Papahānaumokuākea Marine National Monument
CONSERVATION AND MANAGEMENT Permit Application

NOTE: ***This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).***

ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.

- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.

- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED
Send Permit Applications to:
NOAA/Inouye Regional Center
NOS/ONMS/PMNM/Attn: Permit Coordinator
1845 Wasp Blvd, Building 176
Honolulu, HI 96818
nwhipermit@noaa.gov
PHONE: (808) 725-5800 FAX: (808) 455-3093

SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.

Papahānaumokuākea Marine National Monument
Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

Summary Information

Applicant Name: Charles L. Littnan

Affiliation: NOAA Fisheries

Permit Category: Conservation and Management

Proposed Activity Dates: 4/1/2019 – 3/31/2020

Proposed Method of Entry (Vessel/Plane):

NOAA RVs Oscar Elton Sette and Hi'ialakai, possibly Searcher, Imua, and Ka`imikai-O-Kanaloa.

Proposed Locations:

Hawaiian monk seal research and recovery efforts will occur across all islands, islets and atolls in the Northwestern Hawaiian Islands. Work will be done predominantly on the shoreline of each island/islet.

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

25

Estimated number of days in the Monument:

150

Description of proposed activities: (complete these sentences):

a.) The proposed activity would…

support priorities identified in the Papahānaumokuākea Marine National Monument Management Plan (December 2008, hereinafter referred to as MMP); specifically Priority Management Needs: 3.2 Conserving Wildlife (Hawaiian monk seals), and 3.3

Reducing Threats to Monument Resources (Hawaiian monk seals), as well as the Co-Trustee's Conservation & Management Activity: Natural Resource Protection, as listed in section 6.3 of that Monument permit application.

NOAA aims to accomplish natural resource protection related to monk seals by conducting "…management actions to promote the conservation of Monument resources which includes activities necessary to carry out protection of species, such as carrying out existing recovery plans" to fulfill our obligations under the Endangered Species Act and the Hawaiian Monk Seal Recovery Plan (NMFS 2007).

b.) To accomplish this activity we would ….

be continuing three decades of effort to understand the biology, ecology and population trends of monk seals and identify threats to the species and implement actions to mitigate those dangers.

c.) This activity would help the Monument by …

conducting population assessment and monitoring efforts across the NWHI archipelago in particular during the summer field camp season. Simultaneously we will collect information on the health, ecology and biology of monk seals and threats to the species and use these data to develop, implement and assess a multitude of recovery activities.

Recovery activities would include, but are not limited to, translocating seals away from danger and to areas of great survival, rehabilitation of undernourished seals, disentanglement from marine debris, mitigation of shark predation risks to pups at French Frigate Shoals, removal of marine debris, vaccination against morbillivirus, reuniting mothers and pups, and more.

Other information or background:

This is a brief summary of information relevant to monk seal research and recovery initiatives proposed here. More information can be found in the attached Recovery Plan for the Hawaiian Monk Seal.

• The Hawaiian monk seal is an endangered species numbering approximately 1,350 individuals, 1,100 seals reside in the NWHI.

• The Hawaiian monk seal has been the focus of research and recovery activities for over 30 years. This has resulted in one of the most robust population datasets for a large mammal species allowing the Program to develop and assess cutting edge recovery

actions.

• These recovery activities have resulted in the fact that a minimum of 28% of Hawaiian monk seals alive today are here because they directly benefited from an action or are the offspring of a female seal that benefited.

• In the PMNM, the key threats to the survival of the species include low birth rates combined with poor survival of juvenile Hawaiian monk seals to reproductive age. The majority of research activities are directed to understanding threats to the seals and mitigating those, particularly related to young female seals.

• All activities proposed here are permitted by the NOAA MMPA/ESA Permit 16632-01 (and associated NEPA docs etc.) and supported by the Revised Recovery Plan for Hawaiian Monk Seals.

• This permit also supports effort conducted by our State and Federal partners that are directed towards monk seal research and recovery.

• To maximize the benefit from our limited time in this remote place, the Program will use a suite of methods to ensure that all areas are well-surveyed (including using technology to expand data collection, and requesting access to all monk seal haul-out areas).

