

Compatibility Determination

Use: Environmental Education and Interpretation

Refuge Name: Hawaiian Islands National Wildlife Refuge (NWR), Papahānaumokuākea Marine National Monument (MNM)

City/County and State: City and County of Honolulu, State of Hawai‘i

Establishing and Acquisition Authority (ies):

The Hawaiian Islands Reservation was established by President Theodore Roosevelt through Executive Order (EO) 1019, dated February 3, 1909.

In 1940, President Franklin D. Roosevelt signed Presidential Proclamation (PP) 2416, which changed the name of the Reservation to the Hawaiian Islands NWR, but did not add to or otherwise modify the Reservation’s purposes.

On June 15, 2006, President Bush signed PP 8031 making the Hawaiian Islands NWR part of a monument that became the Papahānaumokuākea Marine National Monument (MNM) on March 6, 2007 (PP 8112).

Refuge Purpose(s):

The purpose of the Hawaiian Islands Reservation is “...as a preserve and breeding ground for native birds...” (EO 1019).

Additional Direction to Inform Decision making:

National Wildlife Refuge System Mission:

To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System Administration Act of 1966, as amended (NWRS Administration Act, 16 U.S.C. 668dd-668ee)).

Papahānaumokuākea Marine National Monument:

Additionally, PP 8031, which established the Papahānaumokuākea MNM; as well as the Monument’s vision, mission, guiding principles, and goals all provide additional information for consideration of compatible activities. Papahānaumokuākea covers a much larger area than the Refuge, but also includes the Refuge.

Wilderness Management Objectives:

Portions of the Hawaiian Islands NWR were proposed for designation as wilderness under the Wilderness Act of 1964. Per Fish and Wildlife Service (FWS) policy and Department of the Interior regulation (Title 50 of the Code of Federal Regulations, Part 35), proposed wilderness is managed to preserve its wilderness character until such time as Congress takes action on the proposal and managed according to wilderness management objectives found in 6 Refuge Manual 8.3:

1. To manage the land to accomplish refuge purposes in such a way so as to preserve the wilderness resource for future benefit and enjoyment of the public; and
2. To provide opportunities for education, research, solitude, and recreation where these activities are compatible with refuge purposes.

Description of Use(s):

The 1997 amendments to the NWRS Administration Act defined environmental education and interpretation as wildlife-dependent public uses. In that Act, the U.S. Congress charged that, when compatible with the purpose or purposes for which a NWR was established, such uses be given special consideration in planning for and management of the National Wildlife Refuge System. When determined compatible on a refuge-specific basis, these uses are priority general public uses of that national wildlife refuge. National wildlife refuges are to seek opportunities to allow these uses in an appropriate and compatible manner.

Both environmental education and interpretation strive to convey an understanding and appreciation of national wildlife refuge resources, the issues that affect them, and the techniques and programs pursued in their management. For this reason these two uses have been combined in one compatibility determination (CD).

Due to the remote location of the Hawaiian Islands NWR and its limited accessibility, funding, and staffing, few opportunities for onsite environmental education and interpretive programs are available. However, with co-management of the Papahānaumokuākea Marine National Monument and new technology, we may be able to offer offsite programs through satellite transmissions to schools around the world. Additionally, from time to time private videographers and photographers may wish to develop environmental education and interpretation materials. These noncommercial activities by videographers covered under this CD would be subject to the same restrictions as the CD for commercial operators (CD for Photography, Videography, and Audiography).

In the future, these activities could occur on any of the islands within the Refuge during the year, but would only be led by government personnel and/or contractors and would be subject to all Refuge-specific conditions that restrict locations, times, number of visitors, etc. (see the Stipulations Necessary to Ensure Compatibility section). Any access for the public to participate in these activities would be primarily by boat and airplane, thus greatly restricting the opportunities for environmental education and interpretation. The number of annual visits and visitors would be controlled by the Refuge through the Monument's permitting process.

Specific examples of where this CD might apply are included in the Monument Management Plan as:

- 1) Section 3.1.1, Activity MCS-3.3: Include an educational component in marine research expeditions.
- 2) Section 3.5.4, Activity OEL-1.5, Continue Teacher- and Class-at-Sea programs on an annual basis.

Two National Oceanic and Atmospheric Administration (NOAA) vessels (*Oscar Elton Sette* and the *Hi'ialakai*) currently transit the Northwestern Hawaiian Islands, generally making three voyages total each year. During each voyage, there is usually one teacher aboard participating in the program who has the opportunity to visit the Refuge. In addition, in 2005 NOAA sponsored a "boatload of educators" tour within the Refuge. The Refuge expects the number of visits by NOAA vessels with teachers to triple in the next 15 years.

