

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

May 11, 2012

Board of Land  
and Natural Resources  
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National Monument Research Permit to Loren Scott Godwin, National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National Monument, for Access to State Waters to Conduct Invasive Species Survey Activities.

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument research permit to Loren Scott Godwin, resource protection specialist, National Oceanic and Atmospheric Administration (NOAA), Papahānaumokuākea Marine National Monument, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

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

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

The activities covered under this permit would occur between July 1, 2012 and June 30, 2013.

This work would build upon investigation from previous years and is a renewal of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES:

The purpose of these activities is to develop an updated species inventory and determine the abundance of alien marine invertebrate species associated with natural and man-made habitats within the Monument.

To carry out this survey, the Applicant proposes to conduct marine alien invertebrate faunal surveys.

Marine Alien Invertebrate Faunal Survey –

This activity would require lethal sampling through hand collection of marine invertebrate fauna associated with man-made structures and near shore natural habitat combined with in situ surveys. Collections would be conducted on SCUBA or snorkeling and would be combined with in situ photographs. A maximum of 20 individuals for each unique taxon would be collected at each island. For sessile fauna, an individual would be represented by a section 5cmX5cm for encrusting growth forms, and a 1cm piece for erect/branching growth forms. This sessile fauna would not include corals and would generally be associated with man-made and natural rubble habitat.

A target list of established species would be used for reference while conducting surveys. Collections of known established species would be conducted to create a reference collection at Bishop Museum. Additional collections would be for invertebrate faunal groups that have a greater likelihood of representing new marine alien species records. Collections would be deposited at Bishop Museum upon return to Oahu for post-processing and storage.

In some instances, marine invertebrates could require microscopic or histological examination to confirm identification, and in these cases, the Applicant would collect a maximum of 10 individual voucher specimens of any species identified as a marine alien species.

Of the more than 400 species of marine alien species recorded in the Hawaiian Archipelago only 18 are established in the Monument. Of the 18 marine alien species established in the Monument, 14 are marine invertebrates. The established alien marine invertebrates are mostly found at Midway Atoll and French Frigate Shoals but one invertebrate species has become established throughout the archipelago. Initial assessment and subsequent monitoring are essential in the control of marine aliens, and establishing such a monitoring effort in the Monument will require incremental efforts. The effort being proposed here represents a portion of the initial stage of establishing a baseline for inventory, abundance and distribution of the established alien marine invertebrate species in the Monument and sets the stage for long-term monitoring. A previously permitted effort in 2010 recorded 9 new invertebrate species records that were alien to the Monument and documented new distribution data for species already recorded as established. It is hoped that this work will be repeated opportunistically in the next five years under future permit submissions.

The activities proposed by the applicant directly support the Monument Management Plan's priority management needs 3.3 – Reducing Threats to Monument Resources. The Alien Species Action Plan (3.3.2) specifies to "Engage in active surveillance to monitor existing infestations and to detect new infestations of alien species over the life of the plan."

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

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- 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: Hawaii Division of Aquatic Resources, Hawaii 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 1st, 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:**

Scientific reviews support the acceptance of this application. The following concerns were raised. Applicant responses are noted below.

1. Please confirm that FWS staff at French Frigate Shoals (FFS), Tern Island, would be contacted via radio check-in prior to commencing your proposed activities at FFS.
  - The applicant confirms that contact of field camp staff is standard operating procedure for all NOAA research cruise operations.
2. Please confirm if there are reports/write-ups that can be provided for previous RAMP activities.
  - The applicant responds with the reminder that this is not a RAMP effort. This permit is under the marine alien species management effort under the Resource Protection Program described in the PMNM Management Plan. A permit report would be provided to the permits staff and a write up for the inventory efforts would be completed June 2012.

