

1. World Heritage Property Data

1.1 - Name of World Heritage Property

Papahānaumokuākea


1.2 - World Heritage Property Details

United States of America Europe and North
Americamixte Cultural landscapes Marine & coastal 13262010

1.3 - Geographic Information Table

25.3490700000-170.1458200000 36207499.0000

1.4 - Map(s)

| Title | Date | Link to source |
|---------------------------|------------|---|
| Map of inscribed property | 20/01/2009 |  |

1.5 - Governmental Institution Responsible for the Property

- Jonathan Putnam
US National Park Service Office of International Affairs
World Heritage Program Officer

1.6 - Property Manager / Coordinator, Local Institution / Agency

- Aulani Wilhelm
Paphanaumokuakea Marine National Monument Superintendent

Comment

Please change Aulani Wilhelm's title to "National Oceanographic & Atmospheric Administration (NOAA) Superintendent" and add: Position Currently Vacant, Fish & Wildlife Service (FWS) Superintendent, United States of American, 808-792-9481 Maria Carnavale, State Co-Manager, State of Hawaii Department of Land & Natural Resources, 808-587-0099, maria.a.carnavale@hawaii.gov

1.7 - Web Address of the Property (if existing)

- papahanaumokuakea.gov

1.8 - Other designations / Conventions under which the property is protected (if applicable)

Comment

Marine National Monument designation, 15 June 2006 IMO Particularly Sensitive Sea Area (PSSA) designation, 03 April 2008

2. Statement of Outstanding Universal Value

2.1 - Statement of Outstanding Universal Value / Statement of Significance

Statement of Outstanding Universal Value

Brief synthesis

Papahānaumokuākea is the name given to a vast and isolated linear cluster of small, low lying islands and atolls, with their surrounding ocean, extending some 1,931 kilometres to the north west of the main Hawaiian Archipelago, located in the north-central Pacific Ocean. The property comprises the Papahānaumokuākea Marine National Monument, which extends almost 2000 km from southeast to northwest.

The property includes a significant portion of the Hawai'i-Emperor hotspot trail, constituting an outstanding example of island hotspot progression. Much of the property is made up of pelagic and deepwater habitats, with notable features such as seamounts and submerged banks, extensive coral reefs, lagoons and 14 km² emergent lands distributed between a number of eroded high islands, pinnacles, atoll islands and cays. With a total area of around 362,075 km² it is one of the largest marine protected areas in the world. The geomorphological history and isolation of the archipelago have led to the development of an extraordinary range of habitats and features, including an extremely high degree of endemism. Largely as a result of its isolation, marine ecosystems and ecological processes are virtually intact, leading to exceptional biomass accumulated in large apex predators. Island environments have, however, been altered through human use, and although some change is irreversible there are also examples of successful restoration. The area is host to numerous endangered or threatened species, both terrestrial and marine, some of which depend solely on Papahānaumokuākea for their survival.

The pristine natural heritage of the area has deep cosmological and traditional significance for living Native Hawaiian culture, as an ancestral environment, as an embodiment of the Hawaiian concept of kinship between people and the natural world, and as the place where it is believed that life originates and where the spirits return to after death.

On two of the islands, Nihoa and Makumanamana, there are archaeological remains relating to pre-European settlement and use, including a large ensemble of shrines, heiau, of a type specific to Papahānaumokuākea, but which resemble those of inland Tahiti. These, together with the sites of stone figures that show a strong relationship to similar carvings in the Marquesas, can be said to contribute to an understanding of Hawaiians strong cultural affiliation with Tahiti and the Marquesas.

Criterion (iii): The well preserved heiau shrines on Nihoa and Mokumanamana, and their associated still living traditions are both distinctive to Hawai'i but, positioned within a wider 3,000 year old Pacific/Polynesian marae-ahu cultural continuum, they can be seen as an exceptional testimony to the strong cultural affiliation between Hawai'i, Tahiti and the Marquesas, resulting from long periods of migration.

Criterion (vi): The vibrant and persistent beliefs associated with Papahānaumokuākea are of outstanding significance as a key element in Pacific socio-cultural evolutionary patterns of beliefs and provide a profound understanding of the key roles that ancient marae-ahu, such as those found in Raiatea, the 'centre' of Polynesia, once fulfilled. These living traditions of the Hawaiians that celebrate the natural abundance of Papahānaumokuākea and its association with sacred realms of life and death, are directly and tangibly associated with the heiau shrines of Nihoa and Mokumanamana and the pristine islands beyond to the north-west.

Criterion (vii): The property provides an illustrating example of island hotspot progression, formed as a result of a relatively stationary hotspot and stable tectonic plate movement. Comprising a major portion of the world's longest and oldest volcanic chain, the scale, distinctness and linearity of the manifestation of these geological processes in Papahānaumokuākea are unrivalled and have shaped our understanding of plate tectonics and hotspots. The geological values of the property are directly connected to the values in Hawai'i Volcanoes National Park and World Heritage property and jointly present a very significant testimony of hotspot volcanism.

Criterion (ix): The large area of the property encompasses a multitude of habitats, ranging from 4,600 m below sea level to

275 m above sea level, including abyssal areas, seamounts and submerged banks, coral reefs, shallow lagoons, littoral shores, dunes, dry grasslands and shrublands and a hypersaline lake. The size of the archipelago, its biogeographic isolation as well as the distance between islands and atolls has led to distinct and varied habitat types and species assemblages. Papahānaumokuākea constitutes a remarkable example of ongoing evolutionary and biogeographical processes, as illustrated by its exceptional ecosystems, speciation from single ancestral species, species assemblages and very high degree of marine and terrestrial endemism. For example, a quarter of the nearly 7,000 presently known marine species in the area are endemic. Over a fifth of the fish species are unique to the archipelago while coral species endemism is over 40%. As many species and habitats remain to be studied in detail these numbers are likely to rise. Because of its isolation, scale and high degree of protection the property provides an unrivalled example of reef ecosystems which are still dominated by top predators such as sharks, a feature lost from most other island environments due to human activity.

