
Papahānaumokuākea (United States of America) No 1326

Official name as proposed by the State Party:

Papahānaumokuākea Marine National Monument

Location:

State of Hawaii
United States of America

Brief description:

Papahānaumokuākea is the new name for 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.

The area has deep cosmological and traditional significance for living Native Hawaiian culture, as an ancestral environment, as an embodiment of the Hawaii an 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 of a type specific to Papahānaumokuākea.

Category of property:

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a *cultural landscape*.

[Note: the property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances, while ICOMOS assesses the cultural significances.]

1. BASIC DATA

Included in the Tentative List: 30 January 2008

International Assistance from the World Heritage Fund for preparing the Nomination: None

Date received by the World Heritage Centre: 21 January 2009

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Cultural Landscapes, on Intangible Cultural Heritage and on Pacific Islands together with several independent experts.

Literature consulted (selection):

DiNardo, G., and F. Parrish (eds), *Northwestern Hawaiian Islands*, Third Scientific Symposium, November 2-4, 2004, (*Atoll Research Bulletin*, 543.), Washington D.C., National Museum of Natural History.

Kirch, P.V., *Feathered gods and fishhooks: an introduction to Hawaiian archaeology and prehistory*, Honolulu, University of Hawaii Press, 1985.

Salvat, B., Haapkyla, J., Shrimm, M., *Coral reef protected areas in international instruments*. World heritage Convention-World network of Biosphere Reserves-Ramsar Convention, CRIOBE-EPHE, Perpignan, 2002.

Smith, A. and Jones, K. L., *Cultural Landscapes of the Pacific Islands*, ICOMOS Thematic Study, December 2007.

Technical Evaluation Mission: A joint ICOMOS/IUCN mission visited the property from 2 to 24 August 2009.

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 17 March 2010

2. THE PROPERTY

Description

The vast seascapes and tiny islands of Papahānaumokuākea, were found uninhabited or abandoned at the time of Western contact in the 18th century.

The Hawaiian Archipelago was first settled around 300BC. The settlers used the abundant rural resources of the main islands to create agricultural terraces along the hillsides, extensive water paddies for their staple food, *kalo* (taro), in the valleys, and fishponds over the shallow reefs. They also fished in the shallow seas. The settlements were mainly in what are now the inhabited islands of the east of the Archipelago. Relict field systems are clearly visible in the landscape of Kohala on the Island of Hawaii.

By contrast, the majority of the chain of small islands and atolls that make up Papahānaumokuākea to the north west of the Archipelago, are all dry islands, with minimal fresh water resources, and they were it seems used only sporadically, with only one island exhibiting settlement remains and a second displaying considerable evidence of ceremonial use.

The main islands/atolls are as follows (from east to west):

- Nihoa Moku Manu (Nihoa Island, Bird Island)
- Mokumanamana (Necker Island)
- Mokuapāpapa Lalo (French Frigate Shoals)
- Pūhāhonu Lalo (Gardner Pinnacles)
- Nalukakala Ko‘anako‘a (Maro Reef)
- Kauō Kamole (Laysan Island, Moller Island)
- Papa‘āpoho Kapou (Lisianksi Island)
- Holoikauaua Manawai (Pearl and Hermes Atoll)
- Pihemanu Kauihelani (Midway Islands, Brook Island, Middlebrook Islands)
- Kānemiloha‘i Holaniku (Kure Atoll)

The islands are tiny and the main ones have little vegetation; the outer islets are small sand islands.

Papahānaumokuākea is said to be the only place in the Hawaiian Islands with a fully intact pre-contact archaeological landscape, where the full suite of site types are preserved, coupled with a near to pristine natural marine environment.

Papahānaumokuākea is now respected by Hawaiians in the main islands as a sacred place containing the boundary between the world of light and the living, and the world of the gods, spirits and primordial darkness, from which all life comes and to which it returns after death.

A creation chant of Hawaii, the Kumulipo, describes the Hawaiian universe as being comprised of these two worlds: Pō, the world of gods, and Ao, the realm of light, where Native Hawaiians and the rest of Hawaii’s living creatures reside. Native Hawaiians believe that Mokumanamana Island, in southeastern Papahānaumokuākea, represents the boundary between these two worlds.