• Unmanned areal systems (UAS) will be used to conduct ecological surveys including surveying and monitoring monk seals, marine debris, and possibly other flora and fauna in the NWHI (as a by-product of habitat mapping or as requested by partners).

• UAS will be launched and recovered from land, NOAA ships, or small boats launched from those ships, and will be flown at altitude below 400 feet.

• UAS efforts will provide the ability to survey and map resources on the remote islands without (1) interference; (2) the potential for the introduction of invasive species; and (3) human disturbance to the natural resources. The UAS would increase the monitoring and surveying capacity in the Monument

• While we work to minimize human presence on Mokumanamana, trained biologists familiar with the island may traverse Mokumanamana in the event that all seal haul-out areas cannot be surveyed through boat-landings or UAS flights at haul-out sites.

• Recently, the NMFS Hawaiian Monk Seal Research Program has developed and published new methods for estimating abundance of monk seals throughout their range. At each site or subpopulation, different analytical techniques are used depending upon the type and quantity of data available. At Mokumanamana and Nihoa Islands, counts of seals on shore are adjusted to account for the proportion of seals at sea, thus yielding a total population estimate with associated error. In order to use this “correction factor”

method, it is critical that a full count of the seals on shore during a survey is obtained.

• At Mokumanamana, seals land at various locations, mostly along the northern coastline and West Cove. To avoid traversing the island on foot, researchers must be put ashore at least at two locations (the saddle at the northwestern side of the island and along the eastern half of the northern coastline). Unfortunately, it is very rare that people can be landed at both sites.

• From 2013 through 2017, 10 attempts were been made to land at Mokumanamana. There was only one case were people landed on both sides of the island to achieve a full population assessment (in 3 cases no landing was possible, in 6 remaining cases landing was only possible in one of the two critical landing areas).

• The lack of reliable, annual full counts of seals on Mokumanamana greatly limits NMFS ability to track monk seal population trends at this site. Further, missing full counts at Mokumanamana (which requires using previous years' data as a proxy and assuming no population change has occurred) reduces overall confidence in the total range-wide abundance estimate for the species.

• In the past, NMFS researchers were permitted to traverse the island on foot when unable to land researchers at both ends of the island. Broader access to transit across the island would have resulted in full reliable ground counts could have been obtained in four of the past five years.

• In an effort to reduce potential impacts to Mokumanamana NMFS self-limited their access to the island. After several years of attempting to survey the data for seals at Mokumanana has several degraded. So we are requesting a return of permission for NMFS researchers to carefully traverse the island to conduct complete surveys while adhering to all BMPs and biosecurity measures and staying mindful of cultural resources.

• This permit is comprehensive and includes ALL monk seal recovery activities that occur in the Monument including the mitigation of predation by Galapagos sharks on monk seal pups at French Frigate Shoals (FFS); the primary source of seal mortality at FFS.

• This is a continuation of permitted shark removal activities for monk seal conservation. The original request was for up to 20 Galapagos sharks to be removed. In subsequent years we have removed 6 sharks in including 2 in 2018. The request for this year would be for 14 Galapagos sharks.

• Predation peaked in 1997-1999; it continues at a rate of 5-11 pups per year from 2000-2014 (usually 15-25% of the pup cohort each year).

• Between 1997 and 2017, shark predation affected over 250 pups out of roughly 1100 born at FFS. Sharks have killed many pups and others were permanently maimed by

severe shark bites and subsequently died.

• Since 1997, NMFS has engaged in a variety of actions to address this threat, including pre-weaning and translocating pups, predator deterrents, and targeted fishing activities to remove problem G. sharks.

• Despite the suite of activities (e.g. deterrents of many kinds) implemented by NMFS, the monk seal population in the NWHI, and particularly at FFS, has continued to decline.

• Removing the sharks exhibiting this behavior from the environment is the most effective means of preventing continued predation.

• NMFS has consulted numerous stakeholders including Native Hawaiians, animal welfare groups, conservation professionals, and the general public. Opinions and concerns are varied between individuals but no external group has requested NMFS cease this activity.

• This activity has been approved and undertaken safely and respectfully almost every year since 2010.

• Successful removal of these individuals could have a profound effect on the monk seal population at French Frigate Shoals while having negligible impact on the G. shark population.