Onsite interpretation of the natural, historic, and cultural resources of the Hawaiian Islands NWR also occurs in association with research expeditions. Generally each ship carries an outreach staff member who works with the researchers and crew to transmit web-based features about their activities and Refuge resources. Occasionally they may visit the field camps at Tern Island or Laysan Island for brief daytime only visits on boats provided by the NOAA ship. These interpretive activities are expected to continue in the future. Cultural resource activities and practices by Native Hawaiians, which includes access for cultural practitioners, are also covered under a separate CD (Cultural Resource Activities and Practices).

The NOAA also offers an ongoing Teacher-at-Sea Program. This program enables teachers to gain firsthand experience of science and life at sea. Participation allows teachers to enrich their classroom curricula with a depth of understanding made possible by living and working side-by-side, day and night, with those who contribute to the world's body of oceanic and atmospheric scientific knowledge.

In the Teacher-at-Sea program, teachers apply and have three choices of vessel types; 1) Fisheries Research, 2) Oceanographic and Coastal Research, and 3) Hydrographic Surveys. They are usually at sea from 1-3 weeks and work the same shifts as the researchers. This sea based experience provides them excellent information for developing school programs and helps NOAA meet the objectives of their mission by promoting among teachers and their students a greater awareness of the need to understand and protect the world's oceans and their resources.

The Monument Management Plan also proposes to use telepresence technology for educational and outreach activities (section 3.5.4, Ocean Ecosystems Literacy). Technologies such as underwater video cameras, real-time video transmission, virtual field trips, and formal distance learning programs may be feasible from the Refuge in the future.

Offsite interpretation of the natural, historic, and cultural resources of the Hawaiian Islands NWR would also include the collection and removal of samples to be used to highlight the flora, fauna, and ecosystems of the Monument. In keeping with the Monument Management Plan principle of "bringing the monument to the people, rather than the people to the monument," limited numbers of specimens may be collected for exhibit in offsite educational facilities (e.g. aquaria) or for offsite education or interpretation programs (e.g. bolus dissections). Offsite interpretation may also include, but is not limited to: Bishop Museum for representative samples and education; NOAA's Mokupa 'papa Discovery Center and the State of Hawai'i's Waikiki Aquarium for education and interpretation; Federal Law Enforcement Training Center and FWS's National Fish and Wildlife Forensics Laboratory for training and identification for law enforcement; and primary and secondary schools and universities for education. Specimens may include whole or pieces of live organisms (e.g. coral, fish), parts of organisms (e.g. bolus'), or remains of organisms. Each collection project for education would have different objectives, protocols, and methodologies; therefore, each study will necessitate its own thorough review through the Monument permitting process. Specimens considered would not include specially protected species without appropriate Endangered Species Act, Marine Mammal Protection Act, or Migratory Bird Treaty Act authorization.

Availability of Resources:

The FWS has very limited staff, facilities, and equipment available for this use. The FWS is responsible for the costs of upkeep and replacement of these items. These facilities are described in greater detail in the Coordinated Field Operations Action Plan (section 3.6.3) within the Monument Management Plan.

Category and Itemization	One time (\$)	Annual (\$/yr)
Administration and Management		\$5,250
Maintenance		\$2,000
Monitoring		\$5,250
Special equipment, facilities or improvements		\$25,000
Offsetting revenues (estimated)		

Orientation and monitoring of impacts would be completed by the Refuge staff (5 % of GS-7 Assistant Refuge Manager, \$2,250; 5 % of GS-9 Refuge Manager, \$3,000). Additional maintenance of current facilities may be required to accommodate more people.

Additional funding for specialized telepresence technology would need to be made available (either through the FWS budget system or from an outside source) in order to allow this use to occur in a compatible manner. Should internal funding not materialize, the FWS would seek outside funding (e.g., from other agency partners or private conservation organizations.)

Transportation costs to reach the Refuge, costs of upkeep and replacement of Refuge special equipment, and costs of activities on the Refuge are paid for by the participant or covered by another agency.

