# Papah naumoku kea

- 1. World Heritage Property Data
- 1.1 Name of World Heritage property

Papah naumoku kea

- 1.2 World Heritage property details
- 1.3 Geographic information table

#### 1.4 - Map(s)

Title	Date	Link to source
Map of inscribed property	2009	

#### Comment

Please add a second map (sent in separate email)

- 1.5 Web and Social Media data of the property (if applicable)
  - 1. papahanaumokuakea.gov

#### Comment

papahanaumokuakea.gov https://www.facebook.com/Papahanaumokuakea https://www.flickr.com/photos/papahanaumokuakea https://www.instagram.com/papahanaumokuakea.hawaii

- 2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)
- 2.1 Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

		The World Heritage property (in whole or in part) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) is not designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.2	List of Cultural Property under Enhanced Protection (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.3	The List of Wetlands of International Importance (The Ramsar List) (Convention on Wetlands of International Importance (Ramsar Convention))		×
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme		×
2.1.5	Global Geoparks Network UNESCO Global Geoparks		×

## 2.2 - Please provide comments on 2.1 if necessary

The Property is protected as a Particularly Sensitive Sea Area under the International Maritime Organization designation.

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?

Not applicable

- 2.4 Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?
- 2.5 Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?

No

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?

No

#### 2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes

2.7.1	1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager <b>regularly</b> communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.2	Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager <b>regularly</b> communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager <b>also manages</b> this designation/programme.	
2.7.3	Convention on Wetlands of International Importance (Ramsar Convention)	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager <b>regularly</b> communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.4	Man and the Biosphere (MAB) Programme	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager <b>regularly</b> communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.5	UNESCO Global Geoparks	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager <b>regularly</b> communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	

- 2.8 Please add any further comments on cooperation with the other designation(s)/programme(s)
- 2.9 Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

Not aware

- 2.10 Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware
- 2.11 Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?

Not aware

- 2.12 Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you aware.
- 3. Statement of Outstanding Universal Value
- 3.1 Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

# Statement of Outstanding Universal Value Brief synthesis

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Papah naumoku kea 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 Papah naumoku kea 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 Papah naumoku kea 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 Papah naumoku kea, 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 Papah naumoku kea 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 Papah naumoku kea 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 (viii): 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 Papah naumoku kea 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. Papah naumoku kea constitutes a remarkable example of ongoing evolutionary and bio-geographical 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 Papah naumoku kea 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. Papah naumoku kea 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.

Papah naumoku kea 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 Papah naumoku kea'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

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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

Authenticity: small corrections are required: (1) change date of Papahanaumokuakea establishment to 2006 (currently listed as 2009, correct year is 2006); (2) please change the second sentence regarding multiple jurisdictions to: "The four management Agencies for the property are the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, the State of Hawaii Department of Land and Natural Resources, and the Office of Hawaiian Affairs." (currently lists 3 agencies)

# 3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	Native Hawaiian Archaeological Resources	×			
3.2.2	Geological Attributes of the site	×			
3.2.3	Nearshore and inland waters	×			
3.2.4	Marine Biodiversity	×			
3.2.5	Terrestrial Biodiversity	×			
3.2.6	seabirds	×			
3.2.7	Shallow and deep reef habitats	×			
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

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

Source: NOAA Office of National Marine Sanctuaries. 2020 State of Papahanaumokuakea Marine National Monument Status and Trends 2008-2019. US Department of Commerce, National Oceanic and Atmospheric Administration, Silver Spring MD, pp 221. Overall state of conservation is good. Some habitats may be in decline, such as certain coral reef resources, due to climate change or sea level rise. Overall, property is protected.

#### 4. Factors Affecting the Property

#### 4.1. Buildings and Development

# 4.1.1 - Housing

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.1.2 - Commercial development

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant
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#### 4.1.3 - Industrial areas

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

Relevant	X Not relevant

# 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

## 4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (19/08/2013):

Not relevant

× Relevant		Not relevant					
Impact			Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>©</b> Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive X	×	×	×	×			/
Negative							

# 4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

While tourism visitation to the site is not permitted, there is a visitor center outside of the site, in the Main Hawaiian Islands, that is focused on bringing the place to the people; and that also partners to raise awareness with several other museums and visitor centers throughout Hawaii

#### 4.2. Transportation Infrastructure

#### 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

Relevant	✗ Not relevant

## 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Outside

t	X Not relevant
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#### 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside

× Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	Decreasing	⇒ Stable	Increasing
Positive							
○ Negative X	×	×	×			<b>→</b>	

# 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Negative, Current, Potential, Inside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>©</b> Outside	<b>№</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive X	×		×		<b>S</b>		
○ Negative X		×	×				1

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#### 4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

✗ Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	→ Stable	Increasing
O Positive							
Negative X		×	×	×			,

# 4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively

While there is minimal vessel traffic to the islands, the area is designated as a PSSA under IMO and there has been a major increase in the use of the designated corridors for large commercial vessel passage between Lisianski and Pearl and Hermes. Additionally, a cryptogenic alga recently has heavily impacted both Pearl and Hermes and Midway Atoll reefs and has the potential to spread further.

#### 4.3. Services Infrastructures

#### 4.3.1 - Water infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (19/08/2013):

Not relevant

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	Potential	Inside	<b>©</b> Outside	▶ Decreasing	<b>⇒</b> Stable	Increasing	
O Positive X		×	×				/	
Negative								

#### 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

# 4.3.4 - Localised utilities

Previous answer Cycle 2 (19/08/2013):

Not relevant

X Relevant				Not relevant			
Impact Origi		Origin		Trend of impact			
Impact	Current	Potential	Inside	<b>©</b> Outside	<b>▶</b> Decreasing	→ Stable	Increasing
O Positive X		×					7
Negative							

# 4.3.5 - Major linear utilities

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

New energy (solar) and wastewater systems are being installed at Midway Atoll. These systems will be smaller than the existing ones, freeing up additional space for wildlife habitat.

# 4.4. Pollution

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#### 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant				Not relevant			
	Impact Ori		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive							
Negative X	×	×	×	×			1

#### 4.4.2 - Ground water pollution

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant
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#### 4.4.3 - Surface water pollution

Previous answer Cycle 2 (19/08/2013):

Not relevant

Delevent	W N. C. I.
Relevant	X Not relevant

#### 4.4.4 - Air pollution

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

## 4.4.5 - Solid waste

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Negative, Current, Potential, Inside, Outside

vant	X Not relevant
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#### 4.4.6 - Input of excess energy

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

# 4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

There is a continued issue with marine debris from around the North Pacific washing ashore on the beaches and reefs of all the Islands. This is causing entanglement and mortality to several species. In addition, seabirds ingest plastics and feed them unintentionally to their chicks, causing significant mortality. Estimates of marine debris impacts are almost 60,000 pounds accumulation per year.

## 4.5. Biological resource use/modification

## 4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant
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#### 4.5.2 - Aquaculture

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

# 4.5.3 - Land conversion

Previous answer Cycle 2 (19/08/2013):

Not relevant

nt	X Not relevant
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#### 4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.5.5 - Crop production

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

Relevant X Not relevant

#### 4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.5.8 - Commercial hunting

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

## 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

## 4.6. Physical resource extraction

### 4.6.1 - Mining

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.6.2 - Quarrying

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.6.3 - Oil and gas

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

#### 4.6.4 - Water (extraction)

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

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# 4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

While seafloor mining does not occur within the property, managers are concerned about potential future impacts from anticipated extensive mining in high seas areas, for example, high seas between Hawaii and the West coast of North America.

