, PI and Maritime Archaeologist
2. Jason Raupp, Diver and Maritime Archaeologist
3. Melissa Price, Diver and Maritime Archaeologist
4. Andy Collins, Field Technician and Resource Monitor
5. Hadley Owen, Small Boat Cox'n and Field Technician

2. Specific Site Location(s): (Attach copies of specific collection locations):

1. French Frigate Shoals
2. Laysan
3. Lisianski
4. Maro Reef
5. Pearl & Hermes Atoll
6. Midway Atoll
7. Kure Atoll

3. Other permits (list and attach documentation of all other related Federal or State permits): State of Hawaii DLNR Section 106 Compliance (Pending)

3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation. N/A

4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information): N/A

5. Time frame:
Activity start: 7/10/2015
Activity completion: 10/1/2015

Dates actively inside the Monument:
From: 7/27/2015
To: 8/25/2015

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application: Weather delays, ship schedule changes due to maintenance, personnel, etc.

Personnel schedule in the Monument:

6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument: N/A (Federal Government work)

7. Check the appropriate box to indicate how personnel will enter the Monument:

XVessel
☐ Aircraft

Provide Vessel and Aircraft information: NOAA Vessel Hi'ialakai

8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):

X Rodent free, Date:
X Tender vessel, Date:
X Ballast water, Date:
X Gear/equipment, Date:
X Hull inspection, Date:

9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):
Vessel name:
Vessel owner:
Captain's name:
IMO#:

Vessel ID#:
Flag:
Vessel type:
Call sign:
Embarkation port:
Last port vessel will have been at prior to this embarkation:
Length:
Gross tonnage:
Total ballast water capacity volume (m3):
Total number of ballast water tanks on ship:
Total fuel capacity:
Total number of fuel tanks on ship:
Marine Sanitation Device:
Type:

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

VMS Email:
Inmarsat ID#:

* Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 203-2503 or (808) 203-2500.

* PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.

10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

Additional Information for Land Based Operations

11. Proposed movement of personnel, gear, materials, and, if applicable, samples: N/A

12. Room and board requirements on island: N/A

13. Work space needs: N/A

DID YOU INCLUDE THESE?

- ☐ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits

DAVID Y. IGE
GOVERNOR OF HAWAI'I

SUZANNE CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

W. ROY HARDY
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

STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAI'I 96809

June 26, 2015

TO: Division of Aquatic Resources File

THROUGH: Suzanne Case, Chairperson

FROM: Maria Carnevale
Papahānaumokuākea Marine National Monument

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT CONSERVATION AND MANAGEMENT PERMIT TO DR. KELLY GLEASON KEOGH, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT, FOR ACCESS TO STATE WATERS TO CONDUCT MARITIME HERITAGE ACTIVITIES UNDER PERMIT PMNM-2015-015

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, HAR:

Project Title:
Papahānaumokuākea Marine National Monument Conservation and Management Permit to Dr. Kelly Gleason Keogh, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, for Access to State Waters to Conduct Maritime Heritage Activities

Permit Number: PMNM-2015-015

Project Description:
The conservation and management permit application, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument, including the NWHI State waters between August 1, 2015 and July 31, 2016.

In the proposed project, the Applicant would conduct maritime archeological surveys throughout the Monument. The purpose would be to gain a greater understanding of impacts and changes to maritime heritage sites. Proposed activities include non-invasive wreck site assessment surveys of selected maritime heritage sites and continued monitoring of known shipwreck and sunken aircraft sites. Activities will also focus on survey and exploration of new maritime heritage sites.

The Applicant proposes to conduct the following maritime heritage activities:

1. Conduct non-invasive individual wreck site assessment surveys;
2. Continued monitoring of known shipwreck and sunken aircraft sites;
3. Ground-truth selected dive targets for potential shipwreck and sunken aircraft sites at Midway Atoll;
4. Conduct non-invasive remote sensing using a magnetometer, SCUBA, snorkeler tow board surveys, and snorkeler scooters at high potential wreck sites;
5. Conduct non-invasive terrestrial surveys of Lisianski, Laysan, and Kure Atoll;
6. Video documentation of maritime heritage sites

Specific activities would consist of exploration for new sites specifically through non-invasive remote sensing survey (magnetometer) and/or snorkeler towboard survey, and SCUBA and snorkeler survey using scooters. Midway priorities are all underwater survey and any terrestrial work on Midway will solely be to communicate with U.S. Fish and Papahānaumokuākea Marine National Monument Wildlife Service of activities and any discoveries made underwater. The preliminary survey for the feasibility of searching for shipwreck survivor camps are land-based only at Lisianski Island, Laysan, and Kure Atoll, where specific survivor camps were reported in historic records, but none are found to date. Exploration on land will be in day light hours only and will include a MMB approved resource monitor. Other activities include non-invasive site assessment surveys, terrestrial survey for shipwreck survivor camps, in situ still photography and digital video of known maritime archeological sites. To safeguard Monument resources the applicant would abide by the PMNM Best Management Practices (BMPs) while conducting the aforementioned activities within the Monument. Up to four (4) individuals including the applicant and a resource monitor would access the Monument.