Anticipated Impacts of the Use(s):

Possible impacts from this use include: (1) disturbance to nesting and resting seabirds and other migratory birds; (2) disturbance to Hawaiian monk seals (*Monachus schauinslandi*) and/or green turtles (*Chelonia mydas*) swimming and feeding in the near shore marine environment or resting on beaches; (3) disturbance to spinner dolphins (*Stenella longirostris*) swimming and feeding in the near shore marine environment; (4) disturbance to fish, cetaceans, marine invertebrates, and corals; (5) disturbance to Laysan ducks (*Anas laysanensis*), Nihoa finches (*Telespiza ultima*), Nihoa millerbirds (*Acrocephalus familiaris kingi*), and Laysan finches (*Telespiza cantans*); (6) trampling of native plants and insects; (7) damage to corals; (8) accidental release of pollution and contaminants; and (9) the accidental introduction and establishment of nonnative species to the Monument. All activities would be designed and managed in a manner to eliminate or minimize these impacts. All environmental education and interpretive activities would be designed and managed in a fashion to eliminate or minimize these impacts. However, even with proper management and execution of a well planned project, certain behavioral responses in wildlife may occur that are not easily recognized by the casual observer. Some proposed activities will require further analysis and compliance by the agencies as more detailed information becomes available and specific plans are developed. These requirements may include additional analysis in accordance with NEPA, and consultation under ESA, Marine Mammal Protection Act, NHPA, and other relevant laws.

Stress reactions (elevated heart rate, elevated levels of corticosterone, and behavioral responses) have been documented in several species of nesting seabirds at several ecotourism locations as a result of human activities in nesting colonies (Jungius and Mirsch 1979, Fowler 1995, Nimon et al., 1995 and Kataysky et al., 2003). Studies, however, have not been conducted to document long-term cumulative effects of human disturbance. When participants are observing albatrosses, terns, boobies, Laysan ducks,

or other species in the less visited areas, they would have the potential of greatly elevating stress hormone levels if the duration of the disturbance is excessive. Kitaysky et al. (2003) showed that limited duration disturbance, however, has only minor, short-term effects. Observation periods for any particular bird or group of birds would be kept to 15 minutes or less for this reason.

Human activities have played a major role in determining the status and trend of Hawaiian monk seals over the past two centuries (Ragen 1997). From the 1960s to the 1990s, decreases in monk seal populations at several locations (French Frigate Shoals, Midway Atoll, and Kure Atoll) have been associated with human disturbance (Gerrodette 1990). Recreational beach activities caused monk seals to alter their pupping and hauling patterns, and survival of pups in suboptimal habitats was low, leading to gradual population declines (Kenyon 1972). Human activity and disturbance caused incredible declines at Midway Atoll (Kenyon 1972). Beach counts of monk seals at Midway Atoll averaged 56 animals in the late 1950s, but declined severely by the late 1960s with a single seal observed during an aerial survey in 1968. While 80 to 100 Hawaiian monk seals coexist with humans in the main Hawaiian Islands, the vast majority frequent remote areas where human presence or access is limited and births occur almost exclusively in relatively remote areas. Reproductive success is declining, with the 2001 total mean nonpup beach counts at the main reproductive NWHI subpopulations approximately 60 percent lower than in 1958 (NMFS 2003). Based on recent counts, the current Hawaiian monk seal population is approximately 1,200 individuals (Antonelis et al. 2006; NMFS 2007), and models predict the population will fall below 1,000 individuals within the next five years. Monks seals are very sensitive to disturbance and proposed activities will be carefully reviewed and, as appropriate, restricted so no further impacts to seals would occur.

Increased use of Monument waters also increases the potential for introductions of nonnative species and interactions (some negative) by boats or snorkelers/divers with monk seals, sea turtles, spinner dolphins, cetaceans, and live corals. One accidental introduction of a nonnative species on a boat or dive equipment could devastate the Monument. In the main Hawaiian Islands, native algae have altered native habitat, and in some areas have overgrown and completely smothered extensive areas of coral reef (DLNR 2003). Other species have caused serious economic effects. Each year, Maui County spends thousands of dollars to remove over a million pounds of the alien algae *Hypnea* from its beaches (Coloma-Agaran 2003). Snowflake coral (*Carijoa riisei*) has covered significant portions of black coral beds in the main Hawaiian Islands in depths greater than 250 feet (75 meters) and is now considered one of the most invasive invertebrates on deep-water coral reefs (DLNR 2003).