Criterion (x): The terrestrial and marine habitats of Papahānaumokuākea are crucial for the survival of many endangered or vulnerable species the distributions of which are highly or entirely restricted to the area. This includes the critically endangered Hawaiian Monk Seal, four endemic bird species (Laysan Duck, Laysan Finch, Nihoa Finch and Nihoa Millerbird, and six species of endangered plants such as the Fan Palm. Papahānaumokuākea is a vital feeding, nesting, and nursery habitat for many other species, including seabirds, sea turtles and cetaceans. With 5.5 million sea birds nesting in the monument every year and 14 million residing in it seasonally it is collectively the largest tropical seabird rookery in the world, and includes 99% of the world's Laysan Albatross (vulnerable) and 98% of the world's Black-footed Albatross (endangered). Despite relatively low species diversity compared to many other coral reef environments, the property is thus of very high in situ biodiversity conservation value.

Integrity

The boundaries of the property are all located in the ocean, but nevertheless have been clearly defined, demarcated on navigational charts and communicated widely. The large size of the property ensures inclusion of a wide variety of habitat types, including a highly significant area of marginal reef environment as well as submerged banks and deepwater habitat. It also ensures a high degree of replication of habitat type. Although past use has altered some terrestrial environments the property is still predominantly in a natural state: its nature conservation status is exceptional. This is largely due to its isolation as well as a combination of management and protection efforts, some dating back more than 100 years, including national natural resource protection legislation as well as internationally adopted restrictions. The integrity of the property and its ecological processes are in excess of most other island archipelagos and most other tropical marine environments in the world.

All the cultural attributes that reflect Outstanding Universal Value are within the boundaries of the property. The archaeological sites remain relatively undisturbed by cultural factors. Although none of the attributes are under severe threat, some of the archaeological sites need further conservation and protection against damage from plants and wildlife.

Authenticity

The unique arrangement of the collections of shrines of Mokumanamana and Nihoa islands need to be read in detail for their sacred and religious associations, linked to other similar sites across the Pacific. The strong spiritual religious

associations of Mokumanamana island are living and relevant. Damage due to natural processes of decay, and disturbance by wildlife could also disturb their layout and ability to display clearly their meaning.

Protection and management requirements

Papahānaumokuākea is a highly protected area established through Presidential Proclamation in 2009, which adds to pre-existing state, federal and international legal mandates. The multiple layers of Federal and State legislation and regulation protect Papahānaumokuākea's natural heritage and also its cultural heritage: both monuments and landscape. The property was declared a Marine National Monument under the national Antiquities Act, and is further protected by other national legislation including as the National Historic Protection Act, Historic Sites Act, and the Archaeological Resources Protection Act. There are also traditional Native Hawaiian protocols protecting the property's physical and intangible cultural heritage.

The multiple jurisdictions have created a complex institutional environment for management of the property, but management planning and intervention practices are appropriate. The three management Agencies for the property are the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration and the State of Hawaii Department of Land and Natural Resources. There is a need to establish and maintain effective natural, archaeological and cultural heritage skills in managing the property. An archaeologist/cultural heritage specialist is required for the property, to complement the management of its natural values. The multiple jurisdictions have created a complex institutional environment for management of the property, but management planning and intervention practices are well conceived. In view of the threats facing the property, well-governed multi-agency involvement and participation is a strength, provided the complexity does not compromise operational capacities and the ability to quickly respond to challenges. It is a particular strength in relation to addressing the threats to the property that originate beyond its boundaries.

A Monument Protection Plan has been drawn up by key stakeholders, which will act as the guiding document for the property over the next 15 years. This includes strategic objectives and detailed thematic action plans that address priority needs. It is important that these efforts are sustained with the aim to increase streamlining, including to achieve more effective mechanisms for stakeholder participation and outreach. There is a need to ensure that the management system achieves effective, equitable and integrated management that protects and conserves both the cultural attributes and natural features of the property that are the basis for its Outstanding Universal Value.

Threats to the natural values of the property emanating outside its boundaries include marine litter, hazardous cargo, future exploration and mining, military operations, Illegal, Unregulated and Unreported (IUU) fishing, commercial fishing, anchor damage, vessel strikes and Invasive Alien Species. A key issue in relation to threats to cultural attributes is the need to ensure archaeological sites are not disturbed by burrowing animals or plants, and that monitoring indicators address the impact of natural processes on the archaeological resources. There is also a need for management to be underpinned by clear documentation of the physical cultural resource, based on the outcomes of the current archaeological investigations.

Comment

Please make the changes to the following sentences: "Papahānaumokuākea is a highly protected area established through Presidential Proclamation in 2009, which adds to pre-

existing state, federal and international legal mandates." The correct date is 2006. "A Monument Protection Plan has been drawn up by key stakeholders, which will act as the guiding document for the property over the next 15 years." The correct name is the Monument Management Plan.