The name *Ke ala nui polohiwa a Kāne* refers to death, or the westward road of the ancestral spirits. Native Hawaiians believe that when a person’s physical body dies, their spirit travels to *leina*, or portals found on each island. If the individual had lived a *pono* (righteous) life, they would be transported from the *leina* westward to Pō. This spirit realm is represented by the islands and surrounding waters to the northwest of the island of Mokumanamana.

Physical remains of pre-European human occupation have been found only on Nihoa and Mokumanamana islands (the two closest to the main islands), though a basalt artefact of undetermined provenance was reportedly recovered from Lisianski Island in the 1990s.

How long people used the islands is uncertain, as there are only two radiocarbon dates available, the older of which is about 1,000 years before present. Both dates are dubious because of the way the samples were

recovered and stored and because, for a variety of technical reasons, the laboratory at which they were tested produced incorrect determinations during the period in which the samples were submitted. Current research aims to provide better dating.

There are 89 identified archaeological sites on Nihoa and 52 on Mokumanamana, including 45 *heiau* (shrines) between them. These *heiau* are made of well-paved terraces and platforms with single, large, upright stones or, more commonly, rows of uprights. Nihoa Island also features evidence of residential sites, habitation terraces for dryland agriculture and ceremonial complexes.

Mokumanamana Island:

In contrast to Nihoa, Mokumanamana does not appear to have supported a permanent population. Instead it appears to have had some sort of religious function, as attested by its 33 *heiau* (shrines), basalt uprights rising from stone paved rectangular platforms and courts. These follow the crest of the island, tracking the sun. It is believed that the solar solstice hits upright stones of these *heiau* at a significant angle. It is said that this line of massive stones may be a physical manifestation of the celestial and spiritual significance of this island as a representation of a crossing between Pō and Ao. The largest of the ceremonial sites measures 18.6 metres by 8.2 metres, with ‘about’ 11 upright stones of what are believed to be the original 19 still standing.

Native Hawaiians believe that a person’s shadow is the physical manifestation of their spirit, and therefore, that a person has the most *mana* (spiritual power) when they have no shadow, such as at midday, because the spirit is considered to be united with the body. It is believed that Mokumanamana is an important and powerful place to hold ceremonies, because on the summer solstice, a priest’s shadow remains united with his or her body—and the priest’s power remains concentrated—for the longest period at any time of the year, anywhere in the archipelago.

Stone figurines (*ki‘i*) found at Mokumanamana provide an intriguing archaeological link between Hawaiian and Eastern Polynesian cultures. *Ki‘i*, ranging from 20 to 45 centimetres tall, were found with a design and manner of carving that it is believed poses a direct link to similar statues found in the Marquesas Islands.

Nihoa Island:

It is posited that Native Hawaiians lived on Nihoa for a 700-year period, between 1000 and 1700 AD. Around 13% of Nihoa’s landscape is covered by agricultural terraces cut into rock slopes and faced with stone walls. The island’s inhabitants captured rainwater in seeps in the three main valleys. These practices may have sustained a population of up to 100 people.

Nihoa’s residential and agricultural sites are joined by burials, ceremonial terraces, platform foundations, and

many rock shelters, which also may have served as habitation sites, transformed by constructing walls, one as high as three metres, to create shelter from the harsh sea winds and storms. Artefacts recovered from Nihoa include finished and unfinished stone adzes, hammer stones, grindstones, finished and unfinished stone bowls, and bone tools.

It is recorded that until the late 19th century, people from Ni'ihau island (one of the main Hawaiian islands) travelled to Nihoa to fish, collect leaves, wood and grass for cordage.

Underwater wrecks:

There are 60 known shipwrecks in Papahānaumokuākea and 67 known underwater aircraft losses. Twenty-five sites have been surveyed. Midway Atoll was the focus of an important naval battle in World War II and is designated a national memorial. Although described in the nomination dossier, this underwater heritage is not put forward as contributing to outstanding universal value.

History and development

Polynesian voyagers arrived in the isolated Hawaiian Archipelago around 300 AD as part of the great migration around the Pacific that started perhaps around 3,000 years ago from south-east Asia, reached Polynesia by around 200 BC, and then spread across the rest of the Pacific over the next two millennia. The voyagers found the larger islands in what is now Hawaii to have fertile soils, abundant water, and reefs rich with marine life.

The settlers mainly inhabited the main islands to the south-east of the Archipelago, but there is evidence of human use in two within Papahānaumokuākea: Mokumanamana and Nihoa.