Although the remoteness and relative inaccessibility of the NWHI has helped to prevent the introduction of some alien species to the area, the islands are also vulnerable to introductions through a variety of human activities. The NWHI now have terrestrial invaders in most taxa, some of which have caused great disruption to the native ecosystems. The number of alien land plants in the NWHI varies from only 3 introduced at Nihoa to 249 introduced at Midway Atoll. The level of threat from introduced plants also varies between species. For example, the invasive plant golden crownbeard (*Verbesina encelioides*) displaces all native vegetation in nesting areas, causing entanglement and heat prostration and killing hundreds of albatrosses each year. The invasive gray bird locust (*Schistocerca nitens*) was first detected at Nihoa Island in 1984 and by 2000 was periodically reaching population levels large enough to cause damage to the native plant community, including three endemic species listed as endangered. This grasshopper species has now also spread to Mokumanamana, French Frigate Shoals, and Lisianski Island. To prevent further importation of invasive plants, animals, or insects, mandatory quarantine protocols are enforced for any visitors to all the islands in the NWHI (with the exception of Midway Atoll and Tern Island at French Frigate Shoals). These protocols require the use of brand new or island-specific gear at each site and treatments such as cleaning, using insecticide, and freezing to minimize the transport of potentially invasive species to the island.

Any action of pursuit or annoyance from boats potentially disturbs marine mammals in the wild by causing disruption of their behavioral patterns or displacement from essential habitat areas, especially if the cetaceans or seals are in a resting phase (Bejder et al. 1999). Snorkel or dive operations also include the added risk of damaging living coral on the Refuge (Hawkins et al. 1999). Improper boat operation could result in localized impacts to the coral reef from anchoring, touching, standing, or other avoidable physical disturbance to the coral.

Environmental Education

Impacts from visitors would be minimal and infrequent. Additionally, terrestrial and marine viewing areas would be carefully selected to limit wildlife disturbance and potential impacts to cultural resources.

Minimal to no impact on Monument resources is anticipated from offsite programs, designed to bring the place to the people rather than the people to the place. Educational demonstrations would be conducted or supervised by trained FWS-approved guides.

The specific impacts of the NOAA Teacher-at-Sea Program would be the same for any on island activities and would be permitted requiring the same restrictions as others. The Teacher-at-Sea permitting requirements are also covered under another CD (Operations of Co-managing Agencies).

Minimal to no impact on Monument resources is expected from collecting non-living specimens such as bolus' or skeletons. It is anticipated that non-living specimen collection would be incidental to another permitted activity; as such, there would be no to little disturbance impacts related specifically to collection.

The impacts from collecting limited numbers of living specimens are expected to be minimal, as each project would be carefully reviewed and collections restricted to ensure compatibility and prevent any significant short-term, long-term, or cumulative impacts. Collection requests would be evaluated through the Monument permitting process and comparisons examined with ongoing or recently completed activities in the Monument to determine if the species collected, methodologies used, or habitat type and locations used may lead to undesirable cumulative impacts. An agreement for any third-party transfer of specimens would be developed to meet the standards of a Cooperative Research and Development Agreement (CRADA).

Collecting limited numbers of specimens for education purposes should have indirect positive impacts on Monument resources. For example, a living reef habitat representative of that found in the Monument would benefit Monument management by contributing to increased public awareness of the Monument and issues that affect it. Students dissecting albatross bolus and the education programs from this collection help to achieve the Monument mission and Refuge purposes, and widely circulate information about the remote Monument resources. Supporting environmental education and interpretation programs which strive to convey an understanding and appreciation of wildlife resources, the issues that affect them, and the techniques and programs pursued in their management typically increases public support for resource conservation.

Standard and specific conditions are included in this CD under Stipulations Necessary to Ensure Compatibility.

Interpretation

Minimal impact to Refuge resources is anticipated, since only trained FWS-approved guides would conduct interpretive talks and would avoid sensitive wildlife and cultural areas.

Impacts may occur to nesting seabirds, Hawaiian monk seals (*Monachus schauinslandi*), and Hawaiian green turtles (*Chelonia mydas*) may occur if visitors and residents were to wander off guided interpretive walks. Possible impacts include: 1) destruction of Bonin petrels (*Pterodroma hypoleuca*), Tristram's storm petrels (*Oceanodroma tristrami*), or wedge-tailed shearwaters (*Puffinus pacificus*) nesting burrows; 2) smashing, injuring or killing a seabird egg, chick, or adult by stepping on the bird or its nest; 3) negatively affecting seabird nesting success by causing abandonment; 4) allowing seabird egg predation by shorebirds by flushing incubating adults; and (5) disturbing or deterring a resting monk seal or green turtle from a preferred haulout, molting, or pupping/nesting location. Fowler (1995) studied seabird colonies with ecotourism operations and documented that birds located away from frequently visited areas react strongly to any human activity. Birds were observed to habituate to high levels of constant visitation, but not to less constant (although regular) visitation. Therefore, birds located far from trails are more likely to be disturbed from wandering visitors or residents. Monk seal research has documented that pregnant females would abandon preferred pupping locations due to human disturbance (Kenyon 1972).