2.2 - The criteria (2005 revised version) under which the property was inscribed

(iii)(vi)(viii)(ix)(x)

2.3 - Attributes expressing the Outstanding Universal Value per criterion

2.4 - If needed, please provide details of why the Statement of Outstanding Universal Value should be revised

2.5 - Comments, conclusions and / or recommendations related to Statement of Outstanding Universal Value

3. Factors Affecting the Property

3.14. Other factor(s)

3.14.1 - Other factor(s)

3.15. Factors Summary Table

3.15.1 - Factors summary table

| | Name | Impact | | | | | Origin | |
|-------------|---|--------|--|--|--|--|--------|--|
| 3.1 | Buildings and Development | | | | | | | |
| 3.1.3 | Industrial areas | | | | | | | |
| 3.2 | Transportation Infrastructure | | | | | | | |
| 3.2.1 | Ground transport infrastructure | | | | | | | |
| 3.2.2 | Air transport infrastructure | | | | | | | |
| 3.2.3 | Marine transport infrastructure | | | | | | | |
| 3.2.4 | Effects arising from use of transportation infrastructure | | | | | | | |
| 3.4 | Pollution | | | | | | | |
| 3.4.1 | Pollution of marine waters | | | | | | | |
| 3.4.5 | Solid waste | | | | | | | |
| 3.5 | Biological resource use/modification | | | | | | | |
| 3.5.5 | Crop production | | | | | | | |
| 3.7 | Local conditions affecting physical fabric | | | | | | | |
| 3.7.6 | Water (rain/water table) | | | | | | | |
| 3.8 | Social/cultural uses of heritage | | | | | | | |
| 3.8.1 | Ritual / spiritual / religious and associative uses | | | | | | | |
| 3.8.2 | Society's valuing of heritage | | | | | | | |
| 3.8.3 | Indigenous hunting, gathering and collecting | | | | | | | |
| 3.8.4 | Changes in traditional ways of life and knowledge system | | | | | | | |
| 3.9 | Other human activities | | | | | | | |
| 3.9.1 | Illegal activities | | | | | | | |
| 3.9.3 | Military training | | | | | | | |
| 3.10 | Climate change and severe weather events | | | | | | | |
| 3.10.1 | Storms | | | | | | | |
| 3.10.2 | Flooding | | | | | | | |
| 3.10.3 | Drought | | | | | | | |
| 3.10.4 | Desertification | | | | | | | |
| 3.10.5 | Changes to oceanic waters | | | | | | | |
| 3.10.6 | Temperature change | | | | | | | |
| 3.10.7 | Other climate change impacts | | | | | | | |
| 3.11 | Sudden ecological or geological events | | | | | | | |
| 3.11.1 | Volcanic eruption | | | | | | | |
| 3.11.2 | Earthquake | | | | | | | |
| 3.11.3 | Tsunami/tidal wave | | | | | | | |
| 3.11.5 | Erosion and siltation/ deposition | | | | | | | |
| 3.12 | Invasive/alien species or hyper-abundant species | | | | | | | |
| 3.12.1 | Translocated species | | | | | | | |
| 3.12.2 | Invasive/alien terrestrial species | | | | | | | |
| 3.12.3 | Invasive / alien freshwater species | | | | | | | |
| 3.12.4 | Invasive / alien marine species | | | | | | | |
| 3.12.5 | Hyper-abundant species | | | | | | | |
| 3.13 | Management and institutional factors | | | | | | | |
| 3.13.1 | Low impact research / monitoring activities | | | | | | | |
| 3.13.3 | Management activities | | | | | | | |

| | | | | | | |
|---------------|---------|-----------|----------|----------|--------|---------|
| Legend | Current | Potential | Negative | Positive | Inside | Outside |
|---------------|---------|-----------|----------|----------|--------|---------|

3.16. Assessment of current negative factors

3.16.1 - Assessment of current negative factors

| | Spatial scale | Temporal scale | Impact | Management response | Trend |
|--|---------------|--------------------------|---------------|--------------------------------|------------|
| 3.2 Transportation Infrastructure | | | | | |
| 3.2.1 Ground transport infrastructure | restricted | intermittent or sporadic | significant | medium capacity | increasing |
| 3.2.2 Air transport infrastructure | restricted | intermittent or sporadic | minor | low capacity | increasing |
| 3.2.3 Marine transport infrastructure | restricted | on-going | significant | low capacity | increasing |
| 3.2.4 Effects arising from use of transportation infrastructure | restricted | frequent | minor | low capacity | static |
| 3.4 Pollution | | | | | |
| 3.4.1 Pollution of marine waters | widespread | on-going | significant | low capacity | increasing |
| 3.4.5 Solid waste | restricted | frequent | insignificant | no capacity and / or resources | increasing |
| 3.7 Local conditions affecting physical fabric | | | | | |
| 3.7.6 Water (rain/water table) | restricted | intermittent or sporadic | minor | no capacity and / or resources | increasing |
| 3.9 Other human activities | | | | | |
| 3.9.3 Military training | extensive | on-going | significant | no capacity and / or resources | increasing |
| 3.10 Climate change and severe weather events | | | | | |
| 3.10.1 Storms | extensive | intermittent or sporadic | significant | no capacity and / or resources | increasing |
| 3.10.2 Flooding | restricted | intermittent or sporadic | significant | low capacity | increasing |
| 3.10.3 Drought | restricted | frequent | significant | no capacity and / or resources | increasing |
| 3.10.5 Changes to oceanic waters | widespread | on-going | significant | no capacity and / or resources | increasing |
| 3.10.6 Temperature change | widespread | on-going | significant | no capacity and / or resources | increasing |
| 3.10.7 Other climate change impacts | widespread | on-going | significant | no capacity and / or resources | increasing |
| 3.11 Sudden ecological or geological events | | | | | |
| 3.11.3 Tsunami/tidal wave | localised | intermittent or sporadic | catastrophic | no capacity and / or resources | increasing |
| 3.12 Invasive/alien species or hyper-abundant species | | | | | |
| 3.12.2 Invasive/alien terrestrial species | restricted | one off or rare | significant | medium capacity | decreasing |
| 3.12.4 Invasive / alien marine species | extensive | on-going | significant | low capacity | increasing |
| 3.12.5 Hyper-abundant species | restricted | one off or rare | significant | low capacity | increasing |

