## Fraser Island

## 1. World Heritage Property Data

#### 1.1 - Name of World Heritage property

Fraser Island

#### Comment

The name of the property is Fraser Island. At the request of the First Nations people, the Butchulla people, the site manager of the property (Queensland Department of Environment and Science) has put forward a request to change the name to "K'gari (Fraser Island)". K'gari means "Paradise" in the language of the Butchulla people and relates to a creation story about the island. Queensland Parks and Wildlife Service have already adopted this name for the National Park.

#### 1.2 - World Heritage property details

#### 1.3 - Geographic information table

Name	ame Coordinates		Buffer zone (ha)	Total (ha)	Inscription year
Fraser Island	-25.217 / 153.133	181851	0	181851	1992
Total (ha)		181851	0	181851	

#### 1.4 - Map(s)

Title	Date	Link to source
Fraser Island - Map of the inscribed property	2012	Œ

#### 1.5 - Web and Social Media data of the property (if applicable)

- 1. The Official Site for Australian Travel and Tourism Australia
- 2. UNESCO World Heritage Centre
- 3. Fraser Island (Queensland Government DERM, QPWS)
- 4. Fraser Island (Department of Sustainability, Environment, Water, Population and Communities )

#### Comment

1. Correct. 2. Correct. 3. Update to Fraser Island (Queensland Government, Department of Environment and Science)

https://parks.des.qld.gov.au/management/managed-areas/world-heritage-areas/fraser https://parks.des.qld.gov.au/parks/kgari-fraser 4. Update to Fraser Island (Department of Agriculture, Water and the Environment) http://www.environment.gov.au/heritage/places/world/fraser/index.html 5. Add Fraser Coast Tourism & Events https://www.visitfrasercoast.com/Fraser-Island

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) <u>is not</u> 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		×

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#### 2.2 - Please provide comments on 2.1 if necessary

An Australian Biosphere Conference with the theme "We are all connected" was held from 13 March to 15 March 2019. The Fraser Island World Heritage Property was a feature of the conference which included key-note speaker Meriem Bouamrame '(UNESCO's Division of Ecological and Earth Sciences "Man and the Biosphere")'. Inter-governmental agreements are also in place for the parts of the Ramsar Wetland within the World Heritage area with China, Japan and the Republic of Korea.

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?

Not applicable

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 <b>also manages</b> 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 <b>occasionally</b> 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.	
2.7.3	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 <b>also manages</b> 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 <b>also manages</b> 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 <b>also manages</b> this designation/programme.	

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#### 2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)

The Ramsar Wetland designation is managed by the Wetlands Team in the Queensland Department of Environment and Science. There are also overlaps between the site and the Great Sandy Biosphere which covers 1,416,000 hectares, including 542,000 hectares of marine ecosystems and 874,000 hectares of diverse landscape.

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?

Yes

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.

The Endeavour Journal of James Cook

- 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**

Fraser Island, also known by its Aboriginal name of K'gari, lies along the eastern coast of Australia. The property covers 181,851 hectares and includes all of Fraser Island and several small islands off the island's west coast. It is the world's largest sand island, offering an outstanding example of ongoing biological, hydrological and geomorphological processes. The development of rainforest vegetation on coastal dune systems at the scale found on Fraser Island is unique, plus the island boasts the world's largest unconfined aquifer on a sand island.

The property has exceptional natural beauty with over 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, strikingly coloured sand cliffs, and spectacular blowouts. Inland from the beach are majestic remnants of tall rainforest growing on sandy dunes and half of the world's perched freshwater dune lakes

Criterion (vii): Fraser Island is the largest sand island in the world, containing a diverse range of features that are of exceptional natural beauty. The area has over 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, including more than 40 kilometres of strikingly coloured sand cliffs, as well as spectacular blowouts. Inland from the beach are majestic remnants of tall rainforest growing on tall sand dunes, a phenomenon believed to be unique in the world. Half of the world's perched freshwater dune lakes occur on the island, producing a spectacular and varied landscape. The world's largest unconfined aquifer on a sand island has also been found here.

Criterion (viii): The property represents an outstanding example of significant ongoing geological processes including longshore drift. The immense sand dunes are part of the longest and most complete age sequence of coastal dune systems in the world and are still evolving. The superimposition of active parabolic dunes on remnants of older dunes deposited during periods of low sea level, which are stabilised by towering rainforests at elevations of up to 240 metres, is considered unique. Fraser Island also has a variety of freshwater dune lakes which are exceptional in terms of number, diversity and age. The dynamic interrelationship between the coastal dune sand mass, aquifer hydrology and the freshwater dune lakes provides a sequence of lake formation both spatially and temporally.

The process of soil formation on the island is also unique, since as a result of the successive overlaying of dune systems, a chronosequence of podzol development from the younger dune systems on the east to the oldest systems on the west change from rudimentary profiles less than 0.5 metres thick to giant forms more than 25 metres thick. The latter far exceeds known depths of podzols anywhere else in the world and has a direct influence on plant succession, with the older dune systems causing retrogressive succession when the soil horizon becomes too deep to provide nutrition for tall forest species.

Criterion (ix): The property represents an outstanding example of significant ongoing biological processes. These processes, acting on a sand medium, include biological adaptation (such as unusual rainforest succession), and biological evolution (such as the development of rare and biogeographically significant species of plants and animals).

Vegetation associations and succession represented on Fraser Island display an unusual level of complexity, with major changes in floristic and structural composition occurring over very short distances. Both heathland and closed forest communities provide refugia for relict and disjunct populations, which are important to ongoing speciation and radiation. Evolution and specialised adaptation to low fertility, fire, waterlogging and aridity is continuing in the ancient angiosperm flora of the heathlands and the associated vertebrate and invertebrate fauna. Since listing, patterned fens have been discovered on the property, which along with those at Cooloola, are the only known examples of sub-tropical patterned fens in the world. These fens support an unusual number of rare and threatened invertebrate and vertebrate species.

The dynamic interrelationship between the coastal dune sand mass, hydrology, the ongoing processes of soil formation and the development of plant communities is remarkable in its scale and complexity given the uniform substrate. In particular, the development of rainforest vegetation communities, with trees up to 50 metres tall on coastal dune systems at the scale found on Fraser Island, is not known to occur elsewhere in the world. There is clear zonation and succession of plant communities according to salinity, water table, age and nutrient status of dune sands, exposure and fire frequency. The low shrubby heaths ('wallum') are of considerable evolutionary and ecological significance. Fauna including a number of threatened species of frog, have adapted to the highly specialised acidic environment associated with wet heathlands and sedgelands in this siliceous sand environment.

#### Integrity

The property includes all of Fraser Island and a number of small adjacent islands off the west coast including Stewart and Dream Islands covering an area of 181,851 hectares. The boundary of the property extends 500 metres seaward from high water mark around Fraser Island and the smaller islands. The majority of Fraser Island is National Park, and all of the marine area within the property lies within Great Sandy Marine Park. A small area of private land on the island is managed to ensure the property's values are maintained.

The conditions of integrity are met as there is no perceptible human threat to longshore drift and other ongoing processes that make this area outstanding. The property is sufficiently large, diverse and free from disturbance to contain all ecosystem components required for viable populations of all species and for continued maintenance of all natural phenomena. For example the evolution of soil profiles remains essentially undisturbed. Weeds, plant diseases and feral animals are

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present but in low numbers and are subject to active management. Disjunct and relict populations of flora and fauna, including those associated with the lakes and creeks, have remained intact and will continue to be important for ongoing speciation. While the tall forests have been affected to some extent by logging, this practice has stopped and the forests have the capacity to return to their former grandeur.

#### Protection and management requirements

On-ground management of the property is the responsibility of the Queensland Parks and Wildlife Service, Department of Environment and Resource Management, guided by the Great Sandy Region Management Plan, and activity-specific management plans for Fraser Island. As the majority of the island is national park, the strongly protective provisions of the Nature Conservation Act 1992 and the Recreation Areas Management Act 2006 apply. The narrow marine zone surrounding the island lies within the Great Sandy Marine Park and is subject to the provisions of the Marine Parks Act 2004. Indigenous, community and scientific advice on protection and management of the World Heritage values is provided to the State of Queensland and Australian Governments by three Fraser Island World Heritage Area Advisory Committees.

Key threats requiring ongoing attention include degradation due to visitor numbers, inappropriate fire, invasive plants and animals, and climate change. Recreational use of the area is intensive and localised degradation can occur from excessive numbers of visitors potentially impacting on, in particular, lake water quality. Appropriate fire management is required to maintain the integrity of the World Heritage values. Significant human and financial resources are being directed to the management of these threats as well as to the protection and monitoring of the property.

Overarching protection of the World Heritage values occurs under national legislation, the Environment Protection and Biodiversity Conservation Act 1999. All World Heritage properties in Australia are 'matters of national environmental significance' under that legislation, which is the statutory instrument for implementing Australia's obligations under the World Heritage Convention. By law, any action that has, will have or is likely to have a significant impact on the World Heritage values of a World Heritage property must be referred to the responsible Minister for consideration. Substantial penalties apply for taking such an action without approval. In 2007, Fraser Island was added to the National Heritage List, in recognition of its national heritage significance under the Act.

#### Comment

Please note the following changes: - From 2021 there will be one combined advisory committee (rather than three separate committees) that will have an equal number of positions for First Nations people (the Butchulla people), community reps and scientists. - The Department of Environment and Natural Resources (DERM) name has changed – currently Department of Environment and Science (DES).