3. Please confirm if there are any maps that can be provided of the proposed sampling locations at FFS.
- The applicant offers the following locations, which would be visited in addition to the site listed in the permit application:

FFS-34	23.628	-166.1
FFS-12	23.638	-166.2
FFS-35	23.791	-166.2
FFS-32	23.806	-166.2
FFS-33	23.836	-166.3
FFS-H6	23.88	-166.3
Tern Island	Sea Wall and Rip Rap habitat	

4. On page 10, the number 20 is listed for samples total per taxon per island, and on page 11, 10 is listed. Which is correct, or are these samples for different purposes? If so, that is unclear in the permit application.
- The applicant states that the paragraph on page 11: “In instances, there will be invertebrates that cannot readily be identified. Many species of invertebrates require microscopic or histological examination to confirm identification, so very limited numbers of voucher specimens will be collected as necessary to make positive identifications. A maximum of 10 individuals of any species identified as a marine alien species will be collected and preserved” was meant to be deleted in the final draft, and expresses that it was their mistake not to remove this paragraph.
5. Under Methods and Procedures on page 10, where you describe the “Marine Invertebrate Faunal Survey,” it is unclear how hand collections of these organisms leads to a full inventory of alien marine species in the area. Please describe the qualitative and quantitative outcomes you hope to achieve for your collections in terms of creating an inventory of these alien species for the Monument.
- The applicant explains that these surveys must be done incrementally due to budget restrictions and sea day availability on NOAA research cruises, and that the current permit request represents this incremental process which will be continued in following years. The process is still at the baseline level and is mainly on man-made habitat but also includes natural habitat. The area of the NWHI is so vast that the first priority for faunal surveys is man-made and altered habitats, which have a higher likelihood of having established marine alien invertebrates. Marine aliens that are invertebrates represent the highest number of established organism types in the NWHI, and therefore are the focus presently. Information on the distribution of marine alien fishes and algae has come from the records of these species during RAMP surveys. Non-coral

invertebrates are the most numerous and difficult to survey with RAMP survey methods. Typical marine alien invertebrates are represented by species that are lesser known and cryptic and are best sampled by focused hand collections. The applicant states that information gained from the marine invertebrate faunal surveys would be compiled in coming years with the data collected for fishes and algae to create a baseline for marine alien faunal inventory.

**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.
- 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 PAPAHA NAUMOKU AKEA MARINE NATIONAL MONUMENT RESEARCH PERMIT TO SCOTT GODWIN, NOAA, OFFICE OF NATIONAL MARINE SANCTUARIES, PAPAHA NAUMOKU AKEA MARINE NATIONAL MONUMENT, FOR ACCESS TO STATE WATERS TO CONDUCT REEF ASSESSMENT AND MONITORING ACTIVITIES UNDER PERMIT PMNM-2012-035”)

Has Applicant been granted a permit from the State in the past? Yes  No

If so, please summarize past permits:

- The applicant was granted permit PMNM-2011-022 in 2011 to inventory and monitor shallow reef ecosystems and alien marine invertebrates and PMNM-2010-022 in 2010 to inventory and monitor alien marine invertebrates.

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:

DAR 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 Research 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 DAR staff.

RECOMMENDATION:

That the Board authorize and approve a Research Permit to Loren Scott Godwin, NOAA, 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 protocols 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.

Respectfully submitted,



GUY KAULUKUKUI  
Acting Administrator

APPROVED FOR SUBMITTAL



WILLIAM J. AILA, JR.  
Chairperson

**Papahānaumokuākea Marine National Monument**  
RESEARCH 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](mailto: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:** Loren Scott Godwin

**Affiliation:** Papahānaumokuākea Marine National Monument

**Permit Category:** Research

**Proposed Activity Dates:** July 2 -July 22, 2012

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

**Proposed Locations:** Nihoa, Mokumanamana, French Frigate Shoals, Lisianski Island, Laysan Island, Pearl & Hermes, Kure, and Midway

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

8

**Estimated number of days in the Monument:** 21

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

a.) The proposed activity would...  
represent baseline efforts towards an updated species inventory and determination of abundance of alien marine invertebrate species associated with natural and man-made habitats within the Monument

b.) To accomplish this activity we would ....  
conduct faunal surveys by focused hand collections of mobile and sessile marine invertebrate fauna using SCUBA and snorkelling

c.) This activity would help the Monument by ...  
providing information to support the Monument Alien Species Action Plan, specifically Strategy AS-2 "Engage in active surveillance to monitor existing infestations and to detect new infestations of alien species over the life of the plan."