# 4.7. Local conditions affecting physical fabric

#### 4.7.1 - Wind

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	× Not relevant

# 4.7.2 - Relative humidity

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

## 4.7.3 - Temperature

Previous answer Cycle 2 (19/08/2013):

Not relevant

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	<b>G</b> Current	Potential	Inside	© Outside	<b>▶</b> Decreasing	→ Stable	Increasing	
O Positive								
○ Negative X	×	×	×				P	

#### 4.7.4 - Radiation/Light

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

#### 4.7.5 - Dust

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant
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#### 4.7.6 - Water (rain/water table)

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	<b>▶</b> Decreasing	→ Stable	Increasing
O Positive							
	×	×	×				-

# 4.7.7 - Pests

Previous answer Cycle 2 (19/08/2013):

• Not relevant

X Relevant				Not relevant			
	Impact Origin		Origin	Origin Trend of		mpact	
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive							
Negative X	×	×		×			1

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#### 4.7.8 - Micro-organisms

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

Increases in temperatures have negatively affected the survival of young seabird chicks, the same can be said for decreasing rainfall. Increased sea surface temperatures have caused significant coral bleaching and habitat loss in some reef areas. Discovery recently of a cryptogenic alga that has smothered acres of reef area at two atolls is also a concern.

## 4.8. Social/Cultural uses of heritage

#### 4.8.1 - Ritual/Spiritual/Religious and associative uses

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

<b>X</b> Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	⇒ Stable	Increasing
Positive X	×	×	×	×			1
Negative							

#### 4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>№</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive X	×	×	×	×			<b>/</b>
Negative							

#### 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

X Relevant			ı	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	→ Stable	Increasing
○ Positive    ★	×	×	×	×			7
Negative							

#### 4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	Outside	▶ Decreasing	→ Stable	Increasing
Positive X	×	×	×	×			•
Negative							

# 4.8.5 - Identity, social cohesion, changes in local population and community

Previous answer Cycle 2 (19/08/2013):

Not relevant

* Relevant	Not relevant

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	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>№</b> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×			-
Negative							

# 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

# 4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively

OHA was added as a Co-Trustee in 2017. The number of Native Hawaiians accessing the site to conduct traditional practice continues to increase. A Native Hawaiian guidance document, Mai Ka Po Mai, was developed to assist managers in incorporating Native Hawaiian knowledge and practice into all aspects of management. New and existing exploration and research partnerships are providing increased opportunities to teach and share our research in Olelo Hawaii (Hawaiian language)

#### 4.9. Other human activities

#### 4.9.1 - Illegal activities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Inside, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	<b>©</b> Outside	<b>▶</b> Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×	×	×		$\rightarrow$	

#### 4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

# 4.9.3 - Military training

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant			١	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	<b>©</b> Outside	<b>→</b> Decreasing	→ Stable	Increasing
Positive							
Negative	×	×	×	×		<b>→</b>	

#### 4.9.4 - War

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

# 4.9.5 - Terrorism

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

#### 4.9.6 - Civil unrest

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

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# 4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively

As described previously, discarded fishing gear originating outside of the Monument is a major and continuous threat to marine life and seabirds. Military activity is exempted from required management approvals and permissions to operate within Monument boundaries. Although use of the area for military activity is minimal.

## 4.10. Climate change and severe weather events

#### 4.10.1 - Storms

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	<b>→</b> Decreasing	→ Stable	Increasing
O Positive							
Negative	×	×	×	×			1

## 4.10.2 - Flooding

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	<b>▶</b> Decreasing	⇒ Stable	Increasing
O Positive							
○ Negative X	×	×	×	×			-

## 4.10.3 - Drought

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	① Inside	<b>©</b> Outside	<b>▶</b> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×			,

## 4.10.4 - Desertification

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

Relevant	X Not relevant

## 4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant			1	Not relevant			
	Impact Orig		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive							
	×	×	×	×			-

## 4.10.6 - Temperature change

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant	Not relevant
------------	--------------

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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×	×	×			<b>/</b>

## 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

Relevant	✗ Not relevant
----------	----------------

# 4.10.8 - Please comment as necessary on how the factors selected as relevant in 4.10 are affecting the property either negatively or positively

# 4.11. Sudden ecological or geological events

## 4.11.1 - Volcanic eruption

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

Relevant	X Not relevant
----------	----------------

#### 4.11.2 - Earthquake

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Inside, Outside

Relevant X Not relevant	

#### 4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant				Not relevant			
	Impact Origin			gin Trend of impact			
Impact	<b>Gurrent</b>	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive							
○ Negative X		×	×	×		$\rightarrow$	

#### 4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not	relevant

## 4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Inside

X Relevant				Not relevant			
	Impact Origin		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive							
Negative X	×	×	×				<b>P</b>

## 4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

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# 4.11.7 - Please comment as necessary on how the factors selected as relevant in 4.11 are affecting the property either negatively or positively

# 4.12. Invasive/alien species or hyper-abundant species

#### 4.12.1 - Translocated species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

× Relevant			1	Not relevant			
	Impact Origin			Origin Trend of impact			
Impact	Current	Potential	• Inside	<b>©</b> Outside	<b>→</b> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×		×	<b>S</b>		

## 4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact Origin			Trend of impact			
Impact	Current	Potential	• Inside	<b>Outside</b>	<b>→</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive							
Negative X	×	×	×	×	<b>S</b>		

## 4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

× Relevant			١	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	<b>▶</b> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		<b>→</b>	

#### 4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			١	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>▶</b> Decreasing	→ Stable	Increasing
Positive							
Negative	×	×	×	×			<i>P</i>

#### 4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Inside, Outside

Relevant X Not relevant	

# 4.12.6 - Modified genetic material

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

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# 4.12.7 - Please comment as necessary on how the factors selected as relevant in 4.12 are affecting the property either negatively or positively

# 4.13. Management and institutional factors

## 4.13.1 - Management system/Management plan

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	<b>G</b> Current	Potential	Inside	<b>G</b> Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive X	×	×	×	×		<b>→</b>	
Negative							

# 4.13.2 - Legal framework

× Relevant			ı	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	© Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive X	×	×	×	×			1
Negative							

## 4.13.3 - Governance

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	<b>©</b> Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive X	×		×	×			,
Negative							

# 4.13.4 - Management activities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

★ Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	<b>G</b> Current	Potential	• Inside	<b>©</b> Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive X	×	×	×	×			/
Negative							

#### 4.13.5 - Financial resources

× Relevant			N	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>©</b> Outside	<b>▶</b> Decreasing	→ Stable	Increasing
Positive X	×	×	×	×	<b>S</b>		
Negative							

#### 4.13.6 - Human resources

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	<b>→</b> Decreasing	→ Stable	Increasing
Positive X	×	×	×	×		<b>→</b>	
Negative							

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# 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Inside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	<b>▶</b> Decreasing	→ Stable	Increasing
Positive X	×	×	×	×			,
Negative							

# 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant
-------------------------

# 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

4.14. Other factor(s)

# 4.14.1 - Other factor(s)

# 4.15. Factors Summary Table

## 4.15.1 - Factors Summary Table

Name	Impact			Origin		Trend		
4.1 Buildings and Development								
4.1.5 Interpretative and visitation facilities	<b>O</b>	q	9	•	Œ	/		
4.2 Transportation Infrastructure								
4.2.3 Air transport infrastructure								
		9	9	•		<b>→</b>		
4.2.4 Marine transport infrastructure	•	4		•		•		
			9	•		7		
4.2.5 Effects arising from use of transportation infrastructure								
			9	•	<b>G</b>	1		
4.3 Services Infrastructures								
4.3.2 Renewable energy facilities	<b>•</b>		9	•		<b>/</b>		
4.3.4 Localised utilities	0		9			<i>&gt;</i>		
4.4 Pollution								
4.4.1 Pollution of marine waters								
		9	9	•	F	7		
4.7 Local conditions affecting physical fabric								
4.7.3 Temperature								
		q	9	•		1		
4.7.6 Water (rain/water table)								
		q	9	•		7		
4.7.7 Pests								