# 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	Largest sand island in the world. 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, including more than 40 kilometres of strikingly coloured sand cliffs, as well as spectacular blowouts. Containing a diverse range of features that are of exceptional natural beauty.	×			
3.2.2	Majestic remnants of tall rainforest growing on tall sand dunes (a phenomenon believed to be unique in the world). The development of rainforest vegetation communities, with trees up to 50 metres tall on coastal dune systems at the scale found on Fraser Island, is not known to occur elsewhere in the world	×			
3.2.3	Perched freshwater dune lakes producing a spectacular and varied landscape; half of the world's perched freshwater dune lakes occur on the island. World's largest unconfined aquifer on a sand island.	×			
3.2.4	Significant ongoing geological processes including longshore drift	×			
3.2.5	Immense sand dunes that are part of the longest and most complete age sequence of coastal dune systems in the world and are still evolving. The superimposition of active parabolic dunes on remnants of older dunes deposited during periods of low sea level	×			
3.2.6	The superimposition of active parabolic dunes on remnants of older dunes deposited during periods of low sea level	×			
3.2.7	Dunes stabilised by towering rainforests at elevations of up to 240 metres, is considered unique	×			
3.2.8	Possessing a variety of freshwater dune lakes which are exceptional in terms of number, diversity and age. The dynamic interrelationship between the coastal dune sand mass, aquifer hydrology and the freshwater dune lakes provides a sequence of lake formation both spatially and temporally	×			
3.2.9	The process of soil formation on the island is also unique, since as a result of the successive overlaying of dune systems, a chronosequence of podzol development from the younger dune systems on the east to the oldest systems on the west	×			
3.2.10	Podzols change from rudimentary profiles less than 0.5 metres thick to giant forms more than 25 metres thick (the latter far exceeds known depths of podzols anywhere else in the world)	×			
3.2.11	The chronosequence of podzol development has a direct influence on plant succession, with the older dune systems causing retrogressive succession when the soil horizon becomes too deep to provide nutrition for tall forest species	×			
3.2.12	Vegetation associations and succession represented on Fraser Island display an unusual level of complexity, with major changes in floristic and structural composition occurring over very short distances. There is clear zonation and succession of plant communities according to salinity, water table, age and nutrient status of dune sands, exposure and fire frequency		×		
3.2.13	Both heathland and closed forest communities provide refugia for relict and disjunct populations, which are important to ongoing speciation and radiation	×			
3.2.14	Evolution and specialised adaptation to low fertility, fire, waterlogging and aridity is continuing in the ancient angiosperm flora of the heathlands and the associated vertebrate and invertebrate fauna. The low shrubby heaths ('wallum') are of considerable evolutionary and ecological significance. Fauna including a number of threatened species of frog, have adapted to the highly specialised acidic environment associated with wet heathlands and sedgelands in this siliceous sand environment	×			

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×

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

More frequent bush fires as experienced in 19-20 and 20-21 leads to changes to vegetation communities and increased biosecurity risks from pests such as myrtle rust. Climate change also has implications for sand deposition and movement (sea level rise and prevailing wind direction) and may lead to the inundation of systems like the rare sub-tropical patterned fens (and associated flora and fauna). The OUV of the FIWHA currently do not reflect the island's rich indigenous cultural history.

#### 4. Factors Affecting the Property

#### 4.1. Buildings and Development

#### 4.1.1 - Housing

Previous answer Cycle 2 (29/07/2011):

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

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

#### 4.1.2 - Commercial development

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.1.3 - Industrial areas

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

## 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (29/07/2011):

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

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

#### 4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>G</b> Outside	<b>▶</b> Decreasing	⇒ Stable	Increasing
○ Positive    ★	×		×	×			7
Negative X		×	×				1

# 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

Positive impacts include new interpretive centre at the Kingfisher Bay Resort, intended to be a gateway for visitors to receive information relevant to the WH. State funded masterplan for Central Station redevelopment has been developed in consultation with Butchulla, commercial tour operators and other stakeholders. Increased tourism is acting as a driver for a number of threats to the property, including pollution, erosion and siltation, disturbance, and introduction of invasive species.

## 4.2. Transportation Infrastructure

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#### 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (29/07/2011):

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

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	<b>Outside</b>	<b>→</b> Decreasing	<b>⇒</b> Stable	Increasing
Positive X	×	×	×			$\rightarrow$	
Negative X	×	×	×				7

#### 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (29/07/2011):

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

Relevant	✗ Not relevant

## 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (29/07/2011):

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

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

## 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Negative, Current, Inside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	<b>G</b> Outside	<b>№</b> Decreasing	<b>⇒</b> Stable	Increasing
○ Positive    ★	×		×			<b>→</b>	
Negative X	×	×	×	×		<b>→</b>	

## 4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (29/07/2011):

Not relevant

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	Potential	• Inside	<b>Outside</b>	<b>№</b> Decreasing	→ Stable	Increasing	
O Positive								
Negative X	×	×	×			$\rightarrow$		

# 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

Tourism and associated infrastructure, including individual 4WD vehicles, tour buses, barges and aircraft, can negatively impact on the property causing erosion and damage, direct damage to vegetation, fauna (shore birds, dingos, intertidal species) and can impinge on the aesthetic values of the island. Environmental Impact statements for all relevant works require best practise management and operate within a cultural heritage duty of care with Butchulla input.

#### 4.3. Services Infrastructures

# 4.3.1 - Water infrastructure

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	× Not relevant
	** Not relevant

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#### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside

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

#### 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.3.4 - Localised utilities

Previous answer Cycle 2 (29/07/2011):

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

★ Relevant		Not relevant						
	Impact Origin				Trend of impact	pact		
Impact	Current	Potential	• Inside	<b>Outside</b>	<b>▶</b> Decreasing	→ Stable	Increasing	
Positive X	×	×	×			$\rightarrow$		
Negative X	×	×	×				7	

#### 4.3.5 - Major linear utilities

Previous answer Cycle 2 (29/07/2011):

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

A remote area power system (RAPS) upgrade is underway to replace existing panels and batteries which supplement the power at the Queensland Parks and Wildlife Service Dundabara Work Base. This upgrade will significantly reduce the reliance on a diesel-powered generator at the site. Utilities such as radio and phone towers provide important communications given the remoteness of the island.

#### 4.4. Pollution

## 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Outside

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

## 4.4.2 - Ground water pollution

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Inside

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

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#### 4.4.3 - Surface water pollution

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Inside

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

#### 4.4.4 - Air pollution

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.4.5 - Solid waste

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.4.6 - Input of excess energy

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X 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

Marine debris (from offshore shipping) washes up along both the east and west coast of the island. Littering and plastics require constant management effort.

Monitoring is required to assess potential impacts of waste water disposal on ground water quality. Monitoring of the quality of surface waters, including the perched lakes is required to assess potential impacts from swimming (sunscreen or insect repellent). Work is underway to improve waste transfer stations.

# 4.5. Biological resource use/modification

## 4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Inside, Outside

× Relevant			ı	Not relevant					
	Impact		Origin		Trend of impact				
Impact	Current	Potential	<ul><li>Inside</li></ul>	Outside	<b>→</b> Decreasing	→ Stable	Increasing		
O Positive									
	×	×	×	×		<b>→</b>			

## 4.5.2 - Aquaculture

Previous answer Cycle 2 (29/07/2011):

• Not relevant

Relevant X Not relevant

## 4.5.3 - Land conversion

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

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#### 4.5.5 - Crop production

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant 

X Not relevant

#### 4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.5.8 - Commercial hunting

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

#### 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (29/07/2011):

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

K'gari is adjacent to the Great Sandy Marine Park which provides a wide range of recreational, research and commercial opportunities. Fisheries are well-managed (size limits and bag limits for recreational fishers and permits/quotas for commercial fishers), monitoring is ongoing. The marine park also includes several green (no take) zones and seasonal closures to ensure sustainability. As the First Nations people for this island, the Butchulla people have rights to continue traditional hunting.

## 4.6. Physical resource extraction

# 4.6.1 - Mining

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.6.2 - Quarrying

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

## 4.6.3 - Oil and gas

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

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#### 4.6.4 - Water (extraction)

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

# 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

Resource extraction is prohibited on the Island under the Commonwealth and State legislation. The island contains extensive deposits of rutile, ilmenite, zircon and monazite. Historically, sand mining did occur, but was ceased in 1976. Less than 1000 hectares were affected by the sand mine; the ecology of the island continues to recover from the previous impacts of resource extraction.

#### 4.7. Local conditions affecting physical fabric

#### 4.7.1 - Wind

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

✗ Relevant	1	Not relevant					
	Impact Origin				Trend of impact		
Impact	<b>G</b> Current	Potential	Inside	<b>Outside</b>	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing
O Positive 🗶	×		×	×		$\rightarrow$	
Negative X		×	×	×			7

#### 4.7.2 - Relative humidity

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

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

#### 4.7.3 - Temperature

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

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

#### 4.7.4 - Radiation/Light

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.7.5 - Dust

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.7.6 - Water (rain/water table)

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

X 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
② Positive X	×		ж	×		<b>→</b>	
	×			×			P

## 4.7.7 - Pests

Previous answer Cycle 2 (29/07/2011):

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

× Relevant	1	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 X	×	×	×	×			1

## 4.7.8 - Micro-organisms

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

# 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

Myrtle Rust (Austropuccinia psidii), an introduced fungal pathogen, affects species in the family Myrtaceae and is present in a range of Fraser Island endemic species (eg Melaleuca quinquenervia). Impacts and dispersal appears more significant following disturbance events such as fire. Climate change is predicted to have significant impacts on a number of physical attributes; the managing agency is working to identify climate vulnerabilities and adapt management practices accordingly.

#### 4.8. Social/Cultural uses of heritage

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

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside

× Relevant				Not relevant			
	Impact Origin			Trend of impact			
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>G</b> Outside	<b>▶</b> Decreasing	⇒ Stable	Increasing
Positive       ★	×	×	×	×			7
Negative							

## 4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside, Outside

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

## 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

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

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

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

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

## 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (29/07/2011):

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

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

# 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

K'gari is the name of this island in the language of the Butchulla people, this name is increasingly adopted by the managing agency. The Butchulla people retain the right to continue traditional practices such ceremony, hunting, collecting and burial rights. The managing agency is working to establish partnerships with the Butchulla people to embed traditional management practices, especially around fire in day to day management. Tourism impacts are regulated through permitting and signage.

## 4.9. Other human activities

# 4.9.1 - Illegal activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Potential, Inside

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

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#### 4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

## 4.9.3 - Military training

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.9.4 - War

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.9.5 - Terrorism

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

#### 4.9.6 - Civil unrest

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

# 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

The Great Sandy National Park, which incorporates the WHA, is managed under legislation which helps control illegal activities through a penalty system. Ghost nets – particularly discarded crab pots/opera house traps continue to be an issue given the high levels of fishing related tourism in the area. The issue is greater on the west coast of the island. Beach clean ups are undertaken in partnership with the Butchulla Land and Sea Rangers and volunteer organisations.

#### 4.10. Climate change and severe weather events

## 4.10.1 - Storms

Previous answer Cycle 2 (29/07/2011):

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

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

#### 4.10.2 - Flooding

Previous answer Cycle 2 (29/07/2011):

Not relevant

X Relevant	ı	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							
Negative X		×	×				-

#### 4.10.3 - Drought

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Inside, Outside

× Relevant			Not relevant	
	Impact	Origin		Trend of impact

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Impact	Current	Potential	Inside	<b>Outside</b>	<b>→</b> Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×	×	×			<i>P</i>

#### 4.10.4 - Desertification

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant

#### 4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (29/07/2011):

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

× 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	×	×	×	×			1

#### 4.10.6 - Temperature change

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Inside

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

#### 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (29/07/2011):

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

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

# 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

Sea level rise may contribute to accelerated coastal erosion on the east coast. Changes to rainfall patterns, temperature and severity of extreme weather events could impact OUV and disrupt species distribution and abundance. Changes to the fire regime could have flow on affects to vegetation structure, thereby impacts dune systems and potentially increase rates of erosion, and incursions of hot burns into rainforest areas. Climate change adaptation management planning is underway.

