

Raine Island National Park (Scientific)

Incorporates: Raine Island, Moulter Cay and MacLennan Cay



Management Statement

2021



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(including DAUAR)



This management statement has been jointly prepared by the Wuthathi People, Meriam Nation People and Queensland Parks & Wildlife Service and Partnerships (QPWS&P), Department of Environment and Science

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1. Introduction

The Department of Environment and Science recognises, respects and values First Nations peoples and cultures. We recognise First Nations rights and interests in the Country on which we walk, work and live. We are committed to progressing self-determination by working in genuine partnerships with First Nations peoples to incorporate their priorities and perspectives across our decision-making and operations. The *Gurra Gurra Framework 2020-2026* prioritises and accelerates this commitment, guiding the agency to embed Country and people at the centre of all that we do.

1.1 Approach to best practice management

Queensland's parks, forests and reserves are places we want to protect for future enjoyment and wellbeing. What makes these places special are the presence and diversity of natural, cultural, social and economic values. These areas experience natural cycles—they live and breathe—and therefore our management needs to be dynamic too. Queensland Parks and Wildlife Service and Partnerships (QPWS&P), within the Department of Environment and Science (DES), applies a contemporary management process that is based on international best practice and targets management towards the most important features of each park: their **key values**.

The **Values-Based Management Framework** (VBMF) is an **adaptive management** cycle that incorporates planning, prioritising, doing, monitoring, evaluating and reporting into all areas of our business. This enables the agency to be more flexible and proactive and to improve management effectiveness over time. We want to keep our parks, forests and reserves healthy by:

- managing and protecting the things that matter most—our key values
- strategically directing management effort towards priorities
- delivering our custodial obligations as a land manager
- setting a level of service for all parks, forests and reserves
- building systems that support decision making for adaptive management
- building support for what we do through accountability and transparency
- striving for improvement through structured learning and doing.

As a land manager, QPWS&P has a **custodial obligation** to ensure our estate is managed to provide appropriate and safe access, protect life and property, be a good neighbour and work cooperatively with partners across the landscape. The agency does this as part of setting a **levels of service** for each park. Levels of service is a management standard that considers an area's values, threatening processes, custodial obligations, risks and overall management complexity.

Further information on QPWS&P's statutory responsibilities and policies with respect to protected area management is available on the department's website at www.des.qld.gov.au.

Wuthathi People and Meriam Nation People assert traditional connection to, and custodial responsibility for, Raine Island National Park (Scientific). They seek to protect rights and interests in the park, and to work in partnership with QPWS&P in managing the area's key (and other) values, in a manner consistent with the *Raine Island Indigenous Land Use Agreement* and the *Caring for Raine Island Country and Culture* strategic plan (refer to Section 2 for further details).

By assessing an area's key values and levels of service, QPWS&P can prioritise management efforts, balancing the importance of values and threats with our custodial obligations. Each year, we track work programs, monitor the condition of values and evaluate our performance across all aspects of

management. The evaluation process documents how efficiently and effectively we are working toward achieving the objectives we set for managing parks, forests and reserves, and how the condition of key values is changing in response to our management efforts. This evaluation supports transparent and accountable reporting, enabling us to continuously improve park management and demonstrate outcomes to the community.

Figure 1 illustrates phases of the VBMF cycle for management planning. A glossary of the key concepts (in **bold**) used throughout the document is listed in Appendix 2.

Queensland Parks and Wildlife Service (QPWS) is the operational stream of the Queensland Parks and Wildlife Service and Partnerships (QPWS&P) division within the Department of Environment and Science (DES). QPWS will be referred to throughout this document as the State’s representative in the management partnership, which gives effect to this management statement at an operational level.