3.17. Comments, conclusions and / or recommendations related to factors affecting the property

3.17.1 - Comments

Primary threats are climate change, marine debris, invasive/alien species, & impact to cultural & archeological sites. Remediation of past human use is ongoing & long term effort. 100% of marine debris originates outside the Monument & is accumulating faster than it can be removed. Quarantine & eradication programs have reduced spread of terrestrial alien species; prevalence of marine alien & invasive species is increasing. Integration with & inclusion of NH community & practices is increasing.

4. Protection, Management and Monitoring of the Property

4.1. Boundaries and Buffer Zones

4.1.1 - Buffer zone status

There is no buffer zone, and it is not needed

4.1.2 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The boundaries of the World Heritage property are **adequate** to maintain the property's Outstanding Universal Value

4.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The property had no buffer zone at the time of its inscription on the World Heritage List

4.1.4 - Are the boundaries of the World Heritage property known?

The boundaries of the World Heritage property are known by both the management authority and local residents / communities / landowners.

4.1.5 - Are the buffer zones of the World Heritage property known?

The property had **no buffer zone** at the time of its inscription on the World Heritage List

4.1.6 - Comments, conclusions and / or recommendations related to boundaries and buffer zones of the World Heritage property

4.2. Protective Measures

4.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and / or traditional)

There are the multiple layers of Federal and State legislation and regulation protecting Papahānaumokuākea's cultural heritage, "both monuments and landscape". The property was declared a National Marine Monument under the national Antiquities Act, and is further protected by other national legislation including as the National Historic Protection Act, Historic Sites Act, Archaeological Resources Protection Act,

Abandoned Shipwreck Act, Native American Graves Protection and Repatriation Act and Sunken Military Craft Act as well as State legal measures including Hawaii Revised Statutes Chapter 6E – Historic Preservation and Hawaii Administrative Rules Chapters 275 – Rules Governing Procedures for Historic Preservation Review, 277 – Rules Governing Requirements for Archaeological Site Preservation and Development, 280 – Rules Governing General Procedures for Inadvertent Discoveries of Historic Properties, and 300 – Rules of Practice and Procedure Relating to Burial Sites and Human Remains. The property has been protected under Federal law for a century and its current status as a National Monument rests on its 2006 declaration as such under the Federal Antiquities Act. This Act provides criminal penalties for a wide range of unlawful activities. Compliance with this Act and the many others that govern access to and activity in Papahānaumokuākea is ensured by a strict permit system and a dedicated enforcement capacity in the property's administration. Monument enforcement authorities work with the US Coast Guard, which monitors all vessels in the area and physically responds to suspected violations of access regulations.

Comment

Please delete the existing entry and replace in accordance with attached document.

4.2.2 - Is the legal framework (i.e. legislation and / or regulation) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and / or Authenticity of the property?

The legal framework for the maintenance of the Outstanding Universal Value including conditions of Authenticity and / or Integrity of the World Heritage property provides **an adequate or better basis** for effective management and protection

4.2.3 - Is the legal framework (i.e. legislation and / or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and / or Authenticity of the property?

The property had **no buffer zone at the time of inscription** on the World Heritage List

4.2.4 - Is the legal framework (i.e. legislation and / or regulation) adequate in the area surrounding the World Heritage property and buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and / or Authenticity of the property?

The legal framework for the area surrounding the World Heritage property and the buffer zone provides **an adequate or better basis** for effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and / or Integrity

4.2.5 - Can the legislative framework (i.e. legislation and / or regulation) be enforced?

There is **acceptable** capacity / resources to enforce legislation and / or regulation in the World Heritage property but some deficiencies remain

4.2.6 - Comments, conclusions and / or recommendations related to protective measures

4.2.5.3. Due to the size and remoteness of the site, co-managing agencies and partners do not have resources or capability to maintain persistent, on-site surveillance, monitoring and enforcement. Such activities generally only

happen reactively to reports of illegal or unauthorized activity. There are currently no enforcement personnel stationed in the Monument.