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		q	q		Œ	1
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses	0	q	9	•	Œ	1
4.8.2 Society's valuing of heritage	<b>©</b>	q	9	•	<b>G</b>	1
4.8.3 Indigenous hunting, gathering and collecting	<b>o</b>		n a	<i>(</i> a)	78 <b>8</b>	
4.0.5 magerious naturity, gathering and confecung	•	7	-1	G	9	•
4.8.4 Changes in traditional ways of life and knowledge system	<b>©</b>	Ą	9	•	F	<i>P</i>
4.8.5 Identity, social cohesion, changes in local population and community	•	q	9	•	Œ	1
4.9 Other human activities						
4.9.1 Illegal activities	<b>©</b>			<b>(</b>	/pdf	
4.9.3 Military training	•	4	4	Q)	9	-
		q	q	•	Œ	<b>→</b>
4.10 Climate change and severe weather events						
4.10.1 Storms						
	•	q	9	•	Œ	1
4.10.2 Flooding						
4.10.3 Drought	•	q	9	•	<b>F</b>	7
4.10.5 Drought		a	a	<b>(</b> )	<b>₹</b>	7
4.10.5 Changes to oceanic waters		•	•	3	5	
		<b>A</b>	9	•	F	<i>P</i>
4.10.6 Temperature change						
	•	<b>P</b>	9	•	F	1
4.11 Sudden ecological or geological events						
4.11.3 Tsunami/Tidal wave			~		78F	
4.11.5 Erosion and siltation/Deposition	9		4	•	<b>G</b>	<b>→</b>
4.11.3 Erosion and Sitation/Deposition	<u> </u>			<b>(</b> )		_
4.12 Invasive/alien species or hyper-abundant species	•			Ç.		
4.12.1 Translocated species  4.12.1 Translocated species						
			q		<b>F</b>	•
4.12.2 Invasive/Alien terrestrial species						
		q	9	•	Œ	<b>S</b>
4.12.3 Invasive/Alien freshwater species						
	•	q	9	•	Œ	$\rightarrow$
4.12.4 Invasive/Alien marine species						
4.13 Management and institutional factors	9	9	9	•	<b>G</b>	7
4.13.1 Management system/Management plan	•			<b>(</b>	<i>(</i>	<b>=</b>
		-1	4	©	3	_

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- 4.16. Assessment of current and potential positive and negative factors
- 4.16.1 Assessment of current and potential negative and positive factors

# 4.1 Buildings and Development

Name	Impact Impact		Origin		Trend		
4.1.5 Interp	pretative and visitation facilities	<b>O</b>	q	9	•	Œ	1
Spatial sca	ale - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	Temporal scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						

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	Static
×	Increasing

# 4.2 Transportation Infrastructure

Name	Name				Trend	
4.2.3 Air tra	4.2.3 Air transport infrastructure					
			9	9	•	$\rightarrow$
Spatial sca	le - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
×	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
×	Insignificant					
	Minor					
	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - De	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					

Name	Impact	:		Origin	Trend
4.2.4 Marine transport infrastructure	0	9		•	<b>S</b>
			9	•	-

Spatial sca	ale - Area affected by the factor
×	Restricted
	Localised
	Extensive
	Widespread
Temporal	scale - Occurence of the impact
	One off or rare

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×	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - Im	pact on the attributes			
×	Insignificant			
	Minor			
	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
	High capacity			
×	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - De	velopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend
4.2.5 Effec	ts arising from use of transportation infrastructure			

				9	•	<b>G</b>	-				
Spatial sca	ale - Area affected by the factor										
×	Restricted										
	Localised										
	Extensive										
	Widespread										
Temporal s	Temporal scale - Occurence of the impact										
	One off or rare										
	Intermittent or sporadic										
×	Frequent										
	On-going										
Impact - Im	npact on the attributes										
	Insignificant										
×	Minor										
	Significant										
	Major										
Manageme	ent response - Capacity of management to respond										
	High capacity										
×	Medium capacity										
	Low capacity										
	No capacity and / or resources										
Trend - De	velopement over the last 6 years										

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	Decreasing
×	Static
	Increasing

# **4.3 Services Infrastructures**

Name		Impact	t		Origin	Trend
4.3.2 Renev	wable energy facilities	•		9	•	/
Spatial sca	le - Area affected by the factor					
×	Restricted					
•	Localised					
	Extensive					
	Widespread					
Temporal s	scale - Occurence of the impact					
remporar	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going On-going					
	pact on the attributes					
iiipact - iiii						
	Insignificant					
•	Minor					
×	Significant					
	Major					
	nt response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					
Name	ised utilities	Impact		q	Origin	Trend
4.3.4 LOCAI	iscu unines			4		

4.3.4 Localised utilities			9		7		
Spatial scale - Area affected by the factor							
<b>X</b> Restricted							

	Localised
	Extensive
	Widespread
Temporal s	cale - Occurence of the impact

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	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	elopement over the last 6 years
×	Decreasing
	Static
	Increasing

# 4.4 Pollution

Name	Name		Origin		Trend		
4.4.1 Pollu	tion of marine waters						
			9	9	•	Œ	1
Spatial sca	ele - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - In	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						

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	No capacity and / or resources				
Trend - Dev	Trend - Developement over the last 6 years				
	Decreasing				
	Static				
×	Increasing				

# 4.7 Local conditions affecting physical fabric

Name		Impact		Origin		Trend	
4.7.3 Tempo	erature						
			9	9	•		1
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
~							
×	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

Name	Impact			Origin	Trend
4.7.6 Water (rain/water table)					
		<b>A</b>	9	•	

Spatial sc	Spatial scale - Area affected by the factor			
×	Restricted			
	Localised			
	Extensive			

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	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
	Low capacity						
×	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.7.7 Pests							
			9	9		<b>(</b>	7
Spatial sca	al scale - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	Widespread scale - Occurence of the impact						
Temporal s							
Temporal s	scale - Occurence of the impact						
Temporal s	One off or rare						
Temporal s	One off or rare  Intermittent or sporadic						
×	One off or rare Intermittent or sporadic Frequent						
×	One off or rare Intermittent or sporadic Frequent On-going						
×	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes						
×	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant						
X Impact - Im	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor						
Impact - Im	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant						
Impact - Im	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major						
Impact - Im	One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major Interesponse - Capacity of management to respond						

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	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

# 4.8 Social/Cultural uses of heritage

Name	Impact		Origin	Trend			
4.8.1 Ritual	/Spiritual/Religious and associative uses	<b>O</b>	9	9	•	Œ	1
Spatial sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Tammanala							
remporai s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend

Name	Impac	t		Origin		Trend	
4.8.2 Society's valuing of heritage	•	<b>9</b>	9	•	<b>(</b>	P	