**Other information or background:**

**Section A - Applicant Information**

**1. Applicant**

Name (last, first, middle initial): Godwin, Loren Scott

Title: NOAA NMS Resource Protection Specialist

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

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

Phone: [REDACTED]

Fax: [REDACTED]

Email: [REDACTED]

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

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

**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):**

- Dr. Megan Donohue, Field Researcher, Diver & Snorkeler
- Nyssa Silbiger, Field Technician, Diver & Snorkeler
- Holly Bolick, Field Technician, Diver & Snorkeler
- Jason Leonard, Field Technician, Diver & Snorkeler
- Carey Morishige, Field Technician, Snorkeler only
- Hoku Johnson, Field Technician, Snorkeler only
- Justin Rivera, Field Technician, Snorkeler only
- Jasmine Cousins. Field Technician, Diver & Snorkeler



**Section B: Project Information**

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

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

**Ocean Based**

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

Location Description:

Man-made habitats and closely associated natural habitat at Midway Atoll, French Frigate Shoals and Kure Atoll. Opportunistic surveys of natural nearshore habitat at Nihoa, Mokumanamana, Laysan Island, Lisianski Island, Gardner Pinnacles, Maro Reef and Pearl and Hermes Atoll

Specific Locations:

- Midway Atoll, Inner Harbor: 28.213985,-177.363124
- Midway Atoll, Fuel Piers: 28.217615,-177.368445
- Midway Atoll, East Island Pier: 28.210127,-177.335057
- Midway Atoll, West Beach Old Sewage Pipe: 28.21059,-177.387251
- French Frigate Shoals, Tern Island Pier: 23.867848,-166.288775
- Kure Atoll, Pier: 28.393311,-178.296189
- Lisianski Island: West channel: 26.065353,-173.971303
- Pearl & Hermes Atoll lagoon: 27.834568,-175.832949

**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:***

Of the more than 400 species of marine alien species recorded in the Hawaiian Archipelago only 18 are established in the Papahānaumokuākea Marine National Monument (Monument). These marine alien species established in the Monument are made up of 1 macro-algae, 14 marine invertebrates and 3 fish. The established alien marine invertebrates are mostly found at Midway Atoll and French Frigate Shoals but can also be found at other islands within the Monument. Despite the fact that alien marine invertebrates have been recorded more often; less information concerning their abundance and distribution exists compared to alien algae and fish.

In order to control alien species, a hierarchical approach must address the problem at all stages of introduction from arrival to establishment and initiate management strategies ranging from prevention to eradication. Initial assessment and subsequent monitoring are essential in the control of marine aliens. Establishing such a monitoring effort in the Monument will require incremental efforts that will begin with new faunal surveys for marine alien species and the characterization of the abundance and distribution of established marine aliens.

The first faunal survey focusing on marine alien species in the Monument was conducted in 1996 at Midway Atoll (DeFelice, 1998). This survey only generated a species list and did not address the issues of abundance and distribution. In June 2010 an effort was begun by the Principal Investigator (Godwin) in partnership with Hawaii Institute of Marine Biology (HIMB) and Bishop Museum (BPBM) to conduct new faunal surveys under the auspices of the Alien Species Action Plan portion of the Monument Management Plan (MMP Sec 3.3.2, AS-2). This effort updated the 1996 effort for Midway Atoll and expanded surveys to French Frigate Shoals, Pearl and Hermes Reef, Lisianski Island, and Kure Atoll. The 2010 effort recorded 9 new marine invertebrate species records that were alien to the Monument and documented new distribution data for species already recorded as established.

Developing a monitoring scheme for marine alien species requires this inventory information and needs to be determined for established populations in the Monument. The effort being proposed here represents the initial stage of establishing a baseline for inventory, abundance and distribution of the established alien marine invertebrate species in the Monument.

**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?

Because of the close relationship between Native Hawaiians and the ocean, the marine life of the NWHI also constitute a living cultural resource whose well-being is integral to the perpetuation of cultural values and practices. The alien species surveyed by the methods outlined in this application are in close proximity to marine resources and habitats of great cultural significance to Native Hawaiians, in spiritual, religious, nutritional, utilitarian, and other ways. This activity is under the auspices of the sections of the MMP whose goals are to characterize and monitor the Monument's living marine resources but also provide information on resource protection. The information gained will directly inform traditional managers and Native Hawaiian practitioners of the distribution and abundance of these threats to native organisms within the Monument.

Before departure, all scientists participating in this cruise will receive a Native Hawaiian cultural briefing by a cultural practitioner approved by the Office of Hawaiian Affairs (OHA). In addition, the primary permittee, chief scientist, and other appropriate personnel will consult with OHA and the Monument's Native Hawaiian program coordinator on proper conduct while in the NWHI, on cultural sensitivities associated with the proposed activities and locations.