The sites in the two islands have been the subject of only limited archaeological investigation and there are still major gaps in knowledge.

The earliest studies, undertaken by the Tanager Expedition in 1923-24, completely excavated a number of small caves/rock shelters, partly-excavated some open-air sites and removed human skeletal material found in small niches in the cliffs on Nihoa, as well as two human femurs and a tibia revealed by excavation of a rock shelter on Mokumanamana. All the human bone as well as all cultural material retrieved from the excavations and from surface sites were returned to the Bishop Museum in Honolulu. The human skeletal remains have recently been repatriated to the islands by Native Hawaiian cultural practitioners. In addition to completely stripping all sediments observed in cave/rock shelter sites, the Tanager excavations contributed to the destabilization of sections of dry-stone walling on the islands. This and several earlier non-scientific

expeditions to the islands also removed a number of small and highly-distinctive carved stone statues and other artefacts from the surface of Mokumanamana. Some of the images are in Bishop Museum but others appear to have been lost.

Recorded human visitation to the two islands has been minimal since the Tanager Expedition, as the islands were part of the Hawaiian Islands Reservation declared in 1909. Access has effectively been limited to short-term biological surveys, intermittent low-impact archaeological studies and occasional visits by Native Hawaiian cultural practitioners.

Two archaeologists, one a Native Hawaiian doctoral candidate and the other the US Fish and Wildlife Service archaeologist responsible for the property, were left on Mokumanamana during the ICOMOS mission to continue the former's PhD project there. It is likely that this research will go a considerable way to filling the remaining major gaps in knowledge of Nihoa and Mokumanamana.

Although little archaeological research has been done elsewhere in Papahānaumokuākea, (the sum total of archaeological work in the whole areas over eighty years apparently only comes to 18 days), the ICOMOS mission confirmed that any obvious signs of pre-European use would have been easily detected by trained professionals. Moreover, palaeoenvironmental investigations conducted on Laysan Atoll by archaeologists amongst other specialists failed to reveal any sign of pre-European human activity in a sediment core dating back some 7,000 years, more than twice as long as people have been anywhere in remote Oceania and more than four times the length of time people are known to have been in the main Hawaiian islands. Polynesian rats (*Rattus exulans*) were present on Kure until recently but have been exterminated to protect ground-nesting birds whose eggs are highly vulnerable to rat predation. These rats are a commensal species introduced to the remote Pacific by the first human colonists millennia ago and are today carried around on ships along with European rats (although not to the Marine National Monument, as all visiting vessels are subject to strict mandatory rat-control measures). It is not known whether *R. exulans* was introduced to Kure in the European or pre-European period, but the species is absent from the rest of the Northwest Hawaiian Islands and is not known to have occurred anywhere in Papahānaumokuākea at the time of European contact. However, the absence of commensal rats does not mean early Polynesians did not visit the more remote north-western islands, as there is no evidence they were ever present on Nihoa or Mokumanamana, where pre-European human occupation is undoubted.

When Europeans arrived in Hawaii in the late 18th century they found a thriving society with distinctive and complex social and religious systems. In 1898 Hawaii was acquired by the United States through the 'Newlands Resolution'.

Starting in the 1960s and 70s a resistance movement began to develop against Western assimilation. This led to a renaissance of Hawaiian culture and the strengthening of bonds with sacred places.

A large body of information on oral history has been published over around a hundred years in local newspapers (e.g., Kaunamano 1862 in *Hōkū o ka Pakipika*; Manu 1899 in *Ka Loea Kalai'āina*; Wise 1924 in *Nūpepa Kuoko'a*). More recent ethnological studies (2003) highlight the continuity of Native Hawaiian traditional practices and histories in the North-western Hawaiian Islands. Only a fraction of these have been recorded, and many more exist in the memories and life histories of kupuna.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Comparative analysis

In the nomination dossier the property is compared thoroughly to other cultural landscapes inscribed on the World Heritage List that are strongly related to intangible heritage or which are in the Pacific. The conclusions drawn are that none of the inscribed sites offer both a seascape and a sacred site associated with a living indigenous culture.