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised

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	Futaccina						
	Extensive						
_	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
	enous hunting, gathering and collecting	Impact	9	9	Origin	Œ	Trend
	enous hunting, gathering and collecting			9		Œ	
4.8.3 Indige	enous hunting, gathering and collecting le - Area affected by the factor			9		E	
4.8.3 Indige				q		Œ	
4.8.3 Indige	le - Area affected by the factor			q		Œ	
4.8.3 Indige	le - Area affected by the factor  Restricted			ब		Œ	
4.8.3 Indige	le - Area affected by the factor  Restricted  Localised			व		Œ	
4.8.3 Indige	le - Area affected by the factor  Restricted  Localised  Extensive			q		<b>G</b>	
4.8.3 Indige	Restricted Localised Extensive Widespread			q		Œ	
4.8.3 Indige	Restricted  Localised  Extensive  Widespread  ccale - Occurrence of the impact			द		<b>(</b>	
4.8.3 Indige Spatial sca	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  icale - Occurence of the impact  One off or rare			व		<b>(</b>	
4.8.3 Indige Spatial sca	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  ccale - Occurence of the impact  One off or rare  Intermittent or sporadic			q		<b>(</b>	
4.8.3 Indige	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  icale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent			q		<b>(</b>	
4.8.3 Indige	Restricted Localised Extensive Widespread Cocale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going			द्		<b>(</b>	
4.8.3 Indige	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  ccale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  pact on the attributes			व		<b>(%</b>	
4.8.3 Indige	Restricted Localised Extensive Widespread Cocale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant			द्		<b>(</b>	
4.8.3 Indige Spatial sca  X  Temporal s	Restricted Localised Extensive Widespread  Cocurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor			व		<b>(</b>	
4.8.3 Indige  Spatial sca  X  Temporal s	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Gale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  pact on the attributes  Insignificant  Minor  Significant			ं			
4.8.3 Indige  Spatial sca  X  Temporal s	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  coale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  pact on the attributes  Insignificant  Minor  Significant  Major			द्		<b>(!</b>	

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	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
**							
Name		Impact			Origin		Trend
4.8.4 Chang	ges in traditional ways of life and knowledge system	<b>O</b>	9	9	•	C	7
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name			~		Origin		Trend
4.8.5 Identi	ty, social cohesion, changes in local population and community	•	9	9	•	C	1
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						

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	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

# 4.9 Other human activities

Name	Name		Impact		Origin		Trend
4.9.1 Illega	4.9.1 Illegal activities						
			q	q	•	Œ	$\rightarrow$
Spatial sca	lle - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						

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Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	
Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years	
Low capacity	
Medium capacity	

Name	Impact	Impact		Origin		Trend
4.9.3 Military training						
		q	9	•	C	$\rightarrow$

Spatial sca	lle - Area affected by the factor		
×	Restricted		
	Localised		
	Extensive		
	Widespread		
Temporal s	scale - Occurence of the impact		
×	One off or rare		
	Intermittent or sporadic		
	Frequent		
	On-going On-going		
Impact - Im	pact on the attributes		
×	Insignificant		
	Minor		
	Significant		
	Major		
Manageme	nt response - Capacity of management to respond		
	High capacity		
×	Medium capacity		
	Low capacity		
	No capacity and / or resources		
Trend - Dev	Trend - Developement over the last 6 years		
	Decreasing		
×	Static		
	Increasing		

# 4.10 Climate change and severe weather events

Name	Impact			Origin		Trend
4.10.1 Storms						
		9	9	•	C	1
Spatial scale - Area affected by the factor						
Restricted						

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	Localised			
×	Extensive			
	Widespread			
Temporal s	cale - Occurence of the impact			
	One off or rare			
×	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - Im	pact on the attributes			
	Insignificant			
	Minor			
×	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
	High capacity			
×	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - Dev	velopement over the last 6 years			
	Decreasing			
	Static			
×	Increasing			
Name		Impact	Origin	Trend

Name	Impact	Impact		Origin		Trend
4.10.2 Flooding						
		9	9	•	<b>C</b>	1

Spatial sca	ale - Area affected by the factor			
×	Restricted			
	Localised			
	Extensive			
	Widespread			
Temporal s	scale - Occurence of the impact			
×	One off or rare			
	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - Im	pact on the attributes			
	Insignificant			
	Minor			
×	Significant			
	Major			
Manageme	Management response - Capacity of management to respond			
	High capacity			

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×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	relopement over the last 6 years
	Decreasing
	Static
×	Increasing

Name	Impact	Ł		Origin		Trend
4.10.3 Drought						
		q	<b>A</b>	•	F	7

		9	9	•	<b>(</b>	<i>&gt;</i>
Spatial sca	le - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal s	scale - Occurence of the impact					
	One off or rare					
×	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

Name	Impact		Origin		Trend	
4.10.5 Changes to oceanic waters						
		<b>A</b>	<b>A</b>	•	<b>G</b>	7

Spatial sca	ale - Area affected by the factor
	Restricted
	Localised

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×	Extensive			
	Widespread			
Temporal s	cale - Occurence of the impact			
	One off or rare			
	Intermittent or sporadic			
	Frequent			
×	On-going On-going			
Impact - Im	pact on the attributes			
	Insignificant			
	Minor			
×	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
	High capacity			
	Medium capacity			
×	Low capacity			
	No capacity and / or resources			
Trend - Dev	relopement over the last 6 years			
	Decreasing			
	Static			
×	Increasing			
Name		Impact	Origin	Trend
4.10.6 Tem	perature change			

		q	q	•	<b>(</b>	1
Spatial so	ale - Area affected by the factor					
Spatial Sca						
	Restricted					
	Localised					
×	Extensive					
	Widespread					
Temporal	scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going On-going					
Impact - In	npact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Manageme	ent response - Capacity of management to respond					
	High capacity					

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Medium capacity

×	Low capacity						
	No capacity and / or resources						
Trend - Dev	Trend - Developement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

# 4.11 Sudden ecological or geological events

		Impact		Origin		Trend
4.11.3 Tsuna	ami/Tidal wave					
			9	•	Œ	$\rightarrow$
Spatial scale	e - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal so	cale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Imp	pact on the attributes					
	Insignificant					
	Minor					
	Significant					
×	Major					
Managemen	nt response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - Dev	elopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					

Name	Impact			Origin		Trend
4.11.5 Erosion and siltation/Deposition						
		q	9	•		1

Spatial sca	ale - Area affected by the factor
×	Restricted

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Localised     Extensive     Widespread     One off or rare     Intermittent or sporadic     Frequent     X On-going     Impact - Impact on the attributes     Insignificant     Minor     X Significant     Minor     Major     Major	Extens Widesp Temporal scale - O One of	spread  Occurence of the impact  off or rare  nittent or sporadic
Widespread  Temporal scale - Occurence of the impact  One off or rare Intermittent or sporadic  Frequent  Mongoing  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Medium capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Widesp Temporal scale - One of	Occurence of the impact  off or rare  nittent or sporadic
Temporal scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  X On-going  Impact - Impact on the attributes  Insignificant  Minor  X Significant  Major  Management response - Capacity of management to respond  High capacity  X Low capacity  No capacity  No capacity of resources  Trend - Developement over the last 6 years  Decreasing	Temporal scale - O	Occurence of the impact  off or rare  mittent or sporadic  uent
One off or rare  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	One of	off or rare  mittent or sporadic  uent
Intermittent or sporadic Frequent  X On-going Impact - Impact on the attributes Insignificant Minor  X Significant Major Management response - Capacity of management to respond High capacity Medium capacity  X Low capacity No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing		nittent or sporadic
Frequent  Non-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Intermi	uent
Impact - Impact on the attributes  Insignificant  Minor  X Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  X Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing		
Impact - Impact on the attributes  Insignificant  Minor  X Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  X Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Freque	ning
Insignificant  Minor  Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	X On-goi	
Minor  X Significant Major  Management response - Capacity of management to respond High capacity Medium capacity  X Low capacity No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Impact - Impact on	n the attributes
X Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  X Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Insignif	ificant
Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Minor	r
Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	× Signific	ficant
High capacity  Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Major	
Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Management respo	onse - Capacity of management to respond
X Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	High ca	capacity
No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing	Mediur	um capacity
Trend - Developement over the last 6 years  Decreasing	X Low ca	capacity
Decreasing	No cap	apacity and / or resources
	Trend - Developem	ment over the last 6 years
Static	Decrea	easing
	Static	
X Increasing	× Increas	asing