Field efforts will be conducted and supervised at all times by trained marine invertebrate specialists with background in the marine alien species of Hawaii and the tropical Pacific. Collections of voucher organisms will be focused on benthic sessile and mobile marine invertebrates associated with both man-made and natural substrates in shallow near-shore habitat. In the case of this study the shallow near-shore zone is defined as shoreline to 10 m depth. No collection activities will take place in the vicinity of historic resources or cultural sites. If these resources are inadvertently encountered, all activities will cease and moved to another location.

Activities based from the land at Midway Atoll or French Frigate Shoals will be under the supervision of US Fish and Wildlife (USFWS) staff based at these sites. These USFWS staff will provide information and expertise to limit impact to protected flora and fauna associated with Midway Atoll. In the event that land-based nearshore surveys take place at Kure Atoll, the State of Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife and Division of Aquatic Resources field staff will supervise activities.

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 Monument Management Plan (MMP) classifies alien species as a threat to Monument resources and defines a specific action plan (ASAP 3.3.2) directed at alien species. Within this action plan a specific strategy exists that states the importance of engaging in active surveillance for monitoring of existing infestations and to detect new infestations of alien species over the life of the MMP (Strategy AS 2). This process will lead to monitoring protocols, which are also a required management activity from the MMP (AS 2.3).

Although, the collections of organisms under this and the previous permit represent a biomass of less than 1 pound, it represents a positive cumulative effect. This is supported by the fact that new alien species have been recorded in these collections but also have been removed from both natural and man-made habitats in the Monument.

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.

This is an activity specifically for meeting requirements for the MMP involving alien species, therefore this activity must be within the Monument

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

The goal of this project at this early stage is to provide baseline information that will produce an updated species inventory but also set the stage for long term monitoring. Additionally, the removal, preservation and identification of these organisms allows for the development of guides used to record and remove these organisms in the event that future mitigation efforts are undertaken.

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

The faunal inventory of proposed habitats is incremental and will require multiple efforts over coming years to attain accurate species lists, abundance and distribution data.

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

I have been conducting marine alien species surveys in the Hawaiian Archipelago since 2000. I am a qualified taxonomic generalist with expertise in crustaceans, polychaetes, echinoderms, tunicates, bryozoans and mollusks. I have peer reviewed taxonomic publications in various Hawaiian fauna and numerous technical reports from species inventories conducted in the Hawaiian Archipelago. This project will partner with colleagues from Bishop Museum, also with expertise in marine alien species, as well as experience in collection, preservation and archiving of marine specimens. This expertise allows for informed judgements on what organisms are collected and provides the ability to have more focused methodologies in the field that are tailored to marine alien species.

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.

The PI (Godwin) is full time staff at the Monument and co-investigators will be funded either by the PMNM-HIMB research partnership or budgetted contract funding (SOW:NCNM7300-11-02855).

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 training and experience of the investigators allows for specimen collection that is not haphazard. This focused collection will minimize the taking of unnecessary specimens and therefore lessen the impacts to other organisms.



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 project will operate from the NOAA R/V Hiialakai, which is outfitted with the appropriate VMS

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

This effort will be conducted by experts in the collection and preservation of marine invertebrate species and the taxonomy of tropical reef invertebrates associated with both man-made and natural habitats. Additionally, expertise exists on the team in the areas of quantitative analysis, monitoring design and spatial data technologies. The goal of this early stage is to generate baseline data on species inventories and habitat characterization that will lend itself to development of a monitoring scheme.

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

The procedures below describe a process that will be incremental and repeated opportunistically in the next five years. The amount of time needed for faunal collections, taxonomy and quantifying the spatial extent of species and correlations with habitat types is extensive and will involve future permit submissions. This effort is a component of the overall alien species management program described in the MMP and therefore will be on-going.

##### **Marine Alien Invertebrate Faunal Survey**

This effort will require lethal sampling through hand collection of marine invertebrate fauna associated with man-made structures and near shore natural habitat combined with in situ surveys. Collections will be conducted on SCUBA or snorkelling and will be combined with in situ photographs. A target list of established species and will be used for reference while conducting in situ surveys at all requested locations and land-based shallow water surveys at Midway Atoll (See Appendix A). Collections of known established species will be conducted to create a reference collection at Bishop Museum. Additional collections will be for invertebrate faunal groups that have a greater likelihood of representing new marine alien species records (See Attachment). The determination for this second category is based on marine alien species commonly found in the main Hawaiian Islands and regularly associated with anthropogenic transport mechanisms (Godwin, 2003). The list for potential new records is not exhaustive and there are other species that could be found but the list provides a reference source for collections.