# 4.11. Sudden ecological or geological events

#### 4.11.1 - Volcanic eruption

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant

#### 4.11.2 - Earthquake

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X	Not relevant
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#### 4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Outside

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

#### 4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant X Not relevant

## 4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (29/07/2011):

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

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

## 4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (29/07/2011):

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

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

# 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

Fire is a natural part of the island's landscape playing an important role in the ecosystem and the longer-term health of many species. Planned burns take place in partnership with the Butchulla people. Recent wildfires fires (in 2019 due to a lightening strike and in 2020 due to illegal campfire) impacted large areas of the island. However, the island recovered well after the 2019 fire and an initial assessment of the impact of the 2020 fire is showing good signs of ecological recovery.

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

#### 4.12.1 - Translocated species

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Outside

<b>≭</b> Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	<ul><li>Inside</li></ul>	<b>Outside</b>	<b>→</b> Decreasing	⇒ Stable	Increasing
O Positive							
	×	×		×			P

## 4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Potential, Outside

X 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
<ul><li>Positive</li></ul>							
	×	×		×			7

## 4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Potential, Outside

X Relevant				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 X	×	×	×	×			7	

## 4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

## 4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (29/07/2011):

Not relevant

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

## 4.12.6 - Modified genetic material

Previous answer Cycle 2 (29/07/2011):

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

Pest management is undertaken under the umbrella of a state-wide strategic pest management framework, as well as part of day-to-day on ground management activities. A current grant proposal is seeking funding to assess and determine how to manage feral cats on the island. Health checks under the Values Based Management Framework help monitor and identify new threats to the ecosystem. Refer to comments made in 4.7.9 regarding Myrtle Rust. Risks are likely to increase due to climate change

# 4.13. Management and institutional factors

#### 4.13.1 - Management system/Management plan

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

#### 4.13.2 - Legal framework

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

#### 4.13.3 - Governance

× Relevant	Not relevant
TO T	

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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
○ Positive    ★	×		ж	×			1
	×	×	×	×			7

## 4.13.4 - Management activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside

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

## 4.13.5 - Financial resources

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

#### 4.13.6 - Human resources

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

# 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside

× Relevant				Not relevant							
	Impact		Origin		Trend of impact						
Impact	Current	Potential	• Inside	<b>G</b> Outside	<b>№</b> Decreasing	→ Stable	Increasing				
O Positive 🗶	×	×	×	×		$\rightarrow$					
Negative X	×		×	×	<b>S</b>						

# 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

Not relevant

<b>≭</b> Relevant				Not relevant							
	Impact Origin				Trend of impact						
Impact	Current	Potential	• Inside	<b>G</b> Outside	<b>▶</b> Decreasing	<b>⇒</b> Stable	Increasing				
O Positive 🗶	×		×			$\Rightarrow$					
Negative											

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# 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

An updated Management Plan for the Island is in preparation and will incorporate recommendations from the climate change adaptation planning process underway. Research and monitoring is undertaken internally for example the use of acoustic recorders, water sampling etc. Research by external parties is undertaken within the research permit framework issued by managing agency. Health check assessments are undertaken by managing agency in consultation with Butchulla Land & Sea Rangers.

## 4.14. Other factor(s)

#### 4.14.1 - Other factor(s)

The Department of Environment and Science (DES) is partnering with the Butchulla people and transitioning to a co-stewardship or co-management model for Fraser Island (K'gari). DES has restructured the advisory committee arrangements to ensure equal representation of Butchulla people, scientific experts and community people on the Advisory Committee. The management plan will be written in partnership with the Butchulla people. DES resources and supports a Butchulla Land & Sea Ranger group.

## 4.15. Factors Summary Table

#### 4.15.1 - Factors Summary Table

Name	Impact				Origin		
4.1 Buildings and Development							
4.1.1 Housing	<b>O</b>	<b>A</b>	ø	•	<b>G</b>	<b>→</b>	
		q	q	•	<b>G</b>	$\rightarrow$	
4.1.4 Major visitor accommodation and associated infrastructure	<b>O</b>	q	9	•		<b>→</b>	
		q	q	•	<b>G</b>	$\rightarrow$	
4.1.5 Interpretative and visitation facilities	<b>O</b>	q		•	<b>G</b>	1	
			q	•		1	
4.2 Transportation Infrastructure							
4.2.1 Ground transport infrastructure	0	9	9	•		<b>→</b>	
		q	q	•		1	
4.2.3 Air transport infrastructure	<b>O</b>	<b>A</b>	q	•	<b>G</b>	<b>→</b>	
		q	q	•	F	$\rightarrow$	
4.2.4 Marine transport infrastructure	<b>O</b>	9		•		$\rightarrow$	
		q	9	•	Œ	<b>→</b>	
2.5 Effects arising from use of transportation infrastructure							
		9	9	•		$\rightarrow$	
4.3 Services Infrastructures							
4.3.2 Renewable energy facilities	0	9	9	•		1	
						<b>→</b>	
4.3.4 Localised utilities	<b>()</b>	q	q	•		<b>→</b>	
		q	q	•		,	
4.4 Pollution							
4.4.1 Pollution of marine waters							
		<b>A</b>	<b>a</b>		Œ	<i>&gt;</i>	
4.4.2 Ground water pollution		,	•				
		n a	<b>6</b> 31	<b>(</b> )	78	_	
4.4.3 Surface water pollution	<b>O</b>	9	-1	<b>©</b>	G	<b>→</b>	
			ø	0	(F	⇒	
4.5 Biological resource use/modification			U		3		
4.5.1 Fishing/collecting aquatic resources							
4.5.1 Fishing-collecting aquatic resources							
4.5.0 Subsistance hunting		4	4	•	<b>(</b>	<b>→</b>	
4.5.9 Subsistence hunting	<b>O</b>	9		<b>(</b> )	F	<b>→</b>	

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4.7 Local conditions affecting physical fabric						
4.7.1 Wind	•	q		<b>@</b>	(F	<b>→</b>
	<b>©</b>	•		<u>•</u>	(M	7
A.7.2 Delegative housefulfier		-m	7			
4.7.2 Relative humidity	•	4	_	•	Œ.	<b>→</b>
	<b>(a)</b>		E-		<b>G</b>	
4.7.3 Temperature	<b>③</b>	9		•	F	•
	•	9	q		F	-
4.7.6 Water (rain/water table)	<b>③</b>	9		•	<b>G</b>	<b>→</b>
		9			F	<i>&gt;</i>
4.7.7 Pests						
		9	9	•	Œ	1
4.7.8 Micro-organisms						
		9	9	•	Œ	1
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses	•	9	9	•	C	1
4.8.2 Society's valuing of heritage	•	9	9	•	F	<i>&gt;</i>
4.8.3 Indigenous hunting, gathering and collecting	<b>②</b>	9	9	•		<b>→</b>
4.8.4 Changes in traditional ways of life and knowledge system	<b>②</b>	9	9	•	Œ	1
4.8.5 Identity, social cohesion, changes in local population and community	•	9	9	•	Œ	1
4.8.6 Impacts of tourism/Visitation/Recreation	•	9	9	•	F	$\rightarrow$
	•	9	9	•	F	<b>→</b>
4.9 Other human activities						
4.9.1 Illegal activities						
	•		9	•	F	<b>→</b>
4.10 Climate change and severe weather events						
4.10.1 Storms	<b>©</b>	9	9	•	<b>G</b>	-
	•	9	9	•	F	-
4.10.2 Flooding						
	•		P	•		
4.10.3 Drought						
	<b>(a)</b>	9	9	•	<b>G</b>	1
4.10.5 Changes to oceanic waters						
	<b>Θ</b>	P	q	•	F	1
4.10.6 Temperature change						
	9	9	q	•	<b>G</b>	1
4.10.7 Other climate change impacts						
Add Sudden scale ricel as made ricel as well-ricel	<b>(a)</b>	9	9	•	F	
4.11 Sudden ecological or geological events						
4.11.3 Tsunami/Tidal wave						

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							<b>F</b>	<b>(</b> )	<b>(5</b>	$\rightarrow$
									<i>-</i>	
4.11.5 Erosion and	siltation/Deposition				0	9	4	•	Œ.	-
						9	9	•		
4.11.6 Fire (wildfire	9)				<b>O</b>	q	9	•		$\rightarrow$
						q	9	•	Œ	1
4.12 Invasive/alien	species or hyper-abunda	ant species								
4.12.1 Translocate	d species									
						<b>A</b>	<b>a</b>		CET	_
4 12 2 Invasivo/Alia	en terrestrial species						•			
4.12.2 IIIVasive/Alli	en terrestrial species									
						<b>A</b>	9		F	
4.12.3 Invasive/Alic	en freshwater species									
						q	9	<b>(</b> )	Œ	1
4.13 Management	and institutional factors									
4.13.1 Managemen	t system/Management pl	lan			<b>•</b>	q	q	<b>(</b> )	Œ	/
						q		<b>(</b> )	Œ	$\rightarrow$
4.13.2 Legal frame	work				<b>O</b>	q	9	<b>(</b> )	Œ	<i>p</i>
						q	q		Œ	<i>&gt;</i>
4.13.3 Governance					<b>•</b>	q		<b>(</b> )	( <b>4</b>	,
							~3		78	
4 40 4 Managara	4					9	4	<b>Q</b>	Œ.	
4.13.4 Managemen	t activities				•	9	9	•		
						4	9	•		$\rightarrow$
4.13.5 Financial re	sources				<b>O</b>	q	9	•	Œ	$\rightarrow$
						q	9	•	Œ	$\rightarrow$
4.13.6 Human reso	urces				<b>O</b>	q	9	•	Œ	$\rightarrow$
						q	9	•		$\rightarrow$
4.13.7 Low impact	research/monitoring acti	ivities			<b>O</b>	q	9	•	Œ	$\rightarrow$
						q		•	Œ	•
4.13.8 High impact	research/monitoring act	tivities			<b>O</b>	q		•		$\rightarrow$
Legend	Current	Potential	Negative	<ul><li>Positive</li></ul>	<ul><li>Ins</li></ul>	ide		Outsi	de	

# 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	ame				Origin	Trend	
4.1.1 Hous	ing	<b>O</b>	9	<b>a</b>	•	Œ	$\rightarrow$
			9	9	•	Œ	$\rightarrow$
0	Associated by the forter						
Spatial Sca	lle - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						