# 4.12 Invasive/alien species or hyper-abundant species

Name		Impact		Origin		Trend	
4.12.1 Tran	4.12.1 Translocated species						
				q		C	<b>S</b>
Custial ass	le. Asso affected by the factor						
Spatial Sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						

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Management response - Capacity of management to respond				
	High capacity			
×	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - Dev	Trend - Developement over the last 6 years			
×	Decreasing			
	Static			
	Increasing			

	Increasing						
Name		Impact	i		Origin		Trend
4.12.2 Inva	sive/Alien terrestrial species						
			9	9	•	C	•
Spatial sca	ele - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	Impact - Impact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	ent response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
×	Decreasing						
	Static						
	Increasing						

Impact Impact			Origin		Trend	
4.12.3 Invasive/Alien freshwater species						
		9	9	•	C	$\rightarrow$

Spatial scale - Area affected by the factor			
×	Restricted		

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	Localised		
	Extensive		
	Widespread		
Temporal s	cale - Occurence of the impact		
×	One off or rare		
	Intermittent or sporadic		
	Frequent		
	On-going		
Impact - Im	pact on the attributes		
×	Insignificant		
	Minor		
	Significant		
	Major		
Manageme	nt response - Capacity of management to respond		
	High capacity		
×	Medium capacity		
	Low capacity		
	No capacity and / or resources		
Trend - Dev	elopement over the last 6 years		
	Decreasing		
×	Static		
	Increasing		

Name		Impact			Origin	
4.12.4 Invasive/Alien marine species						
		q	Ą	•	F	1
Spatial scale - Area affected by the factor						
Restricted						
Localised						

	Localised
×	Extensive
	Widespread
	Madelyroad

Temporal scale - Occurence of the impact		
	One off or rare	
	Intermittent or sporadic	
	Frequent	

	Frequent
×	On-going Control of the Control of t
Impact - Im	ppact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Canacity of management to respond

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	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	Trend - Developement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

#### 4.13 Management and institutional factors

Name		Impact			Origin		Trend
4.13.1 Man	agement system/Management plan	0	9	9	•	Œ	<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
	Significant						
×	Major						
Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						

Name	Impact		Origin		Trend	
4.13.2 Legal framework	0	9	9	•	Œ	1

Spatial scale - Area affected by the factor

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	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
	Significant					
×	Major					
Manageme	nt response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	relopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					
Name 4.13.3 Gove	ernance	Impact	9	Origin  •  •		Trend
		•		O .	3	
		•		O .	3	
Spatial sca	le - Area affected by the factor	<b>③</b>		Q	3	
Spatial sca		•		G	3	
Spatial sca	le - Area affected by the factor  Restricted  Localised			G	3	
	Restricted  Localised  Extensive				3	
×	Restricted  Localised  Extensive  Widespread				,	
×	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact					
×	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare					
×	Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare  Intermittent or sporadic					
X Temporal s	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent					
× Temporal s	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going					
× Temporal s	le - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  pact on the attributes					
× Temporal s	Restricted Localised Extensive Widespread  cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant					
× Temporal s	Restricted Localised Extensive Widespread  cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor					
× Temporal s	Restricted Localised Extensive Widespread  cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant					

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Manageme	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
4.13.4 Mana	agement activities	<b>O</b>	9	9	•	<b>G</b>	
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
	Significant						
×	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.13.5 Fina	ncial resources	<b>()</b>	<b>A</b>	9	•	C	•

Spatial scale - Area affected by the factor											
	Restricted										

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	Localised						
	Extensive						
×	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going On-going						
Impact - Imp	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managemen	nt response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						
×	Decreasing						
	Static						
	Increasing						
Name		Impact			Origin		Trend
4.13.6 Huma	an resources	<b>O</b>	4	9	<b>②</b>	<b>G</b>	<b>→</b>
Spatial scal	e - Area affected by the factor						
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Imp	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managemen	nt response - Capacity of management to respond						

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	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
4.13.7 Low	impact research/monitoring activities	<b>O</b>	9	9	•	F	
Spatial scal	e - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

- 4.17. Serial inscriptions (national or transnational)
- 4.17.1 If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor
- 4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.
- 4.18.1 Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)

Attribute Preserved Compromised Seriously compromised Lost

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4.18.1.1	Native Hawaiian Archaeological Resources	×		
4.18.1.2	Nearshore and Inland Waters	×		
4.18.1.3	Marine Biodiversity	×		
4.18.1.4	Seabirds	×		
4.18.1.5	Shallow and Deep Reef Habitats	×		

#### 5. Protection and Management of the Property

#### 5.1. Boundaries and Buffer Zones

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

The boundaries are adequate to maintain the property's Outstanding Universal Value

#### 5.1.2 - Are the boundaries of the World Heritage property known and recognised?

The boundaries are known by both the management authority and local communities/landowners

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

The property has no buffer zone and does not need one

#### 5.1.4 - Are the boundaries of the buffer zones known and recognised?

The property has no known and recognised buffer zone

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

The boundary of Papahanaumokuakea was expanded in 2016 from 362,072 square kilometers to 1,508,870 million square kilometers, providing an extensive expansion/buffer area.

#### 5.2. Protective Measures

#### 5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).

There are the multiple layers of Federal and State legislation and regulation protecting Papah naumoku kea's natural and cultural heritage. The property was declared a Marine National Monument under the national Antiquities Act in 2006 but has been protected under some legal framework since President Theodore Roosevelt's Executive Order establishing the Hawaiian Islands Reservation in 1909. Since then, there has been a wide variety of federal and state protective measures taken, including but not limited to the following:

- Federal Measures Specific to Papah naumoku kea and the NWHI: The Executive Order transferring jurisdiction over Midway Atoll from the U.S. Navy to the Fish & Wildlife Service in 1996; the Executive Order establishing the NWHI Coral Reef Ecosystem Reserve in 2000; and the Presidential Proclamation and accompanying codifying federal regulations that established the Monument in 2006. In addition, federal regulations implemented the IMO PSSA Mandatory Ship Reporting System in 2008.
- General Federal Measures Applicable to Monument Resources: The Antiquities Act of 1906; the Migratory Bird Treaty Act of 1918; the National Historic
  Preservation Act of 1966; the Coastal Zone Management Act of 1972; the Marine Mammal Protection Act of 1972; the Endangered Species Act of 1973;
  the Magnusson-Stevens Conservation and Management Act of 1976; the Native American Graves Protection and Repatriation Act of 1990; and the
  National Environmental Policy Act of 1969.
- State Measures: The Hawai'i Organic Act of 1900, the Hawaii Admission Act of 1959, the Constitution of the State of Hawaii, the Hawaii Revised Statutes, and the Hawaii Administrative Rules.