A maximum of 20 individuals for each unique taxon will be collected at each island. For sessile fauna, an individual will be represented by a section 5cmX5cm for encrusting growth forms and a 1cm piece for erect/branching growth forms. This is to include enough material for taxonomic and molecular analysis. This sessile fauna will not include corals and will generally be associated with man-made and natural rubble habitat. These samples of sessile fauna will be collected by the use of hand scrapers, which will be used to dislodge the organism from the substrate and minimize incidental collection of non-target organisms

Collections will be brought back to the research vessel or land-based laboratory on Midway Atoll and preserved with methods appropriate for both taxonomic identification and molecular analysis. An established and funded contract (NCNM7300-11-02855) will cover the collections being deposited at Bishop Museum upon return to Oahu for post-processing and storage.

In instances, there will be invertebrates that cannot be readily identified. Many species of invertebrates require microscopic or histological examination to confirm identification, so very limited numbers of voucher specimens will be collected as necessary to make positive identifications. A maximum of 10 individuals of any species identified as a marine alien species will be collected and preserved.

**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:  
See Attachment

Scientific name:  
See Attachment

# & size of specimens:  
20 individuals maximum/ island  
Non-coral sessile fauna: encrusting growth form- 5cmX5cm section, erect/branching growth form-1cm sample

Collection location:  
Man-made habitats and associated natural substrate and opportunistically on other natural substrate

Whole Organism  Partial Organism

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

All specimens will be preserved and archived at Bishop Museum. Portions of specimens needed for taxonomic analysis will be further processed at Bishop Museum. Portions preserved for molecular analysis will be held at Bishop Museum for use by Hawaii Institute of Marine Biology

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

- General site/location for collections:

Specimens from this effort will be stored in temperature controlled facilities at Bishop Museum, which are certified by the American Museum Association.

- Is it an open or closed system?  Open  Closed

n/a

- Is there an outfall?  Yes  No

n/a

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

n/a

- Will organisms be released?

n/a

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

Specimens will be preserved and transported aboard the NOAA R/V Hiialakai. The collections will not include coral specimens

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

Samples for molecular analysis and taxonomic identification will be collected and stored at Bishop Museum under an existing contract (see Section 8). Hawaii Institute of Marine Biology. Specific collaboration on molecular analysis will be with Dr. Rob Toonen at Hawaii Institute of Marine Biology and the ReefChip project.

Collaboration with taxonomists at museums and universities around the world will be necessary for some organisms to attain greater taxonomic resolution. The following specialist would be consulted if additional identification assistance is needed:

Sponges - Barbara Calcinaï, Istituto di Scienze Del Mare, Università di Ancona, Italy

Hyrozoa - Dale Calder, Royal Ontario Museum, Canada

Polychaetes - Rolando Bastida Zavala, Universidad del Mar LABSIM, Mexico

Polychaetes - Leslie Harris, Natural History Museum of LA County, USA

Cnidarian (Anemones) - Daphe Fautin, U. of Kansas, USA

Bryozoans - Kevin Tilbrook, Queensland Museum, Australia

Bryozoans - Roger Cuffey, Penn State, USA

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

Only standard open-circuit SCUBA and hand tools will be used.

**12b. List all Hazardous Materials you propose to take to and use within the Monument:**

95% Ethanol, 10% Formalin

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

Not applicable

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

Samples will be accessioned at Bishop Museum and identified to the lowest taxonomic level by June 2013. Publications will follow in the Winter 2014.

**15. List all Applicants' publications directly related to the proposed project:**

Baums, I.B., S. Godwin, E. Franklin, R. Toonen and D. Carlon. 2011. Population expansions occurred during periods of Pleistocene sea level rise in four species of coral associated hermit crabs (Anomura: Diogenidae). *Molecular Ecology*

Godwin, L.S., L. Harris, A. Charette and R. Moffitt. 2008. The marine invertebrate species associated with the biofouling of derelict fishing gear in the Pāpahānaumokuākea–Marine National Monument: A focus on marine non-native species transport. Preliminary report prepared for NOAA Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division. 26pp.