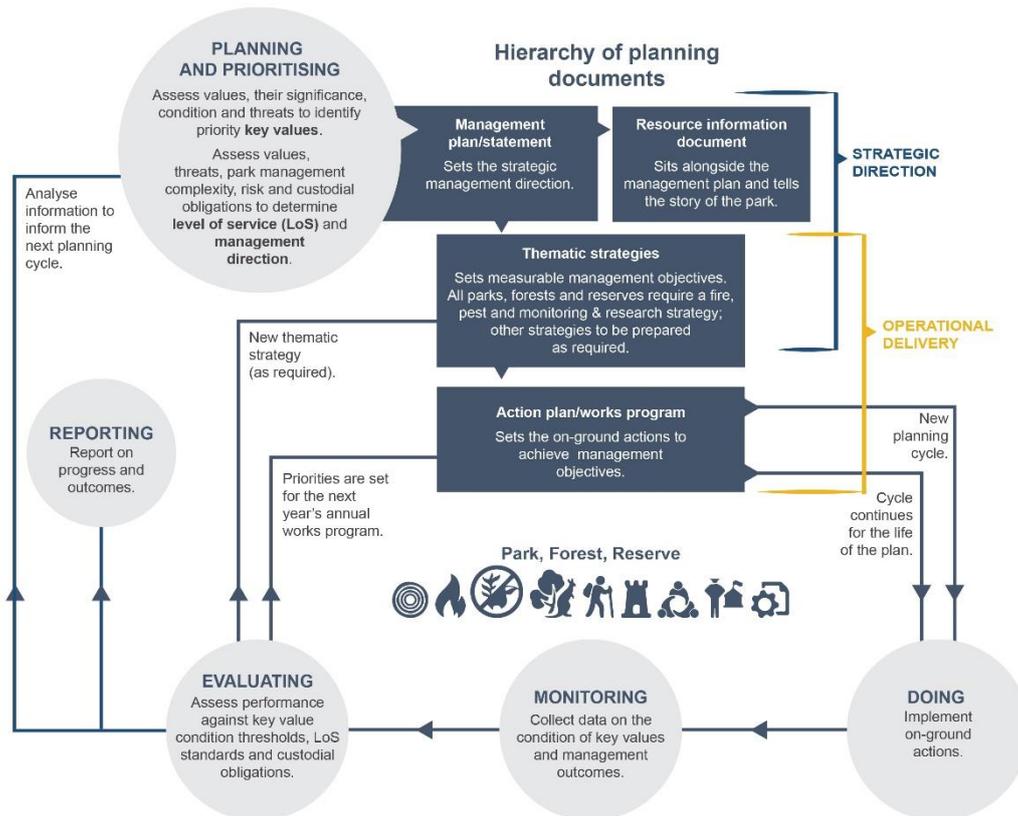


Figure 1. Phases of the VBMF cycle for planning and the hierarchy of planning documents

1.2 Management planning

Management plans and statements are developed through a process of research, assessment and consultation to establish priorities and set **strategic management direction** for the park. They are legislative requirements under the *Nature Conservation Act 1992* (Qld) (NCA). Some planning areas may include forest and reserves (*Forestry Act 1959* (Qld)) and marine parks (*Marine Parks Act 2004* (Qld)). All plans are prepared in keeping with legislation's management principles, supporting regulations, government policies and procedures, and international agreements. Planning for each park is brought together and communicated through a set of planning documents:

- Management plans and management statements provide the high-level strategic direction for managing an area's key values, levels of service and custodial obligations. Management plans and statements are statutory documents and are generally reviewed every 10 years.
- Resource information documents support management plans and statements and provide a compendium of park information that tells the story of the park. These documents accompany management plans and management statements, providing contextual information. They support information provided in the plan but do not provide management direction.
- Thematic strategies provide specific objectives to achieve the strategic management directions identified in management plans and statements. While all parks and forests require a fire strategy, pest strategy and a monitoring and research strategy, others are developed based on a protected area's management requirements and priorities. Thematic strategies are generally reviewed every three to five years to enable adaptive management.
- Action plans outline the work program for delivering on-ground actions.

Further information on the VBMF, copies of management plans/statements and resource information documents are available on the department's website at www.des.qld.gov.au.

2. The Wuthathi People and Meriam¹ Nation People

2.1 People and Country

Wuthathi People of eastern Cape York Peninsula identify as the Traditional Owners/Custodians and holders of Native Title in the [Raine Island ILUA] Agreement Area, including holding custodial rights to speak for, govern and manage Native Title in the Agreement Area. Wuthathi connections to Raine Island go back 60,000 years when sea levels were much lower and Raine Island was only five kilometres from the ancient coastline.