Talks may be located near seabird colonies, but leaders and participants would not enter into the main colony area for these talks. Keeping the group at the edge of the colony would help to limit stress levels. Studies have shown that birds can adapt to repeated disturbance (Fowler 1995), so selection of an area where the birds are regularly viewed by FWS personnel and visitors would minimize the impact of this activity.

Due to the very limited nature of this activity, we do not expect any additional short-term, long-term, and/or cumulative and indirect/secondary impacts other than those normally associated with required existing FWS work. However, it is critical that all visitors follow all quarantine procedures to prevent the accidental introduction of nonnative species to the Monument. One invasive species has the potential to devastate the fragile ecosystem (Chesher 1969). It may be appropriate to set a limit to the number of participants allowed under this use even if staff is available to coordinate the activities. Proposed uses when transportation costs are not covered, quarantine procedures not followed, or there is an unnecessary risk to the natural and cultural resources of the Refuge and Monument would not be permitted.

Public Review and Comment:

This determination was issued for public review and comment as part of the Papahānaumokuākea Draft Monument Management Plan. The plan and associated compatibility determinations were also made available through printed copies upon request and through the Monument Web sites at <http://www.fws.gov/pacificislands> and <http://hawaiiireef.noaa.gov/>. This level of review and comment was selected to meet FWS requirements under the National Wildlife Refuge System Administration Act of 1966, as amended and as determined by the Co-Trustees of the Monument. The Monument is of national interest; therefore, the availability of the Monument Management Plan (including the CDs) was advertised at the national level. The public comment period was held from April 23, 2008 through July 8, 2008 and was subsequently extended to July 23, 2008. Responses to all of the substantive comments that were received for the plan, including those that pertain to the compatibility determinations can be found in Volume V of the Final Monument Management Plan.

Amendments to this CD for collection of specimens for education were made available for public review for 2 weeks from May 6, 2009 to May 20, 2009.

Determination:

- ___ Use is Not Compatible
- X Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

GENERAL TERMS AND CONDITIONS:

Each permittee would be required to adhere to all general conditions specified by the Monument Co-Trustees in their joint permit (Attachment 1).

A more comprehensive list of Refuge and Monument conditions and restrictions is included in this CD and 50 CFR Part 27. Not all of these conditions and restrictions would apply to every use. The type of use and where the activity occurs would drive which are relevant (Attachment 2).

All persons participating in the travel to and from any of the islands must adhere to the “Special Conditions for Movement to and from Islands” which cover the quarantine requirements (Attachment 3).

SPECIFIC TERMS AND CONDITIONS:

All projects would be monitored to ensure the use remains compatible and natural, cultural, and historic resources (which include but are not limited to: nesting and resting seabirds and other migratory birds, Hawaiian monk seals, green turtles, spinner dolphins, fish, cetaceans, marine invertebrates, corals, Laysan ducks, Nihoa finches, Nihoa millerbirds, Laysan finches, native plants and insects, and cultural and historical resources) are not impacted. Staff will also monitor for the accidental release of pollution and contaminants, and the accidental introduction and establishment of nonnative species to the Refuge.

Permittees are responsible for acquiring and/or renewing any necessary State and Federal permits prior to beginning or continuing their project. In addition, the agencies commit to consultation under the Endangered Species Act, Marine Mammal Protection Act, as appropriate, prior to initiation of any action that may affect any marine mammal or Federally-listed species or designated critical habitat.

The Refuge Manager or designee can suspend/modify conditions/terminate environmental education and interpretation that is already permitted and in progress should unacceptable, unforeseen, or unexpected impacts or issues arise or be noted. Termination of any permitted activity would be communicated expeditiously to the Monument Management Board. Whenever feasible, the Refuge Manager will consult with the Monument Co-Trustees prior to termination.