Martin J.W., S. Godwin, R. Moffit. 2008. Additions to the decapod crustacean fauna of the Hawaiian Islands, I. A review of the crab genus *Sakaila* Manning & Holthuis, 1981 (Decapoda, Brachyura, Calappoidea) with a description of a new species from French Frigate Shoals, Northwestern Hawaiian Islands. *Zootaxa*

Godwin, L.S. 2008. The hermit crab *Calcinus isabellae*, Poupin, 1997 (Crustacea: Decapoda: Anomura: Diogenidae), a new record for the Hawaiian Archipelago, including a review of the genus *Calcinus* Dana, 1851 in Hawai'i. *Bishop Museum Occasional Papers* 100: 52-54

Castro, P & L.S. Godwin. 2006. First record of coral crabs of the family Tetraliidae (Crustacea: Brachyura) from the Hawaiian Islands. *Bishop Museum Occasional Papers*. 88:53-55

Godwin, L.S. & H. Bolick. 2006. Inventory of intertidal and shallow sub-tidal marine invertebrates at Kalaupapa National Historic Park. Contribution No. 2006-003 to the Hawaii Biological Survey. 58 pp.

Godwin, L.S., K.S. Rodgers & P.L. Jokiel. 2006. Reducing potential impacts of invasive marine species in the Northwestern Hawaiian Islands Marine National Monument. A report for research conducted under DOI, NOAA, National Ocean Service MOA 2005-008/6882 Amendment No. 001, "Research in Support of the NWHI Coral Reef Ecosystem Reserve, HIMB, SOEST, UH Mānoa."

Godwin, L.S. 2003. Hull fouling of maritime vessels as a pathway for marine species invasions to the Hawaiian Islands. *Biofouling* 19 (Supplement): 123-131

Zabin, C.J., J.T. Carlton and L.S. Godwin. 2004. First report of the Asian sea anemone *Diadumene lineata* from the Hawaiian Islands. *Bishop Museum Occasional Papers* 79: 54-58

Godwin, L.S., L.G. Eldredge and K. Gaut. 2004. The Assessment of Hull Fouling as a Mechanism for the Introduction and Dispersal of Marine Alien Species in the Main Hawaiian Island. Final report submitted to the Hawaii Coral Reef Initiative Research Program. Bishop Museum Technical Report 28. Contribution 2004-015 to the Hawaii Biological Survey

Godwin, L.S. & N. L. Evenhuis. Marine Molluscs. In: Evenhuis & Eldredge (eds). *Natural History of Nihoa and Necker Islands* pp. 147-155. Bishop Museum Press 2004. 220 pp.

Godwin L.S. & L. G. Eldredge. Marine Invertebrates. In: Evenhuis & Eldredge (eds). *Natural History of Nihoa and Necker Islands* pp. 156-177. Bishop Museum Press 2004. 220 pp.

Godwin, S. 2005. Preliminary species inventory for marine invertebrates associated with the coral reef communities of the Northwestern Hawaiian Islands. Report submitted to the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve.

Friedlander, A.M., G. Aeby, R. Brainard, A. Clark, E. DeMartini, S. Godwin, J. Kenyon, R. Kosaki, J. Maragos, and P. Vroom. 2005. The State of Coral Reef Ecosystems in the Northwestern Hawaiian Islands. pp. 270-311. In J. Waddell (ed.), *The State of Coral Reef Ecosystems of the United States and the 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. 522pp.

DeFelice, R.C., D. Minton, and L.S. Godwin. 2002. Records of shallow-water marine invertebrates from French Frigate Shoals, Northwestern Hawaiian Islands, with a note on nonindigenous species. Report to the U.S. Fish and Wildlife Service. Bishop Museum Technical Report No. 23. Contribution No. 2002-01 to the Hawaii Biological Survey

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

---

Signature

Date

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

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):**

Scott Godwin, PI, Field Researcher  
Holly Bolick, Field Researcher  
Carey Morishige, Field Researcher

**2. Specific Site Location(s): (Attach copies of specific collection locations):**  
Midway Atoll, Lisianski Island, Pearl and Hermes Atoll, French Frigate Shoals