4.3. Management System / Management Plan

4.3.1 - Management System

The three management Agencies are the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration and the State of Hawaii Department of Land and Natural Resources – all primarily ‘natural’ agencies. For historical reasons, cultural heritage has only recently been elevated to a similar level of significance and importance as natural heritage in the property. In line with the way cultural heritage is managed in mainland US, cultural heritage expertise is brought in through interaction of the relevant State Historic Preservation Office/Division and the professional cultural heritage arms of Federal environmental protection agencies such as NOAA and FWS, as well as the NPS, which in addition to partly funding State Historic Preservation Divisions/Offices across the nation under the NHPA also co-ordinates US World Heritage activity. The legal and administrative underpinnings of the property’s current Management Plan extend back 100 years, and have been organized on a multiagency/trans-jurisdictional basis for much of that time, in line with cultural heritage management throughout the US. The Memorandum of Agreement (MoA) and associated documents joining the three lead administrative agencies provide formal mechanisms to ensure the operational effectiveness of the co-operative management model. The associated information management system that is still under development is encouraging all the agencies involved in the property to adopt tight formal harmonization of their processes and procedures. This appears to be working satisfactorily owing to the fact that they all worked closely together on the management of the property under its previous protective designations (i.e. before it was declared a National Monument in 2006). Policy framework: management plans and arrangements, including visitor management and presentation Papahānaumokuākea is not accessible to the general public owing to the extreme fragility of its cultural and natural resources and the need to maintain strict quarantine to limit the spread of highly-destructive exotic species of the sorts currently being removed from the islands. In addition to controlled scientific access for cultural and biological research and management, special tours are and will continue to be permitted for Native Hawaiian cultural practitioners as well as carefully-selected US and international educators who can disseminate information about the property. It is conceivable that the public will one day be permitted to enter Papahānaumokuākea in very limited numbers on highly controlled no-landing tours akin to tours undertaken in Antarctica. Such tours would enable people to see the monuments on Nihoa and Mokumanamana very clearly without breaking quarantine or endangering the sites or the visitors (physically-hazardous procedures are required to land on and leave the islands and their terrain is very difficult to negotiate, even for fit, well equipped and experienced fieldworkers). A Monument Protection Plan has been drawn up by key stakeholders who will act as the guiding document for the property over the next 15 years. This incorporates many of the individual plans of the participating agencies. The plans set out a Vision, Mission, Guiding principles and goals. Within this plan there is a need to ensure that habitat restoration cannot over-rule cultural constraints – in particular the need to protect the archaeological sites that are fundamental to the property’s value.

Comment

Please delete the existing entry and replace in accordance with attached document.

4.3.2 - Management Documents

Comment

Additional management documents will be uploaded to the World Heritage Center, including the Natural Resources Science Plan, the Maritime Heritage Research, Education, and Management Plan, Sustenance Fishing Guidelines, several Best Management Practices, and 2009-2011 Permitted Activities Reports.

4.3.3 - How well do the various levels of administration (i.e. national / federal; regional / provincial / state; local / municipal etc.) coordinate in the management of the World Heritage Property ?

There is **excellent coordination** between all bodies / levels involved in the management of the property

4.3.4 - Is the management system / plan adequate to maintain the property's Outstanding Universal Value ?

The management system / plan is **fully adequate** to maintain the property's Outstanding Universal Value

4.3.5 - Is the management system being implemented?

The management system is being **fully** implemented and monitored

4.3.6 - Is there an annual work / action plan and is it being implemented?

An annual work / action plan exists and **most or all activities** are being implemented and monitored

4.3.7 - Please rate the cooperation / relationship with World Heritage property managers / coordinators / staff of the following

| | |
|-------------------------------|----------------|
| Local communities / residents | Not applicable |
| Local / Municipal authorities | Not applicable |
| Indigenous peoples | Good |
| Landowners | Good |
| Visitors | Good |
| Researchers | Good |
| Tourism industry | Good |
| Industry | Not applicable |

4.3.8 - If present, do local communities resident in or near the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Local communities **directly contribute** to some decisions relating to management

4.3.9 - If present, do indigenous peoples resident in or regularly using the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Indigenous peoples directly contribute to **some decisions** relating to management but their involvement could be improved

4.3.10 - Is there cooperation with industry (i.e. forestry, mining, agriculture, etc.) regarding the management of

the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone?

There is **little or no contact** with industry regarding the management of the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone

4.3.11 - Comments, conclusions and / or recommendations related to human resources, expertise and training

There is good coordination between the Co-Trustee agencies in carrying out the mandated and agreed upon management system. The Co-Trustees receive management input both from an Advisory Council made up of constituency group representatives and from the Native Hawaiian Cultural Working Group. By direction of the Presidential Proclamation that established the Monument, the only commercial activity allowed is tourism at Midway Atoll, and that has been temporarily halted due to budget constraints.

4.3.12 - Please report any significant changes in the legal status and / or contractual / traditional protective measures and management arrangements for the World Heritage property since inscription or the last Periodic report

A number of additional management policies/documents/protocols have been enacted since the site was inscribed in 2010. These have been uploaded and include the Natural Resources Science Plan, the Maritime Heritage Research, Education, and Management Plan, Sustenance Fishing Guidelines, several Best Management Practices, and two annual Permitted Activities Reports. More documents will follow as they are completed, including a Native Hawaiian Plan and an Emergency Response Plan.

4.4. Financial and Human Resources

4.4.1 - Costs related to conservation, based on the average of last five years (relative percentage of the funding sources)

| | |
|---|-----|
| Multilateral funding (GEF, World Bank, etc) | |
| International donations (NGO's, foundations, etc) | |
| Governmental (National / Federal) | 96% |
| Governmental (Regional / Provincial / State) | 4% |
| Governmental (Local / Municipal) | |
| In country donations (NGO's, foundations, etc) | |
| Individual visitor charges (e.g. entry, parking, camping fees, etc.) | |
| Commercial operator payments (e.g. filming permit, concessions, etc.) | |
| Other grants | |

4.4.2 - International Assistance received from the World Heritage Fund (USD)

Comment

None

4.4.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is **acceptable** but could be further improved to fully meet the management needs

4.4.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding are **secure** in the medium-term and planning is underway to secure funding in the long-term

4.4.5 - Does the World Heritage property provide economic benefits to local communities (e.g. income, employment)?

There is **some flow** of economic benefits to local communities

4.4.6 - Are available resources such as equipment, facilities and infrastructure sufficient to meet management needs?