Erubam Le, Meriam Le and Ugarem Le from the eastern islands of Torres Strait, which together make up the Meriam Nation, identify as holders of Native Title in the Agreement Area. Meriam Nation People are connected to Raine Island through their canoe voyages and trading with Wuthathi People over several thousand years.

Wuthathi People and Meriam Nation People also have a shared history of involvement in commercial fishing around Raine Island since the 1860s.

[Source: Raine Island National Park (Scientific) Indigenous Land Use Agreement Working Group (2018a)]

The Wuthathi People refer to Raine Island as *Thukuru* and the Meriam Nation People refer to the island as *Bub Warwar Kaur*.

2.2 Raine Island National Park (Scientific) Indigenous Land Use Agreement (ILUA) and working group

The *Raine Island National Park (Scientific) Indigenous Land Use Agreement (Area agreement)* (ILUA) between the Wuthathi People, Meriam Nation People and State of Queensland, was registered on 13 August 2007 and provided for the dedication of Raine Island National Park (Scientific) and the establishment of a consultative working group of Wuthathi People and Meriam Nation People, the Indigenous Land Use Agreement Working Group (ILUAWG). The ILUA includes both the park and surrounding marine park waters (extending three nautical miles from the high water mark of Raine Island, MacLennan Cay and Moulter Cay). The ILUA has been entered into as an Area Agreement under the *Native Title Act 1993* (Cwlth) with a focus on the parties working together cooperatively, to ensure that significant conservation and cultural values are protected. The ILUA is not associated with a formal determination of native title or recognition of native title by the State of Queensland.

The ILUAWG meet at least annually with the QPWS (as representatives of the State of Queensland) to negotiate management protocols and other arrangements that will give effect to the ILUA, caring for country plan (section 2.3) and the management statement. Under the working group framework, the ILUA provides for collaboration between the parties on a wide range of park management issues including (but not limited to) preserving Indigenous cultural heritage and other matters that may affect the rights and interests of the native title groups.

¹ The name 'Meriam', and hence the term 'Meriam Nation People', both refer collectively to those First Nations People from Erub, Mer, Ugar and Dauar Islands in the eastern Torres Strait [Raine Island National Park (Scientific) Indigenous Land Use Agreement Working Group personal communication November 2020].

In 2018, with the support of QPWS, the ILUAWG prepared a strategic plan – *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group* (the plan) (ILUAWG 2018b). This strategic plan outlines strategies for managing the Indigenous cultural heritage of the park and associated sea country. Wuthathi People and Meriam Nation People have used the plan as the foundation of their co-development of the management statement with QPWS. The *Raine Island National Park (Scientific) Management Statement* complements and supports the strategies in the plan.

2.3 Indigenous-led strategic planning: *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group*

In the *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group* (the plan), the ILUAWG has developed a framework for the Wuthathi People, Meriam Nation People, QPWS, researchers and other partners to work together to care for the area's cultural, environmental and economic values.

The plan supports the Wuthathi People and Meriam Nation People to actively be involved in managing their cultural heritage through Indigenous-led governance, capacity-building, and partnerships. Through the plan, the ILUAWG:

- tells the story of Raine Island and broader Sea Country
- identifies important values, rights and interests of People and Country, and their known threats
- communicates Traditional Owners' vision, aspirations and commitments to sustainable use and management
- establishes priority actions to mitigate threats to Country and achieve their vision, aspirations and commitments in collaboration with partners and stakeholders.

The plan provides significant insight into the values and management aspirations of the ILUAWG on behalf of the First Nations peoples. The plan is a key resource underpinning the development and implementation of the *Raine Island National Park (Scientific) Management Statement*. In addition to enhanced natural and cultural values protection, the plan also focuses on securing social, educational and economic benefits for the Wuthathi People and Meriam Nation People, including sustainable Indigenous-led commercial tourism, and employment and cultural and scientific learning opportunities for their young people.