In considering sites not inscribed on the List, it is acknowledged that the concept of sacred realms of Pō, the dark place of origin and Ao, the place of light and humans, is a pan-Polynesian tradition found in Tahiti, New Zealand and Tuamotu. Nevertheless the association of these traditions in Papahānaumokuākea, with the sea-faring traditions and the seascapes that weave together the myriad small islands is distinctive.

Comparisons are also made with other 'Mystery Islands' – that is islands that exhibit evidence of Polynesian settlement but were abandoned by the time of Western contact. There are at least 25 of these. Nihoa and Mokumanamana are seen as exceptional within this group for the high density and intactness of ritual sites and their connection to living cultural traditions.

The *heiau* at Nihoa and Mokumanamana share common attributes with very few structures found in the main Hawaiian Islands; only at Mauna Kea on Hawaii Island, and Haleakalā on Maui, were similar shrines found. These *heiau* resemble those of inland Tahiti (called *marae*) and similar structures in the Marquesas.

ICOMOS notes that the comparative analysis has been undertaken with properties bearing similar values to those of Papahānaumokuākea, inscribed or not on the World Heritage List and at national, regional and international level.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Papahānaumokuākea, a vast area in one of the world's most isolated archipelagos, encompasses a significant expanse of low-lying islands and atolls.
- Papahānaumokuākea:
 - Is a unique seascape, rich in cultural heritage;
 - Is a sacred cultural landscape, a region of deep cosmological and traditional significance to the living Native Hawaiian culture;
 - Contains a host of intact and significant archaeological sites;
 - Provides a largely undisturbed ancestral environment, whose preservation both illuminates and embodies the Hawaiian concept of the literal and spiritual kinship of all things in the natural world, including man, and represents the site where life originates and the place where spirits return after death.

ICOMOS considers that this justification needs to be augmented to explain why the property is of wider than local and regional significance and how it might be seen as being of universal significance to those outside Hawaii, in terms of the extraordinary linkages between remote islands as manifest in cultural traditions, and the links between settled islands and those with sacred functions. The significance of the archaeological sites also needs to be drawn out.

Integrity and Authenticity

Integrity

ICOMOS considers that all the attributes that reflect outstanding universal value are within the boundaries. Although none of the attributes are under severe threat, some of the archaeological sites need further conservation and protection against damage from natural sources – see Environmental threats below.

The property can be said to have overall integrity but the archaeological attributes are vulnerable.

Authenticity

The archaeological sites remain relatively undisturbed from cultural factors and in their remote landscape offer a detailed and poignant reflection of the remote societies established by those migrating across the Pacific.

ICOMOS considers however that they are under some threat from natural factors that could disturb their arrangements and ability to display clearly their meaning.

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.

ICOMOS considers that the conditions of integrity and authenticity have been met, although the integrity of archaeological attributes is vulnerable and this too impacts on authenticity.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (vi) (and natural criteria (viii), (ix) and (x)).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that Papahānaumokuākea's remarkable archaeology and significant ritual sites (*heiau*) bear exceptional testimony to the shared historical origins of all Polynesian societies, and to the growth and expression of a culture that evolved from the last and most difficult wave of cross-Pacific Polynesian migration. As the only Mystery Islands (once inhabited but now abandoned outposts at the farthest reaches of Polynesian migration) that continue a cultural association with their indigenous people, the islands of Nihoa and Mokumanamana can reveal much about cultural resilience in a changing environment.

ICOMOS considers that many Pacific islands demonstrate testimonies to the shared historical origins of Polynesian societies, particularly through sites associated with legends of migration and with the dispersal of food crops. It does not consider that Papahānaumokuākea is the only group of islands in the Pacific to continue a cultural association with their indigenous people, nor does it consider that the islands bear an exceptional testimony to the general Pacific migration process.

However ICOMOS does consider that the well preserved *heiau* shrines on Nihoa and Mokumanamana that are distinctive to Hawaii, but resemble those of inland Tahiti, and the sites of stone figures that have been recovered 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, through positioning the Hawaiian *heiau* tradition within a wider 3,000 year old Pacific/Polynesian *marae-ahu* cultural continuum.

Hawaiian examples of *heiau* are beginning to assist in a better understanding of the key roles that ancient *marae-ahu*, such as those found in Raiatea, once fulfilled.

ICOMOS considers that this criterion has been justified.