There are **some** adequate equipment and facilities, but deficiencies in at least one key area **constrain** management at the World Heritage property

4.4.7 - Are resources such as equipment, facilities and infrastructure adequately maintained?

There is **basic** maintenance of equipment and facilities

4.4.8 - Comments, conclusion, and / or recommendations related to finance and infrastructure

4.4.6.3 With such a large and remote site, more resources will certainly assist managers in maintaining the site's OUV. Additional funding and resources for marine debris removal, a suitable vessel for research and logistics, and more robust surveillance, monitoring and enforcement capability would certainly be welcome and put to constructive use. Given the current U.S. government budget situation, funding and resource reductions are more likely than additions in the near future.

4.4.9 - Distribution of employees involved in managing the World Heritage property (% of total)

| | |
|-----------|-----|
| Full-time | 61% |
| Part-time | 39% |

4.4.10 - Distribution of employees involved in managing the World Heritage property (% of total)

| | |
|-----------|-----|
| Permanent | 86% |
| Seasonal | 14% |

4.4.11 - Distribution of employees involved in managing the World Heritage property (% of total)

| | |
|-----------|-----|
| Paid | 83% |
| Volunteer | 17% |

4.4.12 - Are available human resources adequate to manage the World Heritage property?

A range of human resources exist, but these are **below optimum** to manage the World Heritage Property.

4.4.13 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

| | |
|-------------------------|------|
| Research and monitoring | Good |
| Promotion | Good |
| Community outreach | Good |
| Interpretation | Good |
| Education | Fair |

| | |
|----------------------------------|------|
| Visitor management | Good |
| Conservation | Good |
| Administration | Good |
| Risk preparedness | Good |
| Tourism | Good |
| Enforcement (custodians, police) | Fair |

4.4.14 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

| | |
|----------------------------------|--------|
| Research and monitoring | Low |
| Promotion | Low |
| Community outreach | Low |
| Interpretation | Medium |
| Education | Medium |
| Visitor management | Low |
| Conservation | Low |
| Administration | Low |
| Risk preparedness | Medium |
| Tourism | Low |
| Enforcement (custodians, police) | Low |

4.4.15 - Do the management and conservation programmes at the World Heritage property help develop local expertise?

A capacity development plan or programme is **in place and fully implemented**; all technical skills are being transferred to those managing the property locally, who are assuming leadership in management

4.4.16 - Comments, conclusions and / or recommendations related to human resources, expertise and training

4.4.12.3 Human resource gaps exist most notably in the areas of enforcement and education. 4.4.15.4 Property is managed as locally as possible, given remote location and lack of facilities within the Monument.

4.5. Scientific Studies and Research Projects

4.5.1 - Is there adequate knowledge (scientific or traditional) about the values of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?

Knowledge about the values of the World Heritage property is **sufficient** for most key areas **but there are gaps**

4.5.2 - Is there a planned programme of research at the property which is directed towards management needs and / or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme of research**, which is relevant to management needs and / or improving understanding of Outstanding Universal Value

4.5.3 - Are results from research programmes disseminated?

Research results are **shared widely** with the local, national and international audiences

4.5.4 - Please provide details (i.e. authors, title, and web link) of papers published about the World Heritage property since the last Periodic Report

There have been a number of important scientific and research papers related to PMNM published since the site's WH application was submitted in 2009, dealing with diverse topics such as critically endangered Hawaiian monk seal survival, agency partnerships, constituent support, coral reef ecosystems, marine protected area management, & integration of cultural practices in conservation management.

4.5.5 - Comments, conclusions and / or recommendations related to scientific studies and research projects

The site is a large (362,061 sq km) remote site in the middle of the Pacific Ocean, of which only 14 sq km is emergent land. Even if they had unlimited resources, site managers will never have a complete grasp of all the knowledge necessary to manage the site. There will ALWAYS be things to learn, especially in a dynamic environment that is constantly changing.

4.6. Education, Information and Awareness Building

4.6.1 - At how many locations is the World Heritage emblem displayed at the property?

In **one location and easily visible** to visitors

4.6.2 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

| | |
|--|----------------|
| Local communities / residents | Not applicable |
| Local / Municipal authorities within or adjacent to the property | Not applicable |
| Local Indigenous peoples | Average |
| Local landowners | Not applicable |
| Visitors | Excellent |
| Tourism industry | Excellent |
| Local businesses and industries | Not applicable |

4.6.3 - Is there a planned education and awareness programme linked to the values and management of the World Heritage property?

There is a **planned and effective** education and awareness programme that contributes to the protection of the World Heritage property

4.6.4 - What role, if any, has designation as a World Heritage property played with respect to education, information and awareness building activities?

World Heritage status has been an **important influence** on education, information and awareness building activities

4.6.5 - How well is the information on Outstanding Universal Value of the property presented and interpreted?

There is **excellent presentation and interpretation** of the Outstanding Universal Value of the property

4.6.6 - Please rate the adequacy for education, information and awareness building of the following

visitor facilities and services at the World Heritage property

| | |
|---------------------------|------------|
| Visitor centre | Excellent |
| Site museum | Not needed |
| Information booths | Not needed |
| Guided tours | Excellent |
| Trails / routes | Not needed |
| Information materials | Excellent |
| Transportation facilities | Not needed |
| Other | Adequate |

4.6.7 - Comments, conclusions and / or recommendations related to education, information and awareness building

4.6.1 There is very minimal signage within the site itself, however the WH emblem is displayed prominently on the website, posters, and correspondence, and is part of every presentation about the Monument. 4.6.6.1. There is a Visitor Center at Midway Atoll and also a Discovery Center in Hilo, HI that gets ~60K visitors per year. 4.6.6.8 The site has an outreach partnership with HI Volcanoes NP.