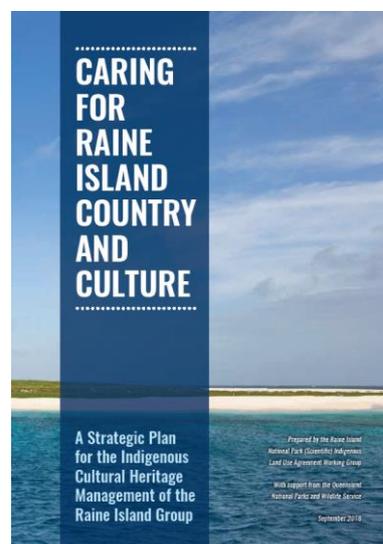


Figure 2. Wuthathi People and Meriam Nation People discussing the management of Country on Raine Island © Chrissie Warren (Wuthathi)

2.4 Raine Island National Park (Scientific) as a cultural landscape

The park is part of a complex cultural landscape involving many layers of human interaction, connection and impact spanning tens of thousands of years (ILUAWG 2018b).

As further outlined by the ILUAWG:

Cultural connections to Raine Island begins with First Nation People in Australia over 60,000 years ago, at a time when global sea levels were more than 100 metres lower than it is today and with Raine Island being located close to the mainland and easy to access. Over thousands of years, Wuthathi People and Meriam Nation People have held cultural connections to Raine Island through the use of its resources and cultural connections to the land and sea through song lines, stories, and voyages to the island.

Following European colonisation, Raine Island continued to be visited for cultural use and values as well as for the resources it supplied to the growing commercial fishing industries. As Australia began to recognise and manage its natural resources through protected area frameworks, Raine Island became the focus of substantial conservation investment, effort and research because of its status as the world's most significant green turtle rookery and the most significant sea bird nesting site in the Great Barrier Reef.

Today, it is clear that the natural landscapes and seascapes of Raine Island – the deep ocean, reefs, sand cays and supported ecosystems – have an interconnectedness with the cultural values that Wuthathi People and Meriam Nation People hold, as well as the many other intrinsic, heritage, conservation, resource values that have been placed over the island.

[Source: Caring for Raine Island Country and Culture, p.13]

Over the millennia, and regardless of sea level changes and the varying distances of Raine Island from the coast, the Wuthathi People and the Meriam Nation People have always maintained (and continue to maintain) a strong and enduring physical, cultural and spiritual connection to the island and its surrounding waters. While Raine Island is currently situated approximately 100 kilometres from the present coastline, at previous sea levels it was only five kilometres from the ancient coast (ILUAWG 2018b).

The Wuthathi People have always maintained a robust physical, spiritual and cultural connection to their expansive yet highly interconnected sea country. This connectivity has been reinforced through wide-ranging sea travel and complex story and song lines—Raine Island being a particularly important ceremony place. Wuthathi People are very proud of their sea country traditions which include links to several other regional offshore islands such as the Sir Charles Hardy Group and the Saunders Islands, in addition to Raine Island and its associated cays. The *Traditional Use of Marine Resource Agreement* between the Wuthathi People and the State and Commonwealth governments² (first accredited in 2008) further reflects the nature and extent of their sea country connection, as well as their aspirations for culture-based sea country management.

Wuthathi People originally utilised double outrigger canoes to navigate to these offshore islands, reefs and along the expansive mainland coastline. Contemporary transport and modern technology further reinforce cultural connection.

² Refer to Great Barrier Reef Marine Park Authority web site for further information: <https://www.gbrmpa.gov.au/ourpartners/traditional-owners/traditional-use-of-marine-resources-agreements>

The Meriam Nation People are trading seafarers that historically sailed double outrigger canoes, navigating long distances throughout the northern reaches of the Great Barrier Reef, including Raine Island, to harvest resources to trade with other First Nations people.

Both groups continue to hold strong traditional knowledge and cultural connections to Raine Island and the surrounding area, which they have passed on through the generations since their ancestors first visited the island (ILUAWG 2018b).

2.5 Looking after Country: Wuthathi People and Meriam Nation People vision statement

Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group (the plan) provides Wuthathi People and Meriam Nation People with a country-based planning approach to managing Raine Island National Park (Scientific). The plan provides QPWS with a clear insight into the vision, aspirations and goals of the First Nations people's partners and, accordingly, a framework for building meaningful management collaboration.