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that Papahānaumokuākea, as an associative cultural landscape, represents core elements of Native Hawaiian cosmology and tradition. The islands northwest of the Tropic of Cancer are believed to lie within the region of primordial darkness from which life originates and to which it returns. For a culture that considers nature and civilization to be part of a genealogical whole, Papahānaumokuākea offers a "place of abundance" to reconnect with an ancestral environment and its seas are also a traditional and contemporary testing ground for the revitalized art of Polynesian wayfinding.

ICOMOS considers that the justification for this criterion needs to set out how the beliefs and living traditions of Hawaiians are of outstanding universal significance and then how the property is directly or tangibly associated with these beliefs and traditions.

ICOMOS considers that the belief system of the Hawaiians is clearly of fundamental importance to Hawaiians and can be seen to be embedded within the islands of Papahānaumokuākea and particularly Mokumanamana island. As visits to the islands are strictly limited, this in effect means that beliefs are associated with the known existence of the islands, even if those associated with the beliefs never visit the islands. The islands thus have an existence value for Hawaiians.

For the Hawaii beliefs to be of more than national and regional significance there is a need for this existence value to be understood and to a degree shared by those outside Hawaii.

ICOMOS considers that Papahānaumokuākea and its associated beliefs can be seen as part of a Pacific wide cultural continuum and an element that is critical to interpreting the socio-cultural evolutionary patterns of beliefs across the Pacific, such as *marae-ahu*. Its crucial significance is enhanced by the continuing living traditions of native Hawaiians.

Furthermore ICOMOS considers that the living traditions of Hawaii that celebrate the natural abundance of Papahānaumokuākea and its association with sacred realms of life and death, can be said to be directly and tangibly associated with the shrines of Nihoa and Mokumanamana and the other pristine islands beyond to the north-west.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (iii) and (vi) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

Description of the attributes

The *heiau* shrines, with their sacred functions, and other archaeological sites on Nihoa and Mokumanamana, including the sites from where stone figures were recovered, the pristine nature of all the islands, and their overall association with sacred realms of life and death.

4. FACTORS AFFECTING THE PROPERTY

Development pressures

ICOMOS considers that there are none.

Military activity

Activities and exercises of the Armed Forces are conducted occasionally within the property. The Monument Management board is working to develop a consultation process in order to ensure the protection of the property. Mokumanamana has also been used for military target practise. Shell craters are evident in a number of places, but no archaeological sites appear to have been hit.

Tourism pressures

The general public do not have access to the islands, apart from Midway Atoll in the far west of Papahānaumokuākea.

Environmental pressures

High-density, long-term seabird nesting, especially by burrowing species, has damaged some sites on Nihoa and Mokumanamana. These birds are protected and are therefore increasing in number. The only mitigating actions taken are to repair damaged walls.

ICOMOS considers that this measure is not adequate to protect the integrity of the archaeological resource.

Natural disasters

Emergency responses are in place in the case of hurricanes or tsunamis and oil spills and vessels grounding.

Impact of climate change

Sea level rises as a result of climate change is a threat to all coral reefs including the nominated property.

ICOMOS considers that the main threats to the property are from burrowing species, for which at the moment there is no deterrent and one urgently needs to be put in place, and military activity which should be precluded from Nihoa and Mokumanamana islands.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundaries of the nominated area are comprehensively described and justified in the nomination dossier. The extensive area nominated includes all the islands perceived to be sacred places in Hawaiian beliefs and their surrounding and linking sea, thus including all the attributes related to the proposed outstanding universal value.

The nominated property has no buffer zone, as it is in an extremely remote region and its boundaries have been set at 50 nautical miles (~100km) out over open sea from each of the islands and atolls. Access to/through the property is very strictly controlled and there are six designated 50 nautical miles wide areas to be completely avoided by ship traffic. All vessels must notify the Federal authorities if they come within 10 nautical miles (~20km) of the Property's outer boundaries.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

Ownership

The Federal government owns everything except Kure Atoll, which is owned by the State of Hawaii. None of the property is now, or is ever likely to be, in private hands.

Protection

Legal Protection

The nomination dossier provides great detail on 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.

Traditional Protection

There are strict traditional Native Hawaiian protocols protecting the property's physical and intangible cultural heritage.

Customary sanctions are also in place to ensure appropriate Native Hawaiian behaviour towards the property.

Effectiveness of protection measures

ICOMOS considers that the legal protection of the property is adequate and effectively monitored through a combination of enforcement by the property's administration and by customary sanctions and helped by the limitations on access – see below.