The strict permitting system that governs virtually all activity in the Monument and the mandatory use of Vessel Management System (VMS) technology ensures a high level of compliance with all regulations; in addition, the U.S. Coast Guard monitors all vessels in the area and physically responds to suspected violations of federal regulations. Co-Trustee agencies also maintain enforcement personnel stationed in Honolulu that are available to respond to specific incidents.

Source: Periodic Reporting Cycle 2

#### Comment

Please make the following minor corrections: -Paragraph 1: remove the word the in the first sentence. Paragraph 1: change some to various -Bullet 2: change Magnusson Stevens to Magnuson Stevens

# 5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

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

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

# 5.2.4 - 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 has no buffer zone

# 5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The **legal framework** for the broader setting of the World Heritage property provides an **adequate 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

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#### 5.2.6 - Can the legal 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 of enforcement remain

#### 5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice

Presidential Proclamation 8031 delineates management boundaries and establishes a joint permitting system. All entry into the Monument is authorized by permit only. A Memorandum of Agreement among the Monument's four Co-Trustees (State of Hawaii-DLNR, Office of Hawaiian Affairs, Department of the Interior-USFWS, and Department of Commerce-NOAA), provides for coordinated administration of all the Federal and State lands and waters within the boundaries of the Monument.

# 5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property

Due to the size and remoteness of the site, co-managing agencies and partners do not have necessary resources or capability to maintain persistent, on-site surveillance, monitoring and enforcement. Enforcement and compliance generally occur in response to reports of illegal or unauthorized activity. There are currently no enforcement personnel stationed in the Monument.

#### 5.3. Management System/Management Plan

### 5.3.1 - Please check the box which most closely match the character of the governance and management system of the property Public management system joint national/ local

#### If 'Other', please specify

#### 5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.

Other forms of statutory or non-statutory plans (e.g. strategic plans)

Traditional ways of management recognised by local communities and other specific groups

Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property

Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management

A code of practice developed by local communities or other groups

An integrated management plan combining World Heritage and any other designations

A management plan

An environmental management framework

A joint approach to management of cultural and natural heritage

#### 5.3.3 - Please give a brief description of the management system currently in place at your property

#### 5.3.4 - Management Documents

#### Comment

There is inadequate space here to list all management documents. We will provide a list in a separate email attachment. In summary: 1. Monument Management Plan and multiple adjunct plans 2. Mai Ka Po Mai Native Hawaiian Guidance 3. PMNM Best Management Practices Plans (there are 20) 4. Resource Monitor guidance

# 5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best practices for the protection of this property?

The 2011 Recommendation on the Historic Urban Landscape is not relevant to this property

5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

# 5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

Some use has been made of the World Heritage Policy for Climate Change

# 5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts of Climate Change on the property:

Site is conducting research, monitoring, and reporting on climate change. Conducted a vulnerability analysis and risk assessment.

### 5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property? No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

### 5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

# 5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state; local/municipal etc.) involved in the management of the World Heritage property

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

#### 5.3.12 - 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

#### 5.3.13 - Is the management system being implemented?

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

An annual work/action plan exists and many of its activities are being implemented

# 5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities			×		
5.3.15.2	Local authorities				×	
5.3.15.3	Landowners in the property and the buffer zone	×				
5.3.15.4	Indigenous peoples				×	
5.3.15.5	Women	×				
5.3.15.6	Other specific groups			×		
	If you selected, 'Other specific groups' please specify	fishing commun	nity			

# 5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups

		Not applicable	Non-existent	Poor	Fair	Good
5.3.16.1	Local communities					×
5.3.16.2	Local/Municipal authorities					×
5.3.16.3	Indigenous peoples					×
5.3.16.4	Landowners	×				
5.3.16.5	Women	×				
5.3.16.6	Youth/Children					×
5.3.16.7	Researchers					×
5.3.16.8	Local Visitors/Tourists					×
5.3.16.9	National/International tourists					×
5.3.16.10	Tourism Industry					×
5.3.16.11	Local businesses and industries					×
5.3.16.12	NGOs					×
5.3.16.13	Other specific groups				×	
	If you selected 'Other specific groups', please specify					

# 5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention

		Not applicable	No contribution	Limited	Significant	Full achievement
5.3.17.1	The management system of the property contributes to gender equality	×				
5.3.17.2	The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)				×	
5.3.17.3	The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status				×	
5.3.17.4	The management system of the property integrates a human rights-based approach	×				
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood	×				

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#### 5.3.18 - Please provide further details on the ratings of the management system given in the table above

#### 5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan

5.3.14.4 There is no single workplan for implementing the management plan actions, instead each co-managing agency has its own.

#### 6. Financial and Human Resources

#### 6.1. Funding

# 6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.6	Governmental (national/federal)	77.5 %	77.5 %
6.1.1.7	Governmental (regional/provincial/state)	22.45 %	22.45 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0.05 %	0.05 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	0 %	0 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	0 %
6.1.1.12	Other	%	%
		Total 100 %	Total 100 %

#### 6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above

#### 6.1.3 - 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

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

The existing sources of funding are secure over both the medium- and long-term

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

# 6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.

		From local communities %	From elsewhere %
6.1.6.1	Men	27 %	8 %
6.1.6.2	Women	46 %	19 %
		Total 73 %	Total 27 %

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

Human resources partly meet the management needs of the World Heritage property

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

Conservation	Good
Environmental sustainability	Fair
Community participation and inclusion	Good
Risk preparedness	Fair
Capacity development and education	Fair
Administration	Good
Research and monitoring	Good

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Awareness raising and public information/communication	Good
Marketing and promotion	Not applicable
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Fair

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

Conservation	Good
Environmental sustainability	Fair
Community participation and inclusion	Fair
Risk preparedness	Poor
Capacity development and education	Fair
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Fair

#### 6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?

No use has been made of the World Heritage Strategy for Capacity Building

- 6.1.11 If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.
- 6.1.12 Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and fully implemented; all technical skills are being transferred to those managing the property locally

- 6.1.13 Comments, conclusions and/or recommendations related to human resources, expertise and training
- 7. Scientific Studies and Research Projects
- 7.1 Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?

Knowledge about the values and attributes of the World Heritage property is acceptable for most key areas but there are gaps

7.2 - 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

7.3 - Are results from research programmes publicly available and disseminated?

Research results are shared widely with active outreach to local communities and national and international audiences

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

A considerable amount of research is occurring, and it is directed toward management needs. The Monument Management Plan outlines the the research priorities to support Monument management. Some research efforts are conducted jointly by the monument's co-managers, although a fully shared program is infeasible due to the amount of research. Some research results are shared widely with active outreach to local, regional, national and international audiences, while others are shared locally.

- 8. Education, Information and Awareness Building
- 8.1 Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities	Fair
Local/municipal authorities	Good

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Indigenous peoples	Fair
Landowners	Not applicable
Women	Not applicable
Youth/children	Fair
Researchers	Fair
Local visitors	Fair
National/international tourists	Fair
Tourism industry	Not applicable
Local businesses and industries	Not applicable
NGOs	Fair
Other specific groups	Fair
If you selected 'Other specific groups', please describe	Fishing community

# 8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?

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

#### 8.3 - Who are the target audiences for education and awareness programmes at your property?

Local communities
Local/municipal authorities
Indigenous peoples
Youth/children
Researchers
Local Visitors
National/international tourists
Local businesses and industries
NGOs
Other specific groups
fishing community

# 8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building

Visitor centre	Good
Site museum	Good
Information booths	Good
Guided tours	Not needed
Trails/routes	Not needed
Printed information materials	Good
Online (website, social media, etc.)	Good
Transportation facilities	Not needed
Other	Not needed
If 'Other' is selected, please specify	

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

#### 9. Visitor Management

#### 9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report

0/0/0/0/0/

#### 9.2 - What information sources are used to collect visitor statistics?

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question is not applicable

#### 9.3 - What is the average length stay of a visitor to the World Heritage property?

One to three hours

#### 9.4 - Please provide the source of information

Questions 9.2 and 9.3 are not applicable. There are no tourism activities within the property.