4.7. Visitor Management

4.7.1 - Please provide the trend in annual visitation for the last five years

| | |
|-----------------|--------|
| Last year | Static |
| Two years ago | Static |
| Three years ago | Static |
| Four years ago | Static |
| Five years ago | Static |

4.7.2 - What information sources are used to collect trend data on visitor statistics?

| |
|------------------------------|
| Accommodation establishments |
| Transportation services |
| Visitor surveys |

4.7.3 - Visitor management documents

Comment

The Monument regulations only allow certain activities within the site, and virtually all activities required a permit approved by the three Co-Trustee agencies. There is a comprehensive Visitor Services Plan in place for Midway Atoll, the site of Midway Atoll National Wildlife Refuge and the Battle of Midway National Memorial, the only location in the Monument that most visitors will see. Visitor programs to Midway have been temporarily suspended in 2013 due to budgetary shortfalls.

4.7.4 - Is there an appropriate visitor use management plan (e.g. specific plan) for the World Heritage property which ensures that its Outstanding Universal Value is maintained?

Visitor use of the World Heritage property is **effectively managed** and does not impact its Outstanding Universal Value

4.7.5 - Does the tourism industry contribute to improving visitor experiences and maintaining the values of the World Heritage property?

There is **excellent co-operation** between those responsible for the World Heritage property and the tourism industry to

present the Outstanding Universal Value and increase appreciation

4.7.6 - If fees (i.e. entry charges, permits) are collected, do they contribute to the management of the World Heritage property?

The fee is collected, and makes **some contribution** to the management of the World Heritage property

4.7.7 - Comments, conclusions and / or recommendations related to visitor use of the World Heritage property

There is a comprehensive Visitor Services Plan in place for Midway Atoll, the only location in the Monument that allows recreational visitors. All activities in the Monument, even non-recreational visitor activities, must be permitted. Visitor programs to Midway have been temporarily suspended in 2013 due to budgetary shortfalls. The Co-Trustee site management aggressively promotes "bringing the Monument to the people" through education, outreach, and the website.

4.8. Monitoring

4.8.1 - Is there a monitoring programme at the property which is directed towards management needs and / or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme** of monitoring, which is relevant to management needs and / or improving understanding of Outstanding Universal Value

4.8.2 - Are key indicators for measuring the state of conservation used to monitor how the Outstanding Universal Value of the property is maintained?

Information on the values of the World Heritage property is **sufficient** for defining and monitoring key indicators for measuring its state of conservation

4.8.3 - Please rate the level of involvement in monitoring of the following groups

| | |
|--|----------------|
| World Heritage managers / coordinators and staff | Excellent |
| Local / Municipal authorities | Not applicable |
| Local communities | Not applicable |
| Researchers | Excellent |
| NGOs | Average |
| Industry | Not applicable |
| Local indigenous peoples | Average |

4.8.4 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?

Implementation is **underway**

4.8.5 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee

Please refer to the attached document.

4.8.6 - Comments, conclusions and / or recommendations related to monitoring

Remote, in situ and ship-based conservation monitoring is an ongoing high-priority activity within PMNM, proscribed by the enabling legislation, the management plan, the co-management partners, and all stakeholders in the property.

Ongoing and planned research evaluates the effectiveness of management, the conservation status of the property, ecosystem and individual organism health.

4.9. Identification of Priority Management Needs

4.9.1 - Please select the top 6 managements needs for the property (if more than 6 are listed below)

Please refer to question 5.2

5. Summary and Conclusions

5.1. Summary - Factors affecting the Property

5.1.1 - Summary - Factors affecting the Property

| | World Heritage criteria and attributes affected | Actions | Monitoring | Timeframe | Lead agency (and others involved) | More info / comment | |
|---------------|---|----------------------------------|--|---|-----------------------------------|---|---|
| 3.4 | Pollution | | | | | | |
| 3.4.1 | Pollution of marine waters | Criteria ix & x. | PMNM has strict discharge regulations. Monitoring ship traffic via PSSA vessel reporting scheme and satellite AIS analysis. Unable to conduct more extensive marine debris removal operations due to funding restraints. | Monitoring ship traffic via PSSA vessel reporting scheme and satellite AIS analysis. Monitoring marine debris accumulation on land and nearshore areas when possible. In situ monitoring for all pollution when possible. | Ongoing | All Co-Trustees are working together to address these issues. | 100% of marine pollution & debris originates outside PMNM boundaries. PSSA protocols reduce potential for grounding or oil spill. Marine debris is accumulating faster than removal due resource limitations. Developing response plan for all hazards. |
| 3.9 | Other human activities | | | | | | |
| 3.9.3 | Military training | Criteria iii, vi, viii, ix, & x. | Continued limited engagement with military to educate and inform them. | Impacts of military operations are not directly monitored but would be discovered during other monitoring activities (research, marine debris, etc.). | Ongoing. | All Co-Trustees agencies. | Military activities & exercises are exempt from PMNM regulations. We include a military representative on an advisory council and a coordinating committee, but site has no authority to regulate or limit military operations in or around the Monument. |
| 3.10 | Climate change and severe weather events | | | | | | |
| 3.10.5 | Changes to oceanic waters | Criteria iii, viii, ix & x. | Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. | All monitoring activities conducted in the context of ongoing climate change. | Ongoing. | All Co-Trustee agencies. | Changes in ocean chemistry, temperature and storm severity have already impacted PMNM. Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. |
| 3.10.6 | Temperature change | Criteria iii, viii, ix & x. | Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. | All monitoring activities conducted in the context of ongoing climate change. | Ongoing. | All Co-Trustee agencies. | Future air temperature changes will affect NWHI terrestrial plants & animals. Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. |
| 3.10.7 | Other climate change impacts | Criteria iii, viii, ix & x. | Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. | All monitoring activities conducted in the context of ongoing climate change. | Ongoing. | All Co-Trustee agencies. | Changes in ocean chemistry, temperature and storm severity have already impacted PMNM. Site is developing its own Climate Change Strategy and is actively working with wide array of partners & stakeholders to develop regional plans and strategies. |
| 3.11 | Sudden ecological or geological events | | | | | | |