The activities proposed by the Applicant directly support the Monument Management Plan's priority management need 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.4 -Maritime Heritage). This action plan calls for "strategies and activities for addressing maritime heritage resource and protection needs in the Monument" and includes strategies such as "studying and protecting maritime heritage resources begin(ing) with basic documentary research and field site surveys." Activities to support this understanding such as the site assessments, remote sensing, and monitoring proposed to be carried out by the permittee, are also addressed in the Monument Management Plan Environmental Assessment (December 2008) which resulted in a FONSI, or a Finding of No Significant Impact. This EA recognizes that field operations rely on ships, and that providing transportation support has a beneficial effect on threatened and endangered species, marine mammals, and other Monument resources. (PMNM MMP Vol 2, p.26, 185, and 187).

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawai'i Division of Aquatic Resources, Hawai'i Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands

National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 16, 2015, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Exemption Determination:
After reviewing HAR § 11-200-8, including the criteria used to determine significance under HAR § 11-200-12, 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, including individual wreck site assessment surveys, remote sensing activities, collecting monitoring and site assessment data, and fish and benthic habitat surveys; have been evaluated as a single action. As a preliminary matter, multiple or phased actions, such as when a group of actions are part of a larger undertaking, or when an individual project is precedent to or represents a commitment to a larger project, must be grouped together and evaluated as a single action. HAR § 11-200-7. Since this permit involves an activity that is precedent to a later planned activity, i.e. the continuation of maritime heritage monitoring activities, the categorical exemption determination here will treat all planned activities as a single action.

2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and § 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR §11-200-8.A.5. exempts the class of actions which involve "basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource." The proposed activities appear to fall squarely under the exemption class #5, exempt item #2 as described under the division of Forestry and Wildlife exemption list published on June 12, 2008. This exemption class has been interpreted to include "inventory studies, new transect lines, photographing, and recording…" such as those to be supported by the proposed activities. It has also been interpreted to include use of the magnetometer and/or tow board for remote sensing. As discussed below, no significant disturbance to any environmental resource is anticipated in the sampling of Monument resources. Thus, so long as the below considerations are met, an exemption class 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." HAR § 11-200-8.B. 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. HAR § 11-200-12. Examples of actions which commonly have a significant effect on the environment are listed under HAR § 11-200-12.

The activities would be a continuation of work previously conducted by this Applicant and others, which involved monitoring and evaluation activities to characterize maritime heritage resources. Permits have been issued for this work to this Applicant every year from 2009 to 2012 and in 2014, and under another applicant in 2006, and it likely that future requests for permits will be received to continue this work. No deleterious impacts resulted from similar previous activities. With this in mind, significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities would be conducted in a manner compatible with the management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The joint permit review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

Table 1: Concurrent projects aboard the HI'IALAKAI

PMNM-2015-006 Simon HI'IALAKAI (approved)	This permit allows the NOAA Ship HI'IALAKAI entry into the Monument. Personnel aboard the vessel would be permitted under separate permits	All locations
PMNM-2015-012 Godwin (approved)	This proposed action would be to conduct Reef Assessment and Monitoring Program (RAMP) activities	All locations
PMNM-2015-015 Gleason (proposed)	This proposed action would be to conduct maritime heritage activities in the NWHI	All locations
PMNM-2015-016 Wall (proposed)	This proposed action would be to conduct coral bleaching assessment activities in the NWHI	All locations
PMNM-2015-013 Couch (proposed)	This proposed action would be to conduct coral health and community structure assessment surveys in the NWHI	All locations

Table 2. Concurrent projects aboard the OKEANOS

PMNM-2015-025 Wetzler (approved)	This permit would support various PMNM permitted projects aboard the OKEANOS	All locations
PMNM-2015-018 Elliott (approved)	This permit would conduct bathymetric mapping activities	Nīhoa, Mokumanamana, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan, Lisianski and Pearl and Hermes

Though the potential permits may occur in the same area, each project differs logistically and targets interaction with different resources. Therefore, 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 be Minimal and Insignificant 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 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.

_____ _____

Suzanne Case Date
Chairperson, Board of Land and Natural Resources