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Manual   Major visitor accommodation and associated infrastructure   Major visitor accommodation and associated infrastructu								
Figure 1 Procurs on the settinane    Impact   Im		One off or rare						
Mary minuses   Mar								
Impact in the attributes    Agrificate   Agr		Frequent						
Miser  Magamente  Maga	×	On-going						
Management response - Capacity of management to respond  ***Tight Capacity  ***Management September - Capacity of management to respond  ***Management September - Capacity of management to respond  ***Management September - Capacity of management to respond  ***Management September - September	Impact - I	npact on the attributes						
Management to response   Capacity of management   Capac		Insignificant						
Management to respond    Injury   Injur	×	Minor						
Manipulation of management to respond    Mgh. capacity   Mgh.		Significant						
Right capacity   Medium capa		Major						
X Modum cipacity  Items of the last 6 years  Xince Statics  Name	Managem	ent response - Capacity of management to respond						
Ever capacity and / or resources		High capacity						
Trend - Developely and if or resources  Trend - Developer that set 6 years    Common	×	Medium capacity						
Trans		Low capacity						
State   Stat		No capacity and / or resources						
Name	Trend - D	evelopement over the last 6 years						
Name		Decreasing						
Name 4.1.4 Major visitor accommodation and associated infrastructure    Impact	×	Static						
4.1.4 Major visitor accommodation and associated infrastructure		Increasing						
4.1.4 Major visitor accommodation and associated infrastructure  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □								
Spatial scale - Area affected by the factor  Restricted  Localised  Widespread  Temporal scale - Occurence of the impact  Insertict or sporadic  Prequent  On- off or rare  Responsed  Insertict or sporadic  Insertic or	Name							Trend
Spatial scale - Area affected by the factor  Restricted  Localised  Videspread  Temporal scale - Occurence of the impact  Intermittent or sporadic  Frequent  On-going  Impact - Impact - Impact  Insignificant  Major  Management response - Capacity of management to respond  Medium capacity  Medium capacity  Medium capacity  Medium capacity  Low capacity  No capacity and / or resources	4.1.4 Majo	r visitor accommodation and associated infrastructure					·	<b>→</b>
Restricted  X Localised  Extensive  Videspread  Temporal scale - Occurence of the impact  X Intermittent or sporadic  Frequent  Prequent  Insignificant  Insignificant  Major  Management to respond  Major  Management to respond  Management to respond  Management to respond  Medium capacity  Low capacity and / or resources			9	4	4	<b>Q</b>	G	<b>→</b>
Extensive Widespread  Temporal scale - Occurence of the impact  X Intermittent or sporadic Prequent Prequent Impact - Impact - Impact on the attributes Insignificant  X Minor  Major  Management to respond  Major  Management to respond  Management to re	Spatial so	ale - Area affected by the factor						
Extensive Widespread  Temporal = Cocurence of the impact  Temporal = Cocurence of the impact  Intermittent or sporadic  Prequent On-going  Impact = Winor  Insignificant  I		Restricted						
Temporal Secure Cocurence of the impact  Temporal Secure Cocurence of the impact  Intermittent or sporadic  Trequent  On-going  Impact - Impact on the attributes  Insignificant  Infor  Infor  Infor  Major  Manor	×	Localised						
Temporal scale - Occurence of the impact  \[ \text{No intermittent or sporadic} \]  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Impact - Impact on the att		Extensive						
X Intermittent or sporadic X Intermittent or sporadic X Prequent X On-going X Insignificant X Minor X Significant X Major  Management to respond X Major  Management to respond X Nedium capacity X No capacity and / or resources		Widespread						
Intermittent or sporadic  Frequent  On-going  Impact - Iwas on the attributes  Insignificant  Minor  Significant  Major  Management to respond  Migh capacity of management to respond  Medium capacity  Low capacity  No capacity and / or resources	Temporal	scale - Occurence of the impact						
Frequent On-going  Impact - Im		One off or rare						
Impact - Imp	×	Intermittent or sporadic						
Insignificant  Minor Significant Major  Management response - Capacity of management to respond  High capacity Medium capacity Low capacity No capacity and / or resources		Frequent						
Insignificant  Minor  Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources		On-going						
Minor Significant Major  Management response - Capacity of management to respond High capacity Medium capacity Low capacity No capacity and / or resources	Impact - I	npact on the attributes						
Significant  Major  Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources		Insignificant						
Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources	×	Minor						
Management response - Capacity of management to respond  High capacity  Medium capacity  Low capacity  No capacity and / or resources		Significant						
High capacity  Medium capacity  Low capacity  No capacity and / or resources		Major						
Medium capacity  Low capacity  No capacity and / or resources	Managem	ent response - Capacity of management to respond						
Low capacity  No capacity and / or resources		High capacity						
No capacity and / or resources	×	Medium capacity						
Trend - Developement over the last 6 years		Low capacity						

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	Decreasing
×	Static
	Increasing

Name	Impact		Origin		Trend	
4.1.5 Interpretative and visitation facilities	•	9		•	F	<b>P</b>
			9	•		<b>/</b>

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 - De	velopement over the last 6 years			
	Decreasing			
	Static			
×	Increasing			

# 4.2 Transportation Infrastructure

Name	Impact			Origin	Trend
4.2.1 Ground transport infrastructure	•	o 9		• →	
		q	9	•	1

Spatial sca	ale - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread

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Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going Control of the control of t						
Impact - Ir	mpact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	evelopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impac		~	Origin		Trend
4.2.3 Air ti	ransport infrastructure	<b>(1)</b>			•	<b>(</b>	
			<b>A</b>			(F	<b>→</b>
			q	9	•		<b>→</b>
	ale - Area affected by the factor		4				<b>→</b>
Spatial sc	Restricted	<b>(2)</b>	9				<b>→</b>
	Restricted Localised	<b>(2)</b>	व				→
	Restricted  Localised  Extensive	9	q				→
×	Restricted  Localised  Extensive  Widespread	Θ	q				<b>→</b>
×	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact	Θ	q				→
X	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare	9	q				→ ·
×	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic	9	q				→
X	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent	•	q				→
X Temporal	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going	•	q				→
X Temporal	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes	9	q				-
X Temporal X	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant	9	q				
X Temporal	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor	•	q				
X Temporal X	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant	•	q				
X Impact - Ir	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant  Major	9	q				
X Impact - Ir	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant  Major  ent response - Capacity of management to respond		q				
X  Impact - Ir	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant  Major  ent response - Capacity of management to respond  High capacity		q				
X Impact - Ir	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant  Major  ent response - Capacity of management to respond  High capacity  Medium capacity		q				
X  Impact - Ir	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  mpact on the attributes  Insignificant  Minor  Significant  Major  ent response - Capacity of management to respond  High capacity		q				

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Trend - Developement over the last 6 years				
	Decreasing			
×	Static			
	Increasing			

Name	Impact		Origin		Trend	
4.2.4 Marine transport infrastructure	•	9		•		$\rightarrow$
		9	9	•	<b>(</b>	$\rightarrow$

			9	9	•	Œ	<b>→</b>		
Spatial sca	Spatial scale - 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		Impact		Impact		Origin		Trend
4.2.5 Effects arising from use of transportation infrastructure									
		9	9	•	<b>→</b>				

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

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	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	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

## 4.3 Services Infrastructures

Name		Impact	i		Origin	Trend
4.3.2 Rene	1.3.2 Renewable energy facilities		9	q	•	1
			9			<b>→</b>
Snatial sc	ale - 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 On-going					
Impact - II	npact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Managem	ent response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					

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

Name	Impact		Impact		Impact		Origin	Trend
4.3.4 Localised utilities	•	9	9	•	$\rightarrow$			
		9	9	•	1			

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 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

# 4.4 Pollution

Name	Impact	į		Origin		Trend
4.4.1 Pollution of marine waters						
		<b>A</b>	9		<b>ઉ</b>	<b>&gt;</b>

Spatial sca	lle - 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 - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impac	t		Origin		Trend
	nd water pollution						Trend
	nd water pollution	Impac	t ¶	9		Œ	Trend ⇒
4.4.2 Groun	nd water pollution lle - Area affected by the factor			9			Trend →
4.4.2 Groun				q			Trend →
4.4.2 Groun	lle - Area affected by the factor			q			Trend  →
4.4.2 Groun	lle - Area affected by the factor  Restricted			q			Trend
4.4.2 Groun	lle - Area affected by the factor  Restricted  Localised			ब			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive			q			Trend  →
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread			ब्			Trend  →
4.4.2 Ground Spatial sca	Restricted  Localised  Extensive  Widespread  scale - Occurrence of the impact			d			Trend
4.4.2 Ground Spatial sca	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare			व			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread  Cocurence of the impact Untermittent or sporadic			ब			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent			द्			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread Cocale - Occurence of the impact Intermittent or sporadic Frequent On-going			व			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread Cone off or rare Intermittent or sporadic Frequent On-going Cone of the attributes Insignificant Minor			व			Trend
4.4.2 Ground Spatial sca	Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant			द्			→
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread Grade - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Insignificant Minor Significant Major			द्			Trend
4.4.2 Ground Spatial sca	Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant  Minor  Significant			व			Trend
4.4.2 Ground Spatial sca	Restricted Localised Extensive Widespread Grade - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Insignificant Minor Significant Major			द्			Trend

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

4.4.3 Surface water pollution	→
	<b>→</b>

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 Control of the Control of t
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ont 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

# 4.5 Biological resource use/modification

Localised

Name	Impact			Origin		Trend
4.5.1 Fishing/collecting aquatic resources						
		9	9	•	Œ	$\rightarrow$
Spatial scale - Area affected by the factor						
Restricted						

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	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 - De	velopement over the last 6 years					
	Decreasing					
	Static					
0.4	Increasing					
×	modality					
	Increasing	Impost		Origin		Trond
Name		Impact		Origin		Trend
Name	istence hunting	Impact	q	Origin	Œ	Trend ⇒
Name						
Name 4.5.9 Subsi						
Name 4.5.9 Subsi	istence hunting					
Name 4.5.9 Subsi	istence hunting lle - Area affected by the factor					
Name 4.5.9 Subsi	istence hunting  Ile - Area affected by the factor  Restricted  Localised  Extensive					
Name 4.5.9 Subsi	Istence hunting  Ile - Area affected by the factor  Restricted  Localised  Extensive  Widespread					
Name 4.5.9 Subsi	Istence hunting  Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact					
Name 4.5.9 Subsi	istence hunting  Ile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare					
Name 4.5.9 Subsi	istence hunting  Ille - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic					
Name 4.5.9 Subsi	istence hunting  ille - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent					
Name 4.5.9 Subsider Spatial scales X	Istence hunting  Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going					
Name 4.5.9 Subsider Spatial scales and scales and scales and scales are scales and scales and scales are scales and scales are scales and scales are scale	istence hunting  Ile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes					
Name 4.5.9 Subsider Spatial scales X	Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant					
Name 4.5.9 Subsider Spatial scales and scales and scales and scales are scales and scales and scales are scales and scales are scales and scales are scale	Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Gazle - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant  Minor					
Name 4.5.9 Subsider Spatial scales and scales and scales and scales are scales and scales and scales are scales and scales are scales and scales are scale	Istence hunting  Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Inpact on the attributes  Insignificant  Minor  Significant					
Name 4.5.9 Subsider Spatial scales and scales are scale	Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Cocale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  pact on the attributes  Insignificant  Minor  Significant  Major					
Name 4.5.9 Subsider Spatial scales and scales are scale	Istence hunting  Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Inpact on the attributes  Insignificant  Minor  Significant					

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

# 4.7 Local conditions affecting physical fabric

Name		Impact			Origin		Trend		
4.7.1 Wind		0	9		•	<b>G</b>	$\rightarrow$		
				9	•	<b>G</b>	<i>P</i>		
Spatial scale	Spatial scale - 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 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	i		Origin		Trend
4.7.2 Relative humidity	<b>O</b>	q		•	Œ	$\rightarrow$
			9		<b>G</b>	7