| | | World Heritage criteria and attributes affected | Actions | Monitoring | Timeframe | Lead agency (and others involved) | More info / comment |
|--------|--------------------|---|--|---|-----------|-----------------------------------|---|
| 3.11.3 | Tsunami/tidal wave | Criteria iii, vi, viii, ix, & x. | Site is working with other agencies to improve long range forecasting of storms, tsunamis, etc. as well as shorter range indicators such as wave buoys. Site emergency response plan 90% complete, will improve staff readiness and response capability. | Continued monitoring of past storm and tsunami impacts, working with other agencies to improve both long and short range forecasting for potentially catastrophic natural events. | Ongoing. | All Co-Trustee agencies. | 2011 Japan tsunami resulted in significant damage to both natural & man-made resources as majority of NWHI are low-lying atolls. Site is working with partner agencies to improve long range forecasting & warning systems & improve staff readiness. |

5.2. Summary - Management Needs

5.2.2 - Summary - Management Needs

| 4.3 Management System / Management Plan | | | | | | | |
|---|--|---|-----------------|-----------------------------------|---------------------|--|--|
| | | Actions | Timeframe | Lead agency (and others involved) | More info / comment | | |
| 4.3.10 | There is little or no contact with industry regarding management | Industry was not included in the management scheme per the Presidential Proclamation establishing the Monument that prohibits all industrial activity in the Monument except for innocent passage of ships. | Not applicable. | Not applicable. | None. | | |

5.3. Conclusions on the State of Conservation of the Property

5.3.1 - Current state of Authenticity

The authenticity of the World Heritage property has been **preserved**

5.3.2 - Current state of Integrity

The integrity of the World Heritage property is **intact**

5.3.3 - Current state of the World Heritage property's Outstanding Universal Value

The World Heritage property's Outstanding Universal Value has been **maintained**.

5.3.4 - Current state of the property's other values

Other important cultural and / or natural values and the state of conservation of the World Heritage property are **predominantly intact**

5.4. Additional comments on the State of Conservation of the Property

5.4.1 - Comments

While direct human impacts on the site have been minimized through a comprehensive permitting regime, indirect human impacts are manifested in the Monument's three primary threats: climate change, marine debris & alien/invasive species. Management activities continue to be devoted to advancing and carrying out constructive resource protection activities for both natural & cultural resources.

6. World Heritage Status and Conclusions on Periodic Reporting Exercise

6.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

| | |
|--|----------------|
| Conservation | Very positive |
| Research and monitoring | Positive |
| Management effectiveness | Positive |
| Quality of life for local communities and indigenous peoples | No impact |
| Recognition | Very positive |
| Education | Positive |
| Infrastructure development | Not applicable |
| Funding for the property | No impact |
| International cooperation | Very positive |
| Political support for conservation | No impact |
| Legal / Policy framework | No impact |
| Lobbying | No impact |
| Institutional coordination | No impact |
| Security | No impact |
| Other (please specify) | No impact |

6.2 - Comments, conclusions and / or recommendations related to World Heritage status

PMNM managers are extremely grateful and honored to have PMNM selected as World Heritage site and we are working diligently to maintain the Outstanding Universal Values for which the site was inscribed.

6.3 - Entities involved in the preparation of this Section of the Periodic Report

| |
|--|
| Governmental institution responsible for the property |
| Site Manager/Coordinator/World Heritage property staff |

6.4 - Was the Periodic Reporting questionnaire easy to use and clearly understandable?

yes

6.5 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

The character limitations in the text blocks frequently prohibit a full explanation of all the necessary information.

6.6 - Please rate the level of support for completing the Periodic Report questionnaire from the following entities

| | |
|----------------------------|-----------|
| UNESCO | Good |
| State Party Representative | Very good |
| Advisory Body | Fair |

6.7 - How accessible was the information required to complete the Periodic Report?

All required information was accessible

6.8 - The Periodic Reporting process has improved the understanding of the following

| |
|---|
| Managing the property to maintain the Outstanding Universal Value |
|---|

6.9 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

| | |
|-----------------|----------------|
| UNESCO | Not Applicable |
| State Party | Not Applicable |
| Site Managers | Not Applicable |
| Advisory Bodies | Not Applicable |

6.10 - Summary of actions that will require formal consideration by the World Heritage Committee

- **Statement of Outstanding Universal Value / Statement of Significance**
Reason for update: Please make the changes to the following sentences: "Papahānaumokuākea is a highly protected area established through Presidential Proclamation in 2009, which adds to pre-existing state, federal and international legal mandates." The correct date is 2006. "A Monument Protection Plan has been drawn up by key stakeholders, which will act as the guiding document for the property over the next 15 years." The correct name is the Monument Management Plan.

6.11 - Comments, conclusions and / or recommendations related to the Assessment of the Periodic Reporting exercise

There are additional changes supplied via attached documents that will require formal consideration by the World Heritage Committee.