ICOMOS considers that the legal protection in place is adequate.

Conservation

Inventories, recording, research

No clear list is provided of the extent of records for the archaeological resource. There is a need for the State Party to provide this. ICOMOS considers that the current on-ground archaeological research should be able to produce a much clearer documented record of the physical cultural attributes.

Present state of conservation

Although the conservation of the archaeological sites benefits from the very limited access to the sites and the fact that there are few safe landing areas, nevertheless, as stated above, and acknowledged in the nomination dossier, extensive bird burrowing is disrupting many of the archaeological sites in Nihoa, interior surfaces and deposits and perimeter and retaining walls. Uprooted

dead loulou palms have also impacted on surfaces. The uprights of one ceremonial site were removed by an expedition in 1928.

The nomination dossier states that the US Fish and Wildlife Service and the State Historic Preservation Division are considering a coordinated stabilisation project to prevent future damage or loss.

ICOMOS considers that this needs to be carried out as a matter of urgency.

Active Conservation measures

There is currently little active conservation work on the archaeological sites.

Maintenance

There is currently almost no regular maintenance.

Effectiveness of conservation measures

The Monument Management Plan sets out the need to put in place strong protection of the cultural attributes and ICOMOS considers that the management of cultural resources needs to be stepped up to deal with the conflict between nature conservation and archaeology and to achieve a much better balance between the natural and cultural attributes. Some constraints on the natural heritage will be needed to sustain the cultural heritage.

ICOMOS considers that there is concern for the fragility of, and disruption to the archaeological remains from plants and animals and further considers that there is an urgency to determine how to constrain natural attributes in order to protect cultural attributes. ICOMOS considers that there is also a need for clear documentation of the cultural resource.

Management

Management structures and processes, including traditional management processes

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 multi-agency/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).

ICOMOS considers that the information management system will greatly enhance public access to detailed information about the property (see below) as well as improve the capacity to manage its cultural and natural resources.

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.

Outside the property, there is an active school outreach program in place within Hawaii called "Navigating for Change", as well as major visitor centres in Honolulu (at the Waikiki Aquarium) and Hilo on the "Big Island" (the island of Hawaii). Another centre is planned for the island of Kauai, which is the closest "main" Hawaiian island to Papahānaumokuākea. In addition to presenting the property to the public, the visitor centre in Hilo explicitly ties Papahānaumokuākea to the rest of the Hawaiian chain and especially to the "Big Island" and its natural World Heritage site of Hawaii Volcanoes National Park. On top of the information available in the visitor centres, the sophisticated property information management system, currently in an advanced stage of development, will provide global access to vast amounts of annotated current and historical technical information regarding the property.

Risk preparedness

Emergency responses procedures are in place to address the main identified threats: hurricanes, tsunamis, oil spills and the grounding of vessels.

Involvement of the local communities

Local communities have been involved at the highest level in the nomination process.

Resources, including staffing levels, expertise and training

NOAA has two maritime archaeologists directly associated with Papahānaumokuākea, but there are no terrestrial archaeologists or cultural heritage specialists currently on staff in the immediate property administration. A native Hawaiian archaeology PhD candidate was until recently employed as a cultural heritage specialist in the Monument administration but since he resigned, management has been unable to find a suitable replacement with appropriate expertise in both monuments and intangible heritage.

An additional position for an archaeologist/cultural heritage specialist for the property is understood to be the first priority of the Fish and Wildlife Service, the property's principal Federal "land-owner". The FWS is responsible for the terrestrial archaeology of all islands in Papahānaumokuākea except Kure, which is owned by the State of Hawaii. At present the FWS relies on the Regional Archaeologist for the FWS Pacific Region, headquartered in Portland, Oregon. He visits the islands regularly to monitor the sites' condition. Although he is stationed on the US mainland, he is physically closer to – and logistically better able to access – the

archaeological sites on Nihoa and Mokumanamana than FWS staff currently based on Midway Atoll within the property. It is, however, clearly recognized by Papahānaumokuākea management that a dedicated FWS terrestrial archaeologist/cultural heritage specialist for the property is required in Honolulu.

The terrestrial archaeology of Kure – as well as any activity anywhere in the property that is governed by Section 106 of the Federal *National Historic Preservation Act* – is managed by trained archaeologists and cultural heritage specialists in the State Historic Preservation Division (SHPD).