Spatial sca	scale - Area affected by the factor	
	Restricted	

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	Localised						
•	Extensive Widespread						
X	cale - Occurence of the impact						
remporars	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Impact 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	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name 4.7.3 Temp	nraturo.	Impact	9		Origin	Œ	Trend
4.7.5 Temp	oracui C		9	ø		œ.	3
			7	-1		G	
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						
	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
4.7.6 Water	(rain/water table)	<b>O</b>	q	•	Œ	$\rightarrow$
			q		F	<b>/</b>

4.7.6 Water	(rain/water table)	•	9		•	C	$\rightarrow$
			q			<b>G</b>	<i>P</i>
Spatial sca	Spatial scale - 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
4.7.7 Pests						
		q	9	•	<b>G</b>	<i>P</i>

Snatial sca	le - Area affected by the factor			
Opuliai 500	Alou direction by the factor			
	Postriotod			

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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	Trend

Name	Impact	pact		Origin		Trend
4.7.8 Micro-organisms						
		9	9	•	Œ	<b>/</b>

Re	Restricted
× Lo	ocalised
E	Extensive
W	Videspread
Temporal scale	lle - Occurence of the impact
0	One off or rare
× In	ntermittent or sporadic
Fr	Frequent
0	On-going On-going
Impact - Impac	ct on the attributes
In	nsignificant
×	Minor
Si	Significant
M	Major
Management r	response - Capacity of management to respond
Hi	ligh capacity

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×	Medium capacity
	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	Name				Origin		Trend
4.8.1 Ritual	/Spiritual/Religious and associative uses	<b>O</b>	9	<b>A</b>	•	C	1
Snatial sca	le - Area affected by the factor						
Opuliar sou							
	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	act		Origin		Trend
4.8.2 Society's valuing of heritage	<b>O</b>	<b>P</b>	9	•	C	

Spatial sca	le - Area affected by the factor
	Restricted

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×	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 - De	velopement over the last 6 years					
	Decreasing					
	Static					
×						
^	Increasing					
~	Increasing					
Name		Impact			Origin	Trend
Name	enous hunting, gathering and collecting	Impact	q	9	Origin	Trend  →
Name				9		
Name 4.8.3 Indige				q		
Name 4.8.3 Indige	enous hunting, gathering and collecting			q		
Name 4.8.3 Indige	enous hunting, gathering and collecting le - Area affected by the factor			q		
Name 4.8.3 Indige	enous hunting, gathering and collecting  le - Area affected by the factor  Restricted			q		
Name 4.8.3 Indige	enous hunting, gathering and collecting  lle - Area affected by the factor  Restricted  Localised			व		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive			q		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread			व		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact			q		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lie - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact			व		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic			व		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent			व		
Name 4.8.3 Indige Spatial sca	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going			q		
Name 4.8.3 Indige Spatial sca  X  Temporal s	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes			व		
Name 4.8.3 Indige Spatial sca  X  Temporal s	enous hunting, gathering and collecting  lie - Area affected by the factor  Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant			q		
Name 4.8.3 Indige Spatial sca  X  Temporal s	enous hunting, gathering and collecting  lile - Area affected by the factor  Restricted  Localised  Extensive  Widespread  cale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant  Minor			व		

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×	High capacity											
	Medium capacity											
	Low capacity											
	No capacity and / or resources											
Trend - Developement over the last 6 years												
	Decreasing											
×	Static											
	Increasing											
Name		Impact		Origin		Trend						
4.8.4 Chan	ges in traditional ways of life and knowledge system	<b>O</b>	4	9	•	<b>F</b>	7					
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 - Impact 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			i		Origin		Trend					
4.8.5 Identity, social cohesion, changes in local population and community		<b>O</b>	9	9	•	<b>G</b>	<i>&gt;</i>					
Spatial sca	le - Area affected by the factor											
×	Restricted											
	Localised											

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	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - I	mpact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Managem	nent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - D	evelopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name	note of to wise Misitation ID associate	Impac		en.	Origin		Trend
4.0.0 IIIIp	acts of tourism/Visitation/Recreation	<b>O</b>	9	9	<b>.</b>	E	<b>→</b>
Spatial so	cale - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						
**	Widespread						
Tempora	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
	mpact on the attributes						
·							
	Insignificant						
	Insignificant  Minor						
×	Minor						
×	Minor Significant						
	Minor Significant Major						
Managem	Minor Significant Major ment response - Capacity of management to respond						
	Minor Significant Major						

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

### 4.9 Other human activities

Name		Impact		Origin	Trend		
4.9.1 Illegal	activities						
				9	•	<b>G</b>	<b>→</b>
Spatial sca	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						

### 4.10 Climate change and severe weather events

Name	Impact			Origin	Trend	
4.10.1 Storms	<b>O</b>	q	9	•	Œ	<b>/</b>
		q	9	•	<b>(</b>	1
Spatial scale - Area affected by the factor						

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	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 - De	velopement over the last 6 years				
	Decreasing				
	Static				
×	Increasing				
Name		Impact		Origin	Trend
Name 4.10.2 Floo	ding	Impact			Trend
	ding	Impact	9	Origin	Trend
4.10.2 Floo	ding lle - Area affected by the factor	Impact	9		Trend
4.10.2 Floo		Impact	q		Trend
4.10.2 Floo	lle - Area affected by the factor	Impact	q		Trend
4.10.2 Floo	ele - Area affected by the factor  Restricted	Impact	9		Trend
4.10.2 Floo Spatial sca	Restricted Localised	Impact	व		Trend
4.10.2 Floo	Restricted  Localised  Extensive	Impact	ब्ब		Trend
4.10.2 Floo	lle - Area affected by the factor  Restricted  Localised  Extensive  Widespread	Impact	4		Trend
4.10.2 Floo	Restricted  Localised  Extensive  Widespread  scale - Occurrence of the impact	Impact	4		Trend
4.10.2 Floo Spatial sca	Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare	Impact	व		Trend
4.10.2 Floo Spatial sca	Restricted Localised Extensive Widespread Cocurence of the impact Untermittent or sporadic	Impact	ब		Trend
4.10.2 Floo  Spatial sca	Restricted Localised Extensive Widespread Cocale - Occurence of the impact Intermittent or sporadic Frequent	Impact	4		Trend
4.10.2 Floo  Spatial sca	Restricted Localised Extensive Widespread  scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going	Impact	9		Trend
4.10.2 Floo  Spatial sca	Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going	Impact	q		Trend
4.10.2 Floo  Spatial sca  X  Temporal s	Restricted Localised Extensive Widespread scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going spact on the attributes Insignificant Minor	Impact	व		Trend
4.10.2 Floo	Restricted Localised Extensive Widespread Gale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Spact on the attributes Insignificant	Impact	9		Trend

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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
4.10.3 Drought						
		9	9	•	<b>(</b>	7

		4	4	<b>(</b> )	G	
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	Ė		Origin		Trend
4.10.5 Changes to oceanic waters						
		q	9	•	<b>(</b>	

Spatial sca	ial 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	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.10.6 Tem	perature change						
			9	9	•	Œ	<b>/</b>

Name	Impact			Origin		Trend
4.10.6 Temperature change						
		<b>P</b>	<b>A</b>	•	<b>G</b>	<b>P</b>

		4	9	•	C.	
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	ent 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
4.10.7 Othe	climate change impacts						
			q	9	•	<b>G</b>	1
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						
Managemei	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						

### 4.11 Sudden ecological or geological events

Name	Impact			Origin		Trend
4.11.3 Tsunami/Tidal wave						
		l	9	•	F	$\rightarrow$

Spatial scale - Area affected by the factor

	Restricted						
	Localised						
•							
×	Extensive						
	Widespread						
	scale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going Control of the Control of t						
Impact - Ir	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managem	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						
Name	sion and siltation/Deposition	Impac	t <i>©</i>	<i>-</i>	Origin	ng.	Trend
4.11.5 Ero	sion and sittation/Deposition		9	9	0	<b>E</b>	>
			·	·			
Spatial sc	ale - 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 On-going						
Impact - In	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managem	Major ent 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
4.11.6 Fire (	wildfire)	0	9	9	•		<b>→</b>
			9	9	•	<b>G</b>	1
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						

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

Name	Impact			Origin		Trend
4.12.1 Translocated species						
		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 - De	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name	sive/Alien terrestrial species	Impact			Origin		Trend
4. 12.2 IIIVa	nveralien tenestrial species		man .	man .		78	_
			7	-1		Ģ	
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						

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×

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		Impac			Origin		Trend
4.12.3 Inva	sive/Alien freshwater species		-01	-3	•	Œ	7
			9	9	<b>Q</b>	G	
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						

### 4.13 Management and institutional factors

No capacity and / or resources

Trend - Developement over the last 6 years

Decreasing
Static
Increasing

Name	Impact	:		Origin	Trend	
4.13.1 Management system/Management plan	<b>O</b>	q	9	•	Œ	P
		q		•	<b>ઉ</b>	$\rightarrow$

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Snatial sc	ale - Area affected by the factor						
Opatiai 30	Restricted						
	Localised						
	Extensive						
×	Widespread						
remporai	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Ir	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	evelopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impac		~9	Origin		Trend
4.13.2 Leg	al framework		9	9	•	<b>E</b>	7
			-1	-1		G	
Spatial sc	ale - 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 - Ir	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						

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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	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.13.3 Gov	rnance	•	9		•	<b>G</b>	1
			9	9	•	C	7
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						
	Out of						

Name	Impact			Origin	Trend	
4.13.4 Management activities	•	9	9	•		1
		<b>P</b>	9	•		$\rightarrow$