#### 9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)

0/0/0/0/0/0/0/

#### 9.6 - Please provide the source of information

There are no tourism activities, or visitors to the property.

### 9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?

There is a planned and effective strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property

#### 9.8 - Please provide any comments relating to the answer provided above in question 9.7

There is no tourism in the monument. Access is by permit only.

#### 9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property?

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

#### 9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, using a different system

#### If a different system, please specify

Monument Permitting System

# 9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?

There is good cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation

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

The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made

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

In one location and easily visible to visitors

#### 9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property?

While there is the authority to collect fees, they are not collected

#### 9.15 - Are there locally driven sustainable tourism initiatives?

Not applicable

If 'Yes', please specify

#### 9.16 - Are the benefits of tourism shared with local communities?

Not applicable

#### If 'Yes', please specify

#### 9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

The Monument is not currently open to visitation but we hope to allow visitation in the next cycle. Although there is no tourism within the property, there is good cooperation between managers and the tourism industry to present the Outstanding Universal Value and increase appreciation, through activities conducted off-site.

#### 10. Monitoring

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

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

# 10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved

#### 10.3 - Are key indicators defined and in place for the following principal aspects of the property?

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	Extend of indicators	Not applicable	No indicators	Indicators have been defined but are not yet in use	Indicators are in place and in use since the last Periodic Reporting cycle
10.3.1	State of conservation				×
10.3.2	Effectiveness of the management system				X
10.3.3	Character of governance				×
10.3.4	Appropriate synergy with other conservation designations				×
10.3.5	Contribution to sustainable development	×			
10.3.6	Capacity development		×		

#### 10.4 - Please provide information on relevant key indicators adopted at the property

A considerable amount of monitoring is occurring, and it is directed toward management needs. Some monitoring efforts are conducted jointly by the monument's co-managers. Key indicators are tracked by agencies on an individual basis.

#### 10.5 - Please rate the level of involvement in monitoring of the following groups:

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Good
Local communities	Good
Indigenous peoples	Good
Landowners	Not applicable
Women	Good
Researchers	Good
Tourism industry	Not applicable
Local businesses and industry	Not applicable
NGOs	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please specify	

# 10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee? Implementation is underway

#### 10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

#### 10.8 - Comments, conclusions and/or recommendations related to Monitoring

Remote, in situ and ship-based conservation monitoring is an ongoing high-priority activity within PMNM, prescribed by the enabling legislation, the management plan, the co-management partners, and stakeholders in the property. Ongoing and planned research evaluates the effectiveness of management, the conservation status of the property, ecosystem and individual organism health.

#### 11. Identification of Priority Management Needs

#### 11.1 - Identification of Priority Management Needs

5.1	Boundaries and Buffer Zones	
5.1.3	The property has <b>no buffer zone</b>	×
5.1.4	The property has <b>no known and recognised buffer zone</b>	×
5.2	Protective Measures	
5.2.4	The property has <b>no buffer zone</b>	×
5.2.6	There is acceptable capacity/resources to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain	×
5.3	Management System/Management Plan	
5.3.7	Some use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	×
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	×
6.1	Funding	
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property	×

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6.1.7	Human resources partly meet the management needs of the World Heritage property	×
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	×
9	Visitor Management	
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	×
10	Monitoring	
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	×
Pleas	se select -1 more issues.	
Ŋ Ple	ease save this question to reflect changes	

#### 12. Summary and Conclusions

#### 12.1. Summary - Factors affecting the Property

#### 12.1.1 - Summary - Factors affecting the Property

4.4	Pollution							
4.4.1	Pollution of marine waters	Nearshore and inland waters Marine Biodiversity Terrestrial Biodiversity Seabirds Shallow and deep reef habitats	Marine debris removal in ocean and on land	plots - Wat	ebris monitoring er quality monitoring observation to environmental	On going	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
4.7	Local condition	ons affecting physical fabi	ic					
4.7.3	Temperature	Native Hawaiian Archaeological Resources Geological Attributes Nearshore and inland wat Marine Biodiversity Terres Biodiversity Seabirds Sha and deep reef habitats	changing temporers management postrial adaptation plan	ncorporating eratures into lans and	Remote and in-situ monitoring of abiotic and biotic data.	On going	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
4.7.6		Water (rain/water table)						
4.7.7		Pests						
4.10	Climate chang	ge and severe weather eve	ents					
4.10.1		Storms						
4.10.5	Changes to oceanic waters	Native Hawaiian Archaeological Resourc Nearshore and inland w Marine Biodiversity Ter Biodiversity Seabirds S and deep reef habitats	vaters climate changerestrial (e.g. tempera	incorporating ge impacts ture, pH, ad water tterns) into plans and	- Remote and in-sitt monitoring of abiotic and biotic data.	0 0	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
4.10.6	Temperature change	Native Hawaiian Archaeological Resourd Nearshore and inland w Marine Biodiversity Ter Biodiversity Seabirds S and deep reef habitats	vaters temperature of management	incorporating change into plans and	- Remote and in-situ monitoring of abiotic and biotic data.	0 0	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
4.11	Sudden ecolo	gical or geological events						
4.11.3		Tsunami/T	idal					

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4.11.5	Erosion and siltation/Deposition	Native Hawaiian Archaeological Resources Nearshore and inland waters Marine Biodiversity Terrestrial Biodiversity Seabirds Shallow and deep reef habitats	Translocating flora and fauna to areas that have a greater resilience to erosion and siltation. Translocation is occurring with an island (e.g. moving to higher elevations) and to other higher islands.	Monitoring of sea bird and plants annually. For example, if bird nests are disappearing or if habitat is disappearing. Monitoring of cultural sites by practitioners. Monitoring of sea turtles, monk seals, and habitat availability	On going	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
4.12	Invasive/alien sp	ecies or hyper-abundant spe	ecies				
4.12.4	Invasive/Alien marine species	Seabirds Shallow and ideep reef habitats [ idea   i	Development and mplementation of standardized dest Management Practices gear and collections) - Hull inspections - Conducting esearch to control or eradicate invasives - Removal of marine debris which may contain invasives	- In-situ detection and monitoring of invasive or alien species (e.g. algae)	On going	US Fish and Wildlife Service, State of Hawaii, National Oceanic and Atmospheric Administration, and Office of Hawaiian Affairs	n/c
Question no	t completed						