In effect, this means that virtually anything that happens anywhere in Papahānaumokuākea is vetted by the archaeologists and cultural heritage specialists in the SHPD, regardless of whether any such specialists are directly employed in the property administration. Such state divisions or offices are required under the *National Historic Preservation Act (NHPA)* and for this reason receive Federal as well as state funding.

Effectiveness of current management

Although the current administrative strategies entailing the co-operation of multiple State and Federal agencies are complex, they will provide a sound basis for effective management of the property for the foreseeable future.

The only concern ICOMOS has is over how a balance between nature and culture will be put in place that allows full protection of the archaeological attributes – that is prevention of burrowing animals and degradation due to plants. The appointment of an cultural heritage specialist will help with this process.

ICOMOS considers that the management system for the property is adequate, provided that an equitable balance is achieved between the protection of cultural and natural attributes and that a cultural heritage specialist is appointed.

6. MONITORING

Monitoring indicators have been put in place, including of engagement of Hawaiians with the property, fostering research and access, but only one indicator relates to the physical remains on the islands and this is concerned with the impact of access. The monitoring is said to be undertaken on a regular basis by the staff of the local property office.

ICOMOS considers that the negative impact of burrowing animals and plants on the archaeological remains must be monitored on a regular basis - after remedial measures and arrangements to contain natural process have been developed.

ICOMOS considers that the monitoring arrangements need to be augmented to monitor the impact of natural processes on the archaeological resources.

7. CONCLUSIONS

The pristine natural heritage of the north-west Hawaiians island, now given a coherence and identity through their new name, Papahānaumokuākea, is seen to have, through the persistence and vitality of Hawaiians beliefs and the strong physical evidence of shrines, *heiau* on Nihoa and Mokumanamana islands, outstanding cultural value.

ICOMOS considers that this value should be recognised on the World Heritage List but that this recognition needs to be supported by stronger conservation and maintenance of the physical cultural attributes which are currently threatened in place through burrowing animals and uncontrolled plants. These archaeological attributes also need more systematic documentation, which it is presumed will be an outcome of the current archaeological investigation, and more systematic monitoring.

The name Papahānaumokuākea Marine National Monument appears to give precedence to the natural attributes. If the property is inscribed for both natural and cultural attributes as a mixed site, then ICOMOS considers that the name should be changed to Papahānaumokuākea or The Islands and Seascapes of Papahānaumokuākea.

Recommendations with respect to inscription

ICOMOS recommends that Papahānaumokuākea Marine National Monument, United States of America, be inscribed on the World Heritage List on the basis of ***cultural criteria (iii) and (vi)***.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Papahānaumokuākea is the new name for 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.

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 Hawaii an 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 Hawaii 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 Hawaii, 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.

Integrity and Authenticity

All the attributes that reflect outstanding universal value are within the boundaries.

The archaeological sites remain relatively undisturbed from cultural factors. They are however under some threat from natural factors and need further conservation and protection. Damage could disturb their layout and ability to display clearly their meaning. 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.

Management and protection requirements

Multiple layers of Federal and State legislation and regulation protect 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*, and the *Archaeological Resources Protection Act*. There are also traditional

Native Hawaiian protocols protecting the property’s physical and intangible cultural heritage.

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. There is an acknowledged need to appoint an archaeologist/cultural heritage specialist for the property.

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. There is a need to ensure that the management system achieves an equitable balance between the protection of cultural and natural attributes that it puts in place a deterrent to ensure archaeological sites are not disturbed by burrowing animals of 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.

ICOMOS also recommends that the name of the property be changed to Papahānaumokuākea or to The Islands and Seascapes of Papahānaumokuākea.

ICOMOS further recommends that the State Party give consideration to the following points:

- Ensure the management system achieves an equitable balance between the protection of cultural and natural attributes with the support of a cultural heritage specialist;
- In order to address the fragility of, and disruption to, the archaeological remains from plant and animals, put in place deterrents to ensure archaeological sites are not disturbed by burrowing animals of plants;
- Develop monitoring arrangements to monitor the impact of natural processes on the archaeological resources;
- Provide clear documentation of the physical cultural resource based on the outcomes of the current archaeological investigations;
- Ensure no military training activities take place on Nihoa and Mokumanamana islands.