### Spatial scale - Area affected by the factor

Increasing

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Localised  Extensive  X Widespread  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  X High capacity Medium capacity Low capacity No capacity and / or resources  Trand - Development over the last 6 years  Decreasing Static  X Increasing								
Exceptive  X		Restricted						
More provided   More provide		Localised						
Temporal scale - Occarence of the impact  Size of or rare  knowledge of special Scale - Occarence of the impact  X On-pary  Impact - Impact on the attributes  isolarizant  Alteror  X Significant  Alteror  Marcor  M		Extensive						
One of or rane   Invermitter or sounded	×	Widespread						
Intermediate or operation:  Firequent  X	Temporal s	scale - Occurence of the impact						
Frequent  X Organy  Impact = Impact cen the attributes  Inspiricent  Major  X System  Major  Management response - Capacity of management to respond  X High copacity  No capably and for resources  Tend - Development over the last 8 years  Decreasing  Suite  X Indicate a forested by the factor  Spatial scale - Area affected by the factor  Restroad  Localeed  Excassion  X Wistognand  Congrant  C		One off or rare						
Management and a stributes		Intermittent or sporadic						
Impact - Impact on the attributes    Incogniticant   Impact   Impa		Frequent						
Insignificant  Minor  X Significant  Malpr  Management response - Capacity of management to respond  X High capacity  Mosquadity  Loc equacity  No capacity of resources  Dorrosong  Some  X Increasing  Name  A13.6 Financial resources  Postficial  Restricted  Consided  Extraction  X Widespecial  Consided  Extraction  X Widespecial  Consolid of ariae  Infilated  Infilated  Consolid of ariae  Infilated	×	On-going On-going						
More  X Significant  Major  Management response - Capacity of management to respond  X Hybr capacity  Medium capacity  Love capacity  No capacity and for resources  Trand - Developement over the last 6 years  Decreasing  Soatic  X Increasing  Name  Minore  Management response - Capacity of management to respond  A13.5 Financial resources  Spatial scaler - Area affected by the factor  Restricted  Localized  Localized  Congrid or rare  Restricted  Congrid or rare  Restricted  Localized  Temporal scaler - Cocurence of the impact  X One off or rare  Internation of the attributes  Internation of the attributes  Integrated  Minore  X Significant  Minore  X Significant	Impact - Im	pact on the attributes						
Significant   Major		Insignificant						
Management response - Capacity of management to respond  X High capacity Medium capacity Low capacity No capacity No capacity No capacity and or resources Trend - Development over the last 6 years    Docteasing   Stafe   S		Minor						
Management response - Capacity of management to respond    High capacity	×	Significant						
High capacity   Medium capacity   Low capacity   Low capacity   No capacity   No capacity   No capacity   No capacity   Static		Major						
Medium capacity  Low capacity  No capacity and / or resources  Trend - Developement over the last 6 years  Decreasing  Static  X Increasing  Name  A1.5. Financial resources  Spatial scale - Area affected by the factor  Resilicand  Localised  Extensive  X Widespread  Temporal scale - Occurence of the impact  One off or rare Intermittent or spondic Intermittent or spondic Intermittent or spondic Integration Insignificant  Minor  X Significant  Minor  X Significant  Minor	Manageme	nt response - Capacity of management to respond						
Low capacity No capacity and / or resources  Trend - Development over the last 6 years  Decreasing State  X Increasing  Name  4.13.5 Financial resources  Restricted  Localised  Extensive  X Widespread  Temporal scale - Occurence of the impact  Con off or rare  Intermittent or sporadic  Frequent  X On-going  Impact Origin  Trend  Trend  Trend  Trend  A.13.5 Financial resources  Intermittent or sporadic  Frequent  X On-going  Impact - Impact on the attributes  Insignificant  Milnor  X Significant  Milnor	×	High capacity						
No capacity and / or resources  Trend - Development over the last 8 years    Decreasing   Static   Sta		Medium capacity						
Trend - Development over the last 6 years    Decreasing   Static		Low capacity						
Decreasing Static  X Increasing  Name		No capacity and / or resources						
Static  X Increasing  Name	Trend - De	velopement over the last 6 years						
Name    Impact		Decreasing						
Name 4.13.5 Financial resources  Origin Trend 4.13.5 Financial resources  Origin Trend Origin O		Static						
Spatial scale - 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 - Impact on the attributes  Insignificant  Minor  X Significant  Major	×	Increasing						
Spatial scale - 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 - Impact on the attributes  Insignificant  Minor  X Significant  Major								
Spatial scale - 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 - Impact on the attributes  Insignificant  Minor  X Significant  Major			Impac	t _		Origin		Trend
Spatial scale - 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 - Impact on the attributes  Insignificant  Minor  X Significant  Major	4.13.5 Fina	ncial resources		<b>E</b>	<b>4</b>	<b>Q</b>	Œ	<b>→</b>
Restricted  Localised  Extensive  Widespread  Temporal scale - Occurence of the impact  One off or rare Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  X Significant  Major				-1	-1	9	G	
Localised  Extensive  Widespread  Temporal scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major	Spatial sca	le - Area affected by the factor						
Extensive  Widespread  Temporal scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major		Restricted						
Widespread Temporal scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Impact - Impact on the attributes Insignificant Minor Significant Major		Localised						
Temporal scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  X Significant  Major		Extensive						
One off or rare  Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major	×	Widespread						
Intermittent or sporadic  Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major	Temporal s	scale - Occurence of the impact						
Frequent  On-going  Impact - Impact on the attributes  Insignificant  Minor  Significant  Major		One off or rare						
Minor Significant Major		Intermittent or sporadic						
Impact - Impact on the attributes  Insignificant  Minor  Significant  Major		Frequent						
Insignificant  Minor  Significant  Major	×	On-going On-going						
Minor  Significant  Major	Impact - Im	pact on the attributes						
X Significant Major		Insignificant						
Major		Minor						
	×	Significant						
Management response - Capacity of management to respond		Major						

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

Name	Impact	Impact		Origin		Trend
4.13.6 Human resources	•	4	9	•	Œ	$\rightarrow$
		q	9	•		$\rightarrow$

		4	4	(I)	<b>→</b>
Spatial se	cale - Area affected by the factor				
	Restricted				
	Localised				
×	Extensive				
	Widespread				
Tempora	scale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - I	mpact on the attributes				
	Insignificant				
×	Minor				
	Significant				
	Major				
Managen	ent response - Capacity of management to respond				
	High capacity				
×	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - D	evelopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				

Name	Impact		Origin		Trend	
4.13.7 Low impact research/monitoring activities	<b>O</b>	q	9	•	Œ	<b>→</b>
		<b>A</b>		•	Œ	•

Spatial sca	ale - Area affected by the factor
	Restricted
	Localised

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×	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	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				
Name		In a set		Outsile	T
Name	n impact research/monitoring activities	Impact		Origin	Trend →
	n impact research/monitoring activities	Impact	9	Origin	Trend →
	n impact research/monitoring activities				Trend →
4.13.8 High	n impact research/monitoring activities ale - Area affected by the factor				Trend →
4.13.8 High					Trend →
4.13.8 High	ale - Area affected by the factor				Trend ⇒
4.13.8 High	Restricted  Localised  Extensive				Trend →
4.13.8 High	Restricted  Localised  Extensive  Widespread				Trend →
4.13.8 High	Restricted  Localised  Extensive				Trend →
4.13.8 High	Restricted Localised Extensive Widespread scale - Occurence of the impact One off or rare				Trend →
4.13.8 High	Restricted Localised Extensive Widespread  Cocurence of the impact Untermittent or sporadic				Trend →
4.13.8 High	Restricted Localised Extensive Widespread scale - Occurence of the impact Intermittent or sporadic Frequent				Trend →
4.13.8 High	Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going				Trend →
4.13.8 High	Restricted Localised Extensive Widespread  Scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going				Trend →
4.13.8 High	Restricted  Localised  Extensive  Widespread  scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  spact on the attributes  Insignificant				Trend →
4.13.8 High  Spatial sca  X  Temporal s	Restricted Localised Extensive Widespread scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going space on the attributes Insignificant Minor				Trend →
4.13.8 High	Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Inpact on the attributes  Insignificant  Minor  Significant				Trend →
4.13.8 High  Spatial sca  X  Temporal s	Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Apact on the attributes  Insignificant  Minor  Significant  Major				Trend →
4.13.8 High  Spatial sca  X  Temporal s	Ide - Area affected by the factor  Restricted  Localised  Extensive  Widespread  Scale - Occurence of the impact  One off or rare  Intermittent or sporadic  Frequent  On-going  Inpact on the attributes  Insignificant  Minor  Significant				Trend →

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×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement 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

NA

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
4.18.1.1	Largest sand island in the world. 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, including more than 40 kilometres of strikingly coloured sand cliffs, as well as spectacular blowouts. Containing a diverse range of features that are of exceptional natural beauty.	×			
4.18.1.2	Majestic remnants of tall rainforest growing on tall sand dunes (a phenomenon believed to be unique in the world). The development of rainforest vegetation communities, with trees up to 50 metres tall on coastal dune systems at the scale found on Fraser Island, is not known to occur elsewhere in the world	×			
4.18.1.3	Perched freshwater dune lakes producing a spectacular and varied landscape; half of the world's perched freshwater dune lakes occur on the island. World's largest unconfined aquifer on a sand island.	×			
4.18.1.4	The process of soil formation on the island is also unique, since as a result of the successive overlaying of dune systems, a chronosequence of podzol development from the younger dune systems on the east to the oldest systems on the west. Podzols change from rudimentary profiles less than 0.5 metres thick to giant forms more than 25 metres thick (the latter far exceeds known depths of podzols anywhere else in the world)	×			
4.18.1.5	Since listing, patterned fens have been discovered on the property, which along with those at Cooloola, are the only known examples of sub-tropical patterned fens in the world. Fens support an unusual number of rare and threatened invertebrate and vertebrate species.	×			

#### 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 do not limit the ability to maintain the property's Outstanding Universal Value but they could be improved

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

The boundaries  $\mbox{\it are}\mbox{\it known}\mbox{\it by}\mbox{\it both}$  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

Recognition of the property's boundaries and the implications of World Heritage recognition by all land managers and the general community/landowners could be improved. The proposed expansion of the property to include the Cooloola extension area may contribute to increased management effectiveness in the longer-term.

#### 5.2. Protective Measures

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

All World Heritage properties in Australia are 'matters of national environmental significance' protected and managed under national legislation, the Environment Protection and Biodiversity Conservation Act 1999 (Cth). By law, any action that has, will have or is likely to have a significant impact on the World Heritage values of a World Heritage property must be referred to the responsible Minister for consideration. This includes impacts originating from outside the property boundary.

At the time of listing, Commonwealth legislation governing the management of World Heritage Areas was the World Heritage Properties Conservation Act 1983 ('the WHPC Act'). The WHPC Act enabled the Commonwealth to make regulations to protect Australia's World Heritage Properties from threatening actions identified in

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the regulations. This legislation, in effect, operated as a last resort mechanism for stopping specific actions.

In 1999, the Environment Protection & Biodiversity Conservation Act 1999 ('the EPBC Act') was introduced. This Act replaces and significantly improves on the WHPC Act, by ensuring up-front protection and improved management for the world heritage values of Australia's World Heritage Properties.

Source: Periodic Reporting Cycle 1; Periodic Reporting Cycle 2

#### Comment

The EPBC Act is currently being reviewed. Initial findings from the independent review suggest that a "fundamental reform of national environmental law is required, and new, legally enforceable National Environmental Standards should be the foundation. Standards should be granular and measurable, providing flexibility for development, without compromising environmental sustainability". It is unknown whether the review will result in actual legislative amendments at this stage.