**3. Other permits (list and attach documentation of all other related Federal or State permits):** n/a

**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):** There is an allocation of 21 days at sea aboard Hi`ialakai from NOAA's Office of Marine and Aviation Operations. Activity is listed in Monument Management Plan : PMNM Alien Species Action Plan, Activity AS-2.1 "Survey distributions and populations of known alien species at regular intervals"

**5. Time frame:**

Activity start: July 5, 2012

Activity completion: July 25, 2012

Dates actively inside the Monument:

From: July 6, 2012

To: July 24, 2012

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

Mechanical problems with NOAA research vessel, weather delays

Personnel schedule in the Monument: The following personnel will be present at all sites listed in Section 1:

Scott Godwin: Midway Atoll, Lisianski Island, Pearl and Hermes Atoll, French Frigate Shoals

Holly Bolick: Midway Atoll, Lisianski Island, Pearl and Hermes Atoll, French Frigate Shoals

Carey Morishige: Midway Atoll only

**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:** This is an activity carried out by the federal government, which is a self-insured entity. Therefore, all included under this permit are covered.

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

Vessel  
 Aircraft

Provide Vessel and Aircraft information: NOAA R/V Hiialakai, Asheville G2B aircraft under contract with USFWS

**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):**

- Rodent free, Date:
- Tender vessel, Date:
- Ballast water, Date:
- Gear/equipment, Date:
- 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:

10m launch (diesel inboard)  
8m launch (diesel inboard)  
(2 ) 17 ft Safeboat (gas twin outboard)

### **Additional Information for Land Based Operations**

**11. Proposed movement of personnel, gear, materials, and, if applicable, samples:**

Gear will be transported to Midway Atoll by NOAA R/V Hiialakai with PI and transported off Midway Atoll by NOAA R/V Hiialaklai in Sept 2012  
Scott Godwin and Holly Bolick transit to Midway aboard NOAA R/V Hiialakai and return to Honolulu via Ashville G2B. Carey Morishige arrives and departs from Midway on Ashville G2B

**12. Room and board requirements on island:** Room and board reserved on Midway Atoll through Defense Base Services for three personnel.

**13. Work space needs:** Midway Atoll USFWS staff providing space in boat house for field laboratory

**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

NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI  
FIRST DEPUTY


WILLIAM M. TAM  
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  
KAIHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

May 11, 2012

TO: Division of Aquatic Resources File

THROUGH: William J. Aila, Jr., Chairperson

FROM: Guy Kaulukukui, First Deputy and Acting Administrator  
Division of Aquatic Resources 

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 RESEARCH PERMIT TO LOREN SCOTT  
GODWIN, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, PAPAHĀNAUMOKUĀKEA  
MARINE NATIONAL MONUMENT, FOR ACCESS TO STATE WATERS TO CONDUCT INVASIVE SPECIES  
SURVEY ACTIVITIES UNDER PERMIT PMNM-2012-035.

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 Research Permit to Loren Scott Godwin,  
National Oceanic and Atmospheric Administration, Papahānaumokuākea Marine National  
Monument, for Access to State Waters to Conduct Invasive Species Survey Activities.

Permit Number: PMNM-2012-035.

Project Description:

The research permit, as described below, would allow entry and activities to occur in  
Papahānaumokuākea Marine National Monument (Monument), including the NWHI State  
waters from July 25, 2012 through July 24, 2013.

This is an effort to develop an updated species inventory and determine the abundance of alien  
marine invertebrate species associated with natural and man-made habitats within the Monument  
by conducting visual surveys of marine alien invertebrate fauna. Collections of up to 20  
individuals per unique taxon per island would be taken of marine aliens.

The proposed activities are in direct support of the Monument Management Plan's priority  
management need 3.3 – Reducing Threats to Monument Resources. The Alien Species Action

ITEM F-6c

Plan (3.3.2) specifies to "Engage in active surveillance to monitor existing infestations and to detect new infestations of alien species over the life of the plan." Activities to support reducing threats to Monument resources, including survey and removal of alien invasive species, such as those to be carried out by the permittee, are addressed in the Monument Management Plan and associated Environmental Assessment. This EA summarizes that such activities could result in a beneficial effect on all native species within the Monument that are harmed by competition or predation by alien species (PMNM MMP Vol 2, p.180).

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii 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 1st, 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 surveying and removal of marine alien invasives, 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 annual monitoring of marine alien invasive species, the categorical exemption determination here will treat all planned activities as a single action. Per the Management Plan, the applicant anticipates applying for future permits to conduct periodic surveys of alien and invasive species..