In addition to holistically managing the Raine Island area for all its values, another central theme of the plan is to enhance the management capacity, leadership and independence of Wuthathi People and Meriam Nation People through strong and enduring partnerships (including amongst themselves, and with QPWS and other management and research entities). As identified by Falen (Doug) Passi (Meriam Le), building these partnerships and subsequently delivering the ILUAWG's vision for the management of the park is a key principle.

Reconcile, negotiate, respect and trust.

[Source: Caring for Raine Island Country and Culture p.49]



Figure 3. Strong management partnerships based on mutual respect, trust and information sharing are essential for holistic key values management. © QPWS

Wuthathi People and Meriam Nation People have a clear vision for managing Raine Island National Park (Scientific) and surrounding waters.

Our vision is to:

Work together cooperatively to ensure that the significant conservation and cultural values of the [ILUA] Agreement Area are protected.

Build governance and management driven by Wuthathi People and Meriam Nation People, and lead collaborative partnerships, for the benefit of our people, others who have a special interest, and the broader community.

Bring our children to Raine Island to pass on and maintain our culture for generations to come.

Sharing and using Traditional Knowledge alongside scientific knowledge to understand, better protect and manage cultural and biological systems on Country.

[Source: Caring for Raine Island Country and Culture p.49]

Desired outcome and strategic management direction

Desired outcome	
<p>The relationship with the Wuthathi People and the Meriam Nation People and the protection of their cultural values will be managed through improved awareness, understanding and mutually respectful partnerships, recognising both their strong connection to Country and their aspirations for a lead role in managing the park’s natural and cultural values.</p> <p>The collaborative management framework provided by the <i>Caring for Raine Island Country and Culture</i>. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group will be successfully implemented, resulting in the effective care of the cultural values of the park and all the environmental, social and economic values that are associated with them.</p>	
Strategic management direction (source: the plan p.49)	Priority
Support implementation of <i>Caring for Raine Island Country and Culture</i> . A strategic plan for the Indigenous cultural heritage management of the Raine Island Group.	1
Work together cooperatively to ensure that the significant conservation and cultural values are protected.	1
Move towards governance and management driven by Wuthathi People and Meriam Nation People, resulting in Indigenous-led collaborative partnerships for the benefits of all people.	1
Share and use Traditional Knowledge alongside scientific knowledge to understand, better protect and manage cultural and biological systems on Country.	1
Support, as far as practicable (including within available departmental resources and vessel operating guidelines), Wuthathi People and Meriam Nation People to bring their children to the park to pass on and maintain culture for generations to come.	1
Support, as far as practicable, the aspiration of the Wuthathi People and Meriam Nation People for a review of the Raine Island Indigenous Land Use Agreement.	1

3. Raine Island National Park (Scientific)

3.1 Management statement and thematic strategies

The Raine Island National Park (Scientific) Management Statement provides the strategic management direction for managing its keys values (Section 4) and meeting our custodial obligations across eight **management themes** (Section 5). The statement is supported by the Raine Island National Park (Scientific) Resource Information document, a compendium of park information that tells the story of the park. *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group* (Section 2) also serves to support and complement the statement particularly in relation to the values and management aspirations of the Wuthathi People and the Meriam Nation People. The strategic management directions set out in this management statement link to a set of thematic strategies that detail management objectives, providing the connection between high-level strategies and on-ground operations. The complexity of a park's values and custodial obligations determine the requirements for specific strategies. Raine Island National Park (Scientific) has three thematic strategies:

- pest strategy
- monitoring and research strategy
- cultural heritage (historic) strategy.

A visitor strategy is not proposed given that general visitation does not occur, consistent with the management intent of a national park (scientific), and the Restricted Access Special Management Area declared over adjoining State and Commonwealth marine park waters.

The restriction on general visitation does not necessarily prevent the potential for First Nations people-led sustainable tourism permissions, providing they are nature and/or culture based, and can demonstrate:

- consistency with the management principles of a national park (scientific), as well as this management statement and any associated thematic strategy
- protection of the area's scientific values, particularly its biological diversity, natural processes and cultural values, through pre-agreed activities that focus on controlled scientific study, monitoring, and/or habitat management and the control of threatening processes.