# 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

1992 /

Nature Conservation Act - https://www.legislation.qld.gov.au/browse/inforce Legislative / 2003 /

Aboriginal Cultural Heritage Act - https://www.legislation.qld.gov.au/browse/inforce Legislative / 2004 /

Environmental Protection Act - https://www.legislation.qld.gov.au/browse/inforce

Legislative / 2016 /

Planning Act - https://www.legislation.qld.gov.au/browse/inforce Legislative /

2006 /

Recreation Areas Management Act - https://www.legislation.qld.gov.au/browse/inforce Legislative /

# 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?

An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation

# 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?

An adequate legal framework exists for the broader setting of the World Heritage property, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property

#### 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

The EPBC Act establishes WHAs as Matters of National Environmental Significance. Any actions (proposed development etc) which may have an impact on Matters of National Environmental Significance are required to be referred to the Commonwealth for assessment under the EPBC Act. Fraser Island WHA sits within national park estate. Management and protection of all of Queensland's Terrestrial World Heritage properties are carried out under the State's environmental legislation (see 5.2.2).

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

An improved ongoing national, environmental monitoring system that informs the 5-yearly SOE Reporting would enhance the Commonwealth's capacity to enforce legislation and/or regulation. This would also require a substantial increase in resourcing. DES's completion of a property specific World Heritage Strategic Plan which will inform the Values Bases Management Framework for planning and management of the national park component of the property, will assist in better maintenance of the OUVs.

#### 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 at provincial/regional level

#### If 'Other', please specify

Does not allow more than one box to be selected.

#### 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 management plan

An annual work plan or business plan

A visitor/visitation management plan

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

On-ground management of the National Park tenure (which represents ~99% of the island) is the responsibility of the DES (QPWS), guided by the Great Sandy Region Management Plan 1994. A new management plan is being developed under a Values Based Management Planning Framework, with finalisation of the plan pending consultation. This management plan will replace the current expired plan and incorporate thematic strategies for fire, pest, visitor management, monitoring and research for example.

#### 5.3.4 - Management Documents

#### Comment

•Great Sandy Region Management Plan 1994 (current, to be replaced with a Values Based Management Plan) •Great Sandy Marine Park 2006 (under review)
•Great Sandy Conservation Park Management Plan 2000 (current) •Fraser Coast Planning Scheme 2014 (current) •Fraser Coast Waste Strategy 2019-2029
(current) •Fraser Coast Biosecurity Plan 2019-22 (current) •Fraser Coast Regional Council Local Law No. 3 (Community and Environment Management) 2011
•Landscape Weed Management Plan for Fraser Island 2011

## 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:

Collaborative development of a climate change impact summary and adaptation plan for the property is currently underway. Relevant policies include the Queensland Climate Adaptation Strategy 2017 and the Biodiversity and Ecosystems Climate Adaptation Plan 2018. A climate science program is maintained and has developed high-resolution climate projection datasets that can inform climate risk assessments and adaptation decision for the property, complimenting climate projection work by BOM/CSIRO.

### 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

NA

# 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 coordination between the range of administrative bodies involved in the management of the property, but it could be improved

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

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

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

The management system is being  $\ensuremath{\textbf{only}}$   $\ensuremath{\textbf{partially}}$  implemented

#### 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			×		

# 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				×	
5.3.17.6	The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property				×	

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

The management system / planning document is currently being updated and planning (including climate change planning) will be undertaking with the local community, experts and the Butchulla First Nations people as well as relevant scientific expertise.

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

#### 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)	0 %	0 %
6.1.1.7	Governmental (regional/provincial/state)	0 %	0 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
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	0 %	0 %
		Total 0 %	Total 0 %

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

Australia cannot provide the requested data for 6.1, as funding is spread across a large number of different programs and priorities which may have multiple benefits for particular properties. That is, it is not possible to disaggregate the funding component attributed to each property. Funding comes from the State Government, Commonwealth Government, commercial activities and other revenues.

#### 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

The day to day management and funding for the management of this property is provided by the Queensland Government. It is estimated that the Australian Government contributes about 2% of funding, including for an Executive Officer, support for a World Heritage Advisory Committee and a 2019 Australian Heritage Grant for waste management on the island.

# 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	70 %	50 %
6.1.6.2	Women	30 %	50 %
		Total 100 %	Total 100 %

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

Human resources are adequate for management needs

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

# 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	Good

Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Fair
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 partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff

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

The site property managers (Queensland Parks and Wildlife Service) employ a highly trained professional team of rangers and administrators, some of whom are Butchulla First Nation peoples. The property managers are also partnering with the Butchulla First Nations people at the community level and increasing the capacity of the Butchulla Land & Sea Rangers to manage the property through enhanced training programs.

#### 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 small amount of research, but it is not planned

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

Research results are shared with local communities and some national agencies

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

There is a draft thematic strategy for research and monitoring which directs new learnings to a better understanding of OUV, this draft strategy is partly derived from a statewide QPWS research prospectus. New research is largely dependant on external researchers, final reports and papers are available online pending the level of circulation taken by the researcher. Research permits require reports to be provided to the Department of Environment and Science at the conclusion of a project

#### 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	Poor
Local/municipal authorities	Fair
Indigenous peoples	Fair
Landowners	Fair
Women	Not applicable
Youth/children	Poor
Researchers	Good
Local visitors	Poor
National/international tourists	Fair
Tourism industry	Poor
Local businesses and industries	Poor

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NGOs	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please describe	

# 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 limited and ad hoc education and awareness programme for children and/or youth

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

Local communities
Local/municipal authorities
Indigenous peoples
Landowners
Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries

# 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	Fair
Site museum	Poor
Information booths	Fair
Guided tours	Fair
Trails/routes	Fair
Printed information materials	Good
Online (website, social media, etc.)	Good
Transportation facilities	Fair
Other	Poor
If 'Other' is selected, please specify	Toilets and other essential services are maintained in the National Park by QPWS and the townships by Fraser Coast Regional Council. Council facilities – particularly at Eurong, do need to be upgraded.

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

Interpretation within the property and local community would benefit from a dedicated focus on World Heritage and a commitment to develop and deliver an ongoing education program aimed at information and awareness-raising across stakeholders and visitors to the property. Interpretative materials on the island vary from dingo safety/warning signage to extensive displays – for example at Lake Mckenzie (Boorangoora), with a focus on visitor management rather than the World Heritage values.

### 9. Visitor Management

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

215,829 / 273,369 / 269,295 / 281,171 / 287,002 /

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

Entry tickets and registries
Transportation services
Other
•Vehicle permits for the RAM Area • Camping permits in the National Park

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

Two overnight stays

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

In 2019, over 35,000 camping permits were issued, with nearly 110,000 visitors spending more than 274,000 visitor nights on the island, an average of almost 2.5 nights per person. These figures are down on 2018 with a 9% decrease in bookings, 13% decrease on people and 1% decrease in visitor nights. Source: K'gari (Fraser Island) 2019 Report, prepared by the QPWS&P Natural Resource Management Team, Great Sandy Area, K'gari (Fraser Island), Department of Environment and Science.

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

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

The tourism industry is considered to be a major beneficiary from the World Heritage property. Spend data for the Fraser Coast Region - not Fraser Island K'gari specifically is below: 1. Domestic tourist - \$171 per person per day. 2. International tourist - \$81 per person per day.

# 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 strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation

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

A variety of strategies have been developed to help guide visitation to the World Heritage Property. A draft visitor management thematic strategy is awaiting finalisation under the Values Based Management Framework to include consideration of OUV in an updated document.

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

Visitor use of the World Heritage property is managed but improvements could be made

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

No

### If a different system, please specify

# 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 limited 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 many locations, but not 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? Fees are collected, and make some contribution to the management of the World Heritage property

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

Yes

### If 'Yes', please specify

Many of the tourism providers on Fraser Island-K'gari are award-winning or Eco-accredited for their sustainable tourism initiatives. Kingfisher Bay Resort holds six Australian Tourism Awards and nine Queensland Tourism Awards for Ecotourism and Development and won a place in the Queensland Tourism Awards Hall of Fame after winning the 2006 Steve Irwin Ecotourism Award – see https://www.kingfisherbay.com/eco-tourism.html Drop Bear Adventures a second example, work to reduce waste and actively conserve the environment on their eco-tours – see

https://www.dropbearadventures.com.au/2018/05/18/eco-tourism-on-fraser-island-doing-our-part-to-keep-kgari-beautiful/ Tour Operators efforts are however challenged by constraints applied to island – for example there is currently no green waste or recycling options available for the island's waste management, and tourism resorts are largely reliant on diesel power generation.

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

Yes

#### If 'Yes', please specify

The benefits of tourism are definitely shared by the Fraser Coast (and to a lesser degree Queensland) community. Benefits are economic (with jobs provided through tourism, hospitality, retail transport conservation and Park Management). There is also an active creative art industry on the Fraser Coast (both Indigenous and non-Indigenous). As well as providing direct employment, tourism indirectly supports a variety of services including water distribution, roads/transport services, health services, additional retail, leisure, sport and entertainment facilities. The population of the Fraser Coast is also well-served with airports, roads, schools, health services and hospitals. Since the Native Title determinations in 2014 and 2019, social and cultural benefits are beginning to flow within the Butchulla community and this is having a positive impact on the World Heritage property, and the Fraser Coast's sense of identity. There is only very limited direct conservation benefit derived from the tourism industry.

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

Additional research and monitoring of total tourist numbers could assist with management activities. Information on total visitation numbers to the World Heritage property (not just the National Park camp grounds) and research into visitor stay, tourism expenditure, benefits and effectiveness will assist with planning and management. QPWS are developing an Integrated Permit System for commercial operators - the project timeframe is currently approximately 12 - 18 months.

#### 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?

	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			×	
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

Once a management plan is adopted under the Values Based Management Framework it is intended that evaluating and analysing how we are performing will help us to understand how effectively we are managing the park, and how to adapt and improve in future. Evaluating and reporting on performance is intended to show QPWS is using public resources efficiently, prioritising activities which protect park values, and always trying to improve our management.

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

World Heritage managers/coordinators and staff	Poor
Local/municipal authorities	Poor
Local communities	Fair
Indigenous peoples	Poor
Landowners	Poor
Women	Not applicable
Researchers	Poor
Tourism industry	Poor
Local businesses and industry	Not applicable
NGOs	Poor
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.

In 2001 the World Heritage Committee requested further information on the proposed Visitor Management Strategy and welcomed "the review of the Great Sandy Regional Management Plan and its explicit recognition of Fraser Island as a World Heritage area requiring special management plans and legislative frameworks to protect the World Heritage site for perpetuity". The managing agency is currently undertaking climate adaptation planning and preparing a property specific World Heritage Strategy.

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

The managing agency will prepare a property specific World Heritage Strategic Plan which will inform the Values Bases Management Framework for planning and management of the national park component of the property (98%). The framework has a Health Check component which requires regular monitoring. The framework also includes a thematic strategy for research and monitoring which will direct research and monitoring to better understand and maintain OUVs.