2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and section 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR §11-200-8.A.5. specifically 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."

In addition, Exemption Class #5, Exempt Item #5 includes "surveys, censuses, inventories, studies, photographing, recording, sampling, collection, culture and captive propagation of aquatic biota", such as those being proposed.

DEPARTMENT OF LAND & NATURAL RESOURCES, EXEMPTION LIST FOR THE DIVISION OF FISH AND GAME (January 19, 1976).

The proposed survey and removal activities here appear to fall squarely under the exemption class identified under HAR § 11-200-8(a)(5), and as described under the former Fish and Game Division exemption list published in 1976. As discussed below, no significant disturbance to any environmental resource is anticipated in either the survey or removal of marine alien invasive species. 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.

These activities would be a continuation of work previously conducted by this applicant, which involve monitoring and collections of marine alien invasive species. There are no other permit applications for surveying and removing marine alien invasive species in the Northwestern Hawaiian Islands. 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 will 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.

The activities would be conducted from the NOAA Ship HI’IALAKAI (PMNM-2012-009) during its July cruise. The following table lists additional activities that are anticipated to take place on this cruise pending approval of permit applications.

**Table 1. Concurrent Projects Aboard NOAA SHIP HI’IALAKAI**

Permit	Purpose and Scope	Location
PMNM-2012-009 NOAA Ship HI’IALAKAI	The permit allows NOAA Ship HI’IALAKAI entry into PMNM. Personnel aboard the vessel will be permitted under separate permits.	All locations
PMNM-2011-018 Meyer	This permit allows collection of reef fish and tagging of top predators as well as acoustic receiver deployment.	All locations

Permit	Purpose and Scope	Location
PMNM-2012-020 Tagawa (proposed)	The proposed action is to allow fin clip collections and tagging of two Jack (Ulua) species, <i>Caranx ignobilis</i> and <i>Caranx melampygyus</i> .	All locations
PMNM-2012-028 Lemus (proposed)	The proposed action is to conduct interviews with research scientists during the course of their field work, and film both the natural resources under study and the scientists conducting the studies to develop multimedia resources for distance learning.	All locations
PMNM-2012-033 Donahue (proposed)	The proposed action is to allow collection of (dead) corals, and to retrieve and deploy coral settlement blocks.	All locations
PMNM-2012-036 Gleason (proposed)	The proposed action is to allow maritime heritage site survey and monitoring activities and collection of a single artifact from the Two Brothers shipwreck.	All locations

No other permits involve the collection and removal of alien marine invertebrates. One other proposed project (PMNM-2011-033) would include collections of corals, which is a marine invertebrate, but these are not alien to the Monument. Further, the proposed activities involve collections from man-made structures, not reefs, so corals are not the focus of these efforts.

**Table 2. Concurrent Projects Aboard NOAA SHIP OSCAR ELTON SETTE**

Permit	Purpose and Scope	Location
PMNM-2012-008 NOAA Ship OSCAR ELTON SETTE	The permit allows NOAA Ship OSCAR ELTON SETTE entry into PMNM. Personnel aboard the vessel will be permitted under separate permits.	Nihoa, Mokumanamana, FFS, Laysan, Lisianski, Pearl and Hermes, Kure
PMNM-2012-001 Co-Trustee	The proposed action is to facilitate the needs of the monk seal field camp	All locations
PMNM-2012-013 Parrish/ Van Atta (proposed)	The proposed action is conduct selected removal of predatory sharks from Hawaiian monk seal pupping sites at French Frigate Shoals.	FFS

The NOAA Ship OSCAR ELTON SETTE (PMNM-2012-008) may also be in the Monument during this time. However, none of the activities on this cruise overlap with the alien marine species inventory and monitoring that is being proposed.

The culmination of these permits, and their disparate activities, occurring throughout the Monument over a 4-week period, is not anticipated to have significant cumulative impacts. 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 research 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. Field efforts would be conducted and supervised at all times by trained marine invertebrate specialists with background in the marine alien species of Hawaii and the tropical Pacific. The removal of marine alien species would have a positive effect on the native ecosystem.

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.

\_\_\_\_\_  
WILLIAM J. AILA, JR.  
Chairperson, Board of Land and Natural Resources

\_\_\_\_\_  
Date