#### 12.2. Summary - Management Needs

#### 12.2.1 - Summary - Management Needs

	-							
5.1	Boundaries and B	suffer Zones						
		Actions	Tin	meframe	Lead agency involved)	(and others	More info /	comment
5.1.3	The property has <b>no buffer zone</b>	Apply for an official World Heritage buffer. That said, the boundary of Papahanaumokuakea we expanded in 2016 from 362,072 square kilometers to 1.5 million square kilometers, providing a recognized, extensive buffer/expansion area.		n going	State of Hawa and Atmosphe	h and Wildlife Service, n/c of Hawaii, National Oceanic mospheric Administration, fice of Hawaiian Affairs		
5.1.4	The property has no known and recognised buffer zone	The PMNM may opt to apply for an official Worlheritage buffer. The boundary of Papahanaumokuakea was expanded in 2016 from 362,072 square kilometers to 1,508,870 square kilometers, providing an extensive buffer/expansion area.	rld On	n going	State of Hawa and Atmosphe	Fish and Wildlife Service, n/c te of Hawaii, National Oceanic d Atmospheric Administration, d Office of Hawaiian Affairs		
5.2	Protective Measur	es						
5.2.4	The property has no buffer zone	The PMNM may opt to apply for an official Heritage buffer. The boundary of Papahanaumokuakea was expanded in 20 from 362,072 square kilometers to 1,508,8' square kilometers, providing an extensive buffer/expansion area.	)16	On going	US Fish and Wildlife S State of Hawaii, Natior Oceanic and Atmosph Administration, and Of Hawaiian Affairs		onal heric	n/c
5.2.6	capacity/resource to enforce legislation and/or regulation in the World Heritage property but some deficiencies of	legislation and/or Administration, and or regulation in the Hawaiian Affairs  World Heritage property but some		onal heric	n/c			
5.3	Management System/Management Plan							
5.3.7	Some use hat been made of the Policy Document on the Impacts or Climate Chan on World Heritage Properties at the property	incorporate appropriate information into existing documents that address climate change.		to implement this action xt reporting cycle.	National Ocea	Vildlife Service, State on inic and Atmospheric in, and Office of Hawaiia		n/c

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5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Review the policy document and implement appropriate information into existing documents.		e to implement this next reporting cycle	. N	IS Fish and Wildlife Service, State lational Oceanic and Atmospheric dministration, and Office of Hawaii		n/c
6.1	Funding							
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property	Requesting allocation of addition (e.g. financial and human resoul improve management effectiven implementation.	ces) to	We hope to imple action by the next cycle.		US Fish and Wildlife Service, Hawaii, National Oceanic and Atmospheric Administration, a Hawaiian Affairs		n/c
6.1.7	Human resources partly meet the management needs of the World Heritage property	Requesting allocation of addition resources to improve managementation effectiveness and implementation	ent	We hope to imple action by the next cycle.		US Fish and Wildlife Service, Hawaii, National Oceanic and Atmospheric Administration, a Hawaiian Affairs		n/c
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	Review the strategy document a implement any relevant informat existing documents.		We hope to imple action by the next cycle.		US Fish and Wildlife Service, Hawaii, National Oceanic and Atmospheric Administration, a Hawaiian Affairs		n/c
9	Visitor Management							
	oresentation a and a	mplement a process to provide ccess for visitors in a sustainable nd culturally appropriate nanner.	We hope to ir action by the cycle.	nplement this next reporting	Hawaii, Na	nd Wildlife Service, State of ational Oceanic and ric Administration, and Office of Affairs	The visitor will be upda	services plan ated
10	Monitoring							
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	Expand monitoring and refine indicators		to implement this ac	Nat	Fish and Wildlife Service, State of tional Oceanic and Atmospheric ministration, and Office of Hawaiian		n/c

#### 12.3. Conclusions on the State of Conservation of the Property

12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property?

The Authenticity of the World Heritage property has been preserved

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### 12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property? The Integrity of the World Heritage property is intact

### 12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

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

#### 12.3.4 - What is the 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 intact

#### 12.3.5 - Comments. conclusions and/or recommendations related to the state of conservation of the property.

#### 13. Impact of World Heritage Status

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

Conservation	Very positive
Research and monitoring	Very positive
Management effectiveness	Very positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Positive
Education	Positive
Infrastructure development	Not applicable
Funding for the property	No impact
International cooperation	Positive
Political support for conservation	Positive
Legal/Policy framework	Positive
Advocacy	Positive
Institutional coordination	No impact
Security	Not applicable
Gender equality	Not applicable
Provision of ecosystem services/ benefits to local communities	Positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	Not applicable
Fostering inclusive local economic development and enhancing livelihood	Not applicable
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Positive
Other	Not applicable
If 'Other', please specify	

#### 13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

14. Good Practice in the Implementation of the World Heritage Convention

#### 14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

1. A highly protective permitting system is in place for World Heritage access. 2. Plans and standardized Best Management Practices (BMPs) are in place to avoid and minimize impacts. 3. Implementation of conservation actions is occurring, to improve site attributes and indicators of World Heritage Site 4. Considering additional layer of protection (e.g. sanctuary designation). 5. Integrated, cooperative management 6. Proactively engaging stakeholders (e.g. Indigenous community) to inform management decision making.

#### 14.2 - Define which topics are covered by this example of best practice at the property level

ynergies	
tate of Conservation	
anagement	
overnance	
apacity Building	

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#### 15. Assessment of the Periodic Reporting Exercise

#### 15.1. Relevance of Periodic Reporting

#### 15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

The World Heritage Convention
The concept of Outstanding Universal Value
The property's Outstanding Universal Value
The concept of Integrity and/or Authenticity
The property's Integrity and/or Authenticity
Management effectiveness to maintain the Outstanding Universal Value
Monitoring and reporting

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

State Party	Good
Site Managers	Good
UNESCO World Heritage Centre	Fair
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Fair

#### 15.2. Use of Data

#### 15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?

Revision of priorities/strategies/policies for the protection, management and conservation of heritage

Update of management plans

Awareness raising

Advocacy

#### 15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

#### 15.3. Timing and resources

#### 15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage

Site Manager/Coordinator World Heritage property staff

Focal points of other international conventions/programmes

Local communities

Indigenous people

### 15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire? Gender balance is explicitly considered and effectively implemented in the process.

### 15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire? Yes

#### 15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

160 / 20 / 80 /

#### 15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources		×
15.3.5.2	Financial resources for organizing consultation meetings/ training	×	

#### 15.4. Format and content of the Periodic Report

#### 15.4.1 - How accessible was the information required to complete this questionnaire?

Not all required information was accessible.

#### 15.4.2 - Was the questionnaire easy to use and clear to understand?

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		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire			×	
15.4.2.2	Clarity of questions		×		

#### 15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

1. Increase clarity of definitions, as they relate to our site. 2. Provide a World Heritage Representative to actively assist in the completion of the report. 3. Question 6.1.6 seems to have a bug. Our numbers add up to 100% but questionaire indicates 'Not Complete' 4. Q 6.1 -Instead of using "local communities" consider refining and expanding options to include "indigenous" as option. People from the local Hawaii community may not fully understand or be embedded in the Indigenous community

#### 15.5. Training and Guidance

#### 15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Good
UNESCO (other sectors/field offices)	Not applicable
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

#### 15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities

UNESCO World Heritage Centre	Good
State Party Representative (national Focal Point)	Good
UNESCO other sectors (e.g. field office)	Not applicable
National Commission for UNESCO	Not applicable
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable
IUCN International	Not applicable

# 15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?

Yes

#### 15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented?

15.6. Actions that will require formal consideration by the World Heritage Committee

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

• Map(s)

Reason for update: Please add a second map (sent in separate email)

• Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

Reason for update: Authenticity: small corrections are required: (1) change date of Papahanaumokuakea establishment to 2006 (currently listed as 2009, correct year is 2006); (2) please change the second sentence regarding multiple jurisdictions to: "The four management Agencies for the property are the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, the State of Hawaii Department of Land and Natural Resources, and the Office of Hawaiian Affairs." (currently lists 3 agencies)

Changes to these items will need to go through the proper processes.

15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

#### 15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

We understand the importance of a standardized assessment, but some questions may not be applicable or appropriate for a site. 'Not applicable' for some questions may need to be added as a response (for example, question 9.3 was not applicable to our site).

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15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.

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