All persons arriving are provided cultural briefing information, as well as orientation materials and related information to minimize disturbance to wildlife (“wildlife viewing etiquette”). Specific restrictions (e.g., 150-foot minimum distance for seals, prohibition of access to heavily burrowed areas, etc.) are strictly enforced. The orientation materials include specific indicators of wildlife behavioral responses to disturbance, especially for the Hawaiian monk seal and green turtle, as well as appropriate visitor response to being approached by wildlife. The orientation also includes a visual demonstration of a 150-foot distance. The 150-foot distance is the minimum, however greater distances may be required depending upon the response of the wildlife. Information on the nesting locations of particularly rare species (e.g., white-tailed tropicbirds) may be withheld to protect these birds from disturbance. Permittees are required to go through orientation immediately upon arrival.

Permittees would not be allowed to approach closer than 150 feet to Laysan duck wetlands.

Tern Island-based vessels involved in permitted activities would be required to return to dock at least 1 hour before sunset, which would also enhance boat operators' ability to avoid collisions with marine life. Permittees planning to engage in water-related activities during the albatross fledging season (June-July) would be thoroughly briefed on watching for shark activity, and water related activities are not permitted during peak shark foraging times (½-hour before dusk to ½-hour after sunrise).

Power boat operators may slow to allow observation of approaching spinner dolphins, but would neither pursue the dolphins nor specifically seek them out. If dolphins are encountered during transit between two points, we would allow the boat to slow and/or stop for observation, but entering the water would not be allowed. Routes to and from snorkeling/dive sites would be plotted to avoid known resting areas of spinner dolphins in the lagoon, as well as preferred Hawaiian monk seal haulout, molting, and pupping sites.

To eliminate anchoring impacts on coral, boat operators would be required to anchor in known sand areas or tie up to a mooring buoy. Anchors will be lowered into place rather than tossed overboard to provide a more controlled placement.

To eliminate anchoring impacts on coral, boat operators would be required to anchor in known sand areas or tie up to a mooring buoy.

Two-stroke motors for boats are prohibited. There are two primary reasons for limits to 4-stroke outboard motors: 1) they are quieter – producing less sound underwater and above water that could disturb fish, marine mammals, sea turtles, and birds and 2) they have a more efficient and complete combustion and as a result emit less water and air pollution. No other loud sounds would be associated with this program.

Donations or loans of specimens would comply with 50 CFR 12.35 thru 12.38. Collections of live samples that are taken off site of the refuge are considered on loan to the permittee. The donation or loan may be made only after the execution of a transfer document which is subject to the conditions specified in 50 CFR 12.36.

Monument special permit conditions include the following conditions that meet the requirements for FWS special use permits and covers all activities within Papahānaumokuākea Marine National Monument.

- 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 permittees 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.*

Justification:

When determined compatible on a station specific basis, environmental education and interpretation are priority public uses of that national wildlife refuge. The Hawaiian Islands NWR is closed to entry and use by the general public. However, there are occasions where environmental education and

interpretation occur in a very limited manner and usually in the company of another government employee (e.g., a person accompanying a government employee who does not recognize or understand the Refuge resources). Additionally, funding and technologies may become available in the future to increase environmental education and interpretation. By allowing the use to occur under the stipulations described above, it is anticipated that wildlife species which could be disturbed during the use will find sufficient food resources and resting places such that their abundance and use of the Monument will not be measurably lessened. *Allowing collection of limited numbers of specimens for education purposes should have indirect positive impacts on Monument resources Supporting environmental education and interpretation programs which strive to convey an understanding and appreciation of wildlife resources, the issues that affect them, and the techniques and programs pursued in their management typically increases public support for resource conservation.*

Additionally, it is anticipated that the rigorous quarantine and inspection protocols will prevent the inadvertent introduction or transmission of alien species. Thus, the use would not materially interfere with or detract from the fulfillment of Proclamation 8031, the Refuge System mission, or the purposes for which the refuge was established.

Mandatory 10- or 15-year Reevaluation Date:

Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

Mandatory 10-year reevaluation date (for non-wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

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Presidential Proclamation 8031, 15 June 2006 (71 FR 36443) Establishing the Northwestern Hawaiian Islands as a marine national monument.

Presidential Proclamation 8112, 6 March 2007. Establishment of the Papahānaumokuākea Marine National Monument (72 FR 10031).

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Refuge Determination:

FWS Superintendent,
Papahānaumokuākea Marine National Monument

_____ Date: _____
(Signature)

Project Leader,
Hawaiian and Pacific
Islands NWRC

_____ Date _____
(Signature)

Concurrence:

Refuge Supervisor,
National Wildlife
Refuge System
Pacific Region

_____ Date _____
(Signature)

Regional Chief,
National Wildlife
Refuge System
Pacific Region

_____ Date _____
(Signature)