#### 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 no known and recognised buffer zone	×				
		^				
5.2	Protective Measures					
5.2.3	An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	×				
5.2.4	The property has <b>no buffer zone</b>					
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	×				
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					
5.3.11	There is <b>coordination</b> between the range of administrative bodies involved in the management of the property, <b>but it could be improved</b>	×				
5.3.12	The management system/plan is only partially adequate to maintain the property's Outstanding Universal Value	×				
5.3.13	The management system at the property is only being partially implemented					
5.3.17	• In a limited manner, the management system of the World Heritage property does contribute to gender equality					
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					
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property					
6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff					
7	Scientific Studies and Research Projects					
7.2	There is a small amount of research in the World Heritage property but it is not planned	×				
8	Education, Information and Awareness Building					
8.2	There is a limited and ad hoc education and awareness programme for children and/or youth	×				
9	Visitor Management					
9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation					
9.9	Visitor use of the World Heritage property is managed but improvements could be made					
9.11	There is limited cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation					
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	Please select 1 more issues.					
□ 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

4.7 Local conditions affecting physical fabric

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4.7.3	Temperature	Criterion (ix): TI property repres an outstanding example of sigr ongoing biologi processes. Incr temperature ma result in impact biodiversity.	ents will un change planning p	anaging agency dertake climate e adaptation ng. The results incorporated into erm planning, h a World ge Management gy (entire ty) and Values Management Vational Park)	Mana a Hea comp requir monit under mana ensur check	Values Based gement Plan has lith Check onent which es regular oring to be taken. The ging agency will e that these is consider utes of OUV.		be compl 2023.	eted	and W	nsland Parks fildlife Service the Department vironment and ce.	pro pre- ove	threat to perty - c	urrent indicate an ease in
4.7.7		Pests	s											
4.10	Climate chan	ge and severe	weather events											
4.10.1	Storms	Criterion (viii) property repr an outstandir example of s ongoing geol processes in longshore dri immense sar are part of th longest and tomplete age sequence of dune system world and are evolving.	resents will ung char char char char char char char char	managing agency undertake climate nge adaptation ning. The results be incorporated into term planning, ugh a World tage Management tegy (entire verty) and Values and Management in (National Park)	Mai a H con req moi und mai ens	e Values Based nagement Plan ha ealth Check nponent which uires regular nitoring to be lertaken. The naging agency will uure that these icks consider ibutes of OUV.	s I	To be com by 2023.	npleted	and with of E	eensland Parks Wildlife Service in the Departme invironment and ence.	a nt p p n	key thre roperty - rediction nore freq	change is eat to this current as indicate juent and nse storm
4.10.6	Temperature change	See respor 4.7.3		ee responses to	See 4.7.	responses to	Sec. 4.7	e respons 7.3	es to	See 4.7.	responses to	See responses to 4.7.3		nses to
4.10.7	Other climate change impacts	The attribut described u criteria (vii), and (ix) cou subject to the effects of a changing cli	inder will e , (viii) and o uld all be more the predi clima imate. OUV propi inforr the c planr	managing agency ngage climatic other experts to accurately ct the impacts of the change on the attributes of the erty and this mation will inform limate adaptation ning process soon mmence.	ic planning work will be to incorporated into the Values Based s of Management Framework the which applies to the National Park (98% of the island) this framework has a Health Check (monitoring) component		ork will be place by ed into the 2023 sed ent Framework ies to the ark (98% of this framework th Check g) component		Wildlife Service within the Department of Environment and Science.		recognimpac climate to affe OUV. planni inform	The Department recognises that the impacts of a changing climate have the potento affect the property's OUV. Climate adaptati planning will help to inform the management response to this threat		
4.11	Sudden ecolo	gical or geolog	gical events											
4.11.6	Fire (wildfire)	Criteria (v (ix)	work peop to ad pract chan risks adap inform	The managing agency is working with the First Nations people, the Butchulla people to adapt fire management practices to respond to a changing climate and reduce risks of wildfire. Climate adaptation planning will inform fire management practices.		The Values Bass Management Fr. which applies to Park (98% of the framework has a Check (monitorin component which OUV.	amewo the Na e island a Healtl ng)	ational d) this h	by end 2023	of	Queensland Pa Wildlife Service Department of and Science.	within	he	NA
4.12	Invasive/alier	species or hy	per-abundant sp	ecies										
4.12.2	Invasive/Alien terrestrial species	Criteria (v (ix)	the B Rang speci curre Natio Plan Mana which	The Department works with the Butchulla Land & Sea Rangers to control pest species. The Department is currently preparing a new National Park Management Plan using the Values Based Management Framework which will provide guidance for pest control.		Management Framework which applies to the National is Park (98% of the island) this framework has a Health nt Check (monitoring) component which can monitor OUV.		National by end of and) this 2023		olace	ace Wildlife Service w		the	NA
4.13	Management	and institution	al factors											
4.13.1			Management system/Managen plan	nent										

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4.13.3	Governance
4.13.4	Management activities
Question not completed	

### 12.2. Summary - Management Needs

### 12.2.1 - Summary - Management Needs

12.2.1 - Summary - Management Needs										
5.1	Boundaries and Buffer Zones									
		Actions	Timeframe	Lead agency (and others involved)	More info / comment					
5.1.4	The property has no known and recognised buffer zone	which apply to the areas adjacent to the World Heritage property, these provisions	There are legislative provisions which apply to the areas adjacent o the World Heritage property, hese provisions provide a type of buffer.	There are legislative provisions which apply to the areas adjacent to the World Heritage property, these provisions provide a type of buffer.	There are legislative provisions which apply to the areas adjacent to the World Heritage property, these provisions provide a type of buffer.					
5.2	Protective Measur	Protective Measures								
5.2.3	An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	The managing agency will develop a World Heritage Management Strateg aligning with the national legislation applying to the management of Worl Heritage areas (EPBC Act). This will ensure that management complies with the legal framework.	y	Queensland Parks and Wildlife Service within the Department of Environment and Science.	n/a					
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	Refer to response to 5.2.3 - the same action will address this matter.	Refer to response to 5.2.3	Refer to response to 5.2.3	Refer to response to 5.2.3					
5.3	Management Sys	tem/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	The climate adaptation planning work referenced in 4.10.7 will incorporate recommendations of this policy documendations of this policy documendations.		referenced in 4.10.7	referenced in 4.10.7					

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5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved	DES is working more closely with part such as the Fraser Coast Regional Coat collaborate on projects to address management issues eg. related to Wamanagement and Resource Recovery	ouncil	Fraser Coast Regional Council, the Butchulla Aboriginal Corporation and DES.  Waste management project related to grant funding application developed by F Coast Regional Council (Fi and supported by the BAC DES. On 7 May 2021, confirmation was received the FCRC was successful grant bid for \$400k.			at funding veloped by Fraser al Council (FCRC) I by the BAC and by 2021, vas received that is successful in their	
5.3.12	The management system/plan is only partially adequate to maintain the property's Outstanding Universal Value	Refer to response to 5.2.3 - the same action will address this matter.	Refer to res	sponse to 5.2.3	Refer to response to 5.2.3	Refer to response to 5.2.3		
7	Scientific Studies and Research Projects							
7.2	There is a small amount of appointing a new expert advisory committee.  research in the World Heritage property but it is not planned research institutions.  The managing agency is currently by 2022 Queensland Parks and Wildlife Services within the Department of Environment and Science.  the Department of Environment and Science.  the Department of Environment and Science.					n/a		
8	Education, Informa	ation and Awareness Building						
8.2	There is a Initiated and ad approach to community engagement and it is intended that increased effort will be made to and awareness programme for children and/or youth					n/a		
9	Visitor Manager	nent						
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	Refer to response to 9.11 - this action will address this concern.	Refer to response to	9.11 Re	ofer to response to 9.11	Refer to respon	nse to 9.11	

#### 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?

Not applicable (sites inscribed exclusively under criteria vii to x (natural World Heritage properties)

# 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 has been compromised by factors described in this report

## 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 impacted by factors described in this report, but this situation is being addressed through effective management actions.

### 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.

Some values are likely to be compromised by factors related to climate change. Fire is a natural part of the landscape, but with hotter dryer conditions predicted, the fire regime is changing. For instance, a wildfire that started on 14/10/20 due to an illegal campfire burnt approximately half (85,000 ha) of the island. Work is now underway to commence asset, environmental and cultural assessments, and recovery works as needed. Climate adaptation planning informs response to this threat.

#### 13. Impact of World Heritage Status

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

Conservation	Positive
Research and monitoring	Positive
Management effectiveness	Positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	Positive
Legal/Policy framework	Positive
Advocacy	Not applicable
Institutional coordination	Positive
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	Positive
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

Majority of the WHA is within a protected area, providing statutory protection, ensuring integrity is maintained. Key threats requiring ongoing attention include degradation due to visitor numbers, inappropriate fire, invasive flora/fauna and climate change. Further research and action on climate change impacts and adaptation as well as measures to mitigate visitor impacts will assist.

#### 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

Consistent with the UNESCO policy on climate change, research into the potential impacts of climate change on the World Heritage values of K'gari (Fraser Island) is continuing. Property managers are working in partnership with climate scientists and First Nations groups to improve understanding and develop tools to assist with adaptive management. The Queensland Government recently commenced a project "Climate Change Planning for Fraser Island (K'gari) World Heritage Area" in collaboration with the Australian Government Department of Environment and Energy, Butchulla Aboriginal Corporation, Butchulla Native Title Aboriginal Corporation, Butchulla Land & Sea Rangers, James Cook University, CSIRO, and the Queensland Parks and Wildlife Service.

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

Sustainable Development

Synergies

Capacity Building

### 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 concept of Integrity and/or Authenticity

The property's Integrity and/or Authenticity

Management effectiveness to maintain the Outstanding Universal Value

Monitoring and reporting

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

State Party	Fair
Site Managers	Fair
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

### 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
Non-Governmental Organizations
External experts

# 15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire? Gender balance has **not been explicitly** considered or 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

60 / 30 / 60 /

#### 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?

Most required information was accessible.

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

		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

 $\label{eq:makemultiple logons} \mbox{ available. More space in the comment boxes (more characters)}.$ 

#### 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	Fair
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	Not applicable
State Party Representative (national Focal Point)	Fair
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?

Not applicable (i.e. I did not use these resources)

- 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
  - Name of World Heritage property

Reason for update: The name of the property is Fraser Island. At the request of the First Nations people, the Butchulla people, the site manager of the property (Queensland Department of Environment and Science) has put forward a request to change the name to "K'gari (Fraser Island)". K'gari means "Paradise" in the language of the Butchulla people and relates to a creation story about the island. Queensland Parks and Wildlife Service have already adopted this name for the National Park.

• Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee
Reason for update: Please note the following changes: - From 2021 there will be one combined advisory committee (rather than three separate
committees) that will have an equal number of positions for First Nations people (the Butchulla people), community reps and scientists. - The
Department of Environment and Natural Resources (DERM) name has changed – currently Department of Environment and Science (DES).

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

The Butchulla People are the First Nations people for K'gari (Fraser Island). In the language of the Butchulla people K'gari means paradise and relates to their creation story. The Butchulla people have advised that they acknowledge that the World Heritage listing of K'gari is for natural values only; that this listing does not reflect the rich cultural fabric of the island and that they would like their cultural heritage to be internationally recognised.

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

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