A fire strategy is not proposed due to a no burning/fire exclusion management approach to protect the fire-sensitive vegetation of Raine Island National Park (Scientific).

Specific on-ground objectives and actions in *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group* serve as a de-facto thematic strategy to:

- guide effective partnerships with Wuthathi People and the Meriam Nation People
- protect First Nations people's cultural values.

3.2 Park overview

Raine Island National Park (Scientific) is located in the East Cape York Marine Bioregion approximately 170km south-east of the tip of Cape York Peninsula (Map 1). It is in the State electorate of Cook and the local government area of Cook Shire Council.

Raine Island National Park (Scientific) incorporates two vegetated coral cays: Raine Island (approximately 27ha), Moulter Cay (approximately 9ha) and the un-vegetated MacLennan Cay (approximately 4ha). Located in the north of the Great Barrier Reef, Raine Island is situated near the continental shelf (with adjacent water depths of more than 300m), while Moulter and MacLennan Cays physically sit on the shelf. These cays lack significant ecological influence from the mainland coast but share some attributes with a string of numerous cays along the outer margin of the Great Barrier Reef from near Princess Charlotte Bay to Bramble Cay in northeast Torres Strait.

Raine Island (11°36'S, 144°01'E) is the largest shelf edge vegetated cay in the northern Great Barrier Reef, which sits on top of a 210ha planar detached reef (GBRMPA zoning map identifier 11-243). Raine Island is by far the most important of the three islands, with ecological, historical and cultural values that are of state, national and international significance (Queensland Government, 2013).

These values include:

- scientific records from 1843 identifying the most diverse (and one of the most important) seabird rookeries in the Great Barrier Reef World Heritage Area
- the world's largest remaining rookery for the internationally endangered³ green turtle *Chelonia mydas* – it has been a nesting site for green turtles for more than 1000 years, supporting 90% of the northern Great Barrier Reef breeding population
- a stone beacon that remains one of the oldest colonial stone buildings constructed by convicts in the state
- a complex cultural landscape incorporating a significant cultural and story place for Wuthathi People and Meriam Nation People.



Figure 4. Raine Island © Biopixel

³ *Chelonia mydas* is listed as 'endangered' at an international level [International Union for Conservation of Nature (IUCN)], and 'vulnerable' at both a national (Australia level *Environment Protection and Biodiversity Conservation Act 1999* (EPBC)) and Queensland level (NCA).



Map 1. Raine Island National Park (Scientific)

Raine Island National Park (Scientific) was originally dedicated in August 2007 to protect the natural and cultural values of the island and cays. As turtles and seabirds nest on the ground and are easily disturbed, access to the park is restricted to scientific and conservation purposes only. No public access is permitted on Raine Island or its adjacent cays.

The Indigenous Land Use Agreement (Area Agreement QI2006/044) recognises the importance of Raine Island to First Nations peoples and provides a formal management link between the State and Wuthathi People and Meriam Nation People (Section 2).

The tidal lands and waters surrounding Raine Island National Park (Scientific) are part of the Inshore Segment of the Outer Islands Management Area of the Great Barrier Reef Coast Marine Park (Queensland). Waters seaward of low-water mark are part of the Far Northern Management Area of the Great Barrier Reef Marine Park (Commonwealth). The tidal lands, waters and reefs surrounding the national park (scientific) are zoned ‘Marine National Park’ zone under both State and Commonwealth zoning plans. Restricted Access Special Management Areas are declared over waters (including tidal lands) immediately surrounding Raine Island, Moulter Cay and MacLennan Cay, under both State and Commonwealth legislation. Access to these waters and tidal lands is by permit only. This restriction further facilitates protection of breeding seabirds and turtles (Queensland Government, 2013).

QPWS and the Great Barrier Reef Marine Park Authority operate a joint field management program for the marine and island national parks [including Raine Island National Park (Scientific)], encompassing the Great Barrier Reef Marine Park and the Great Barrier Reef Coast Marine Park. Further information on the Reef Joint Field Management Program is available on the Department’s website at www.des.qld.gov.au, and the Great Barrier Reef Marine Park Authority website at www.gbrmpa.gov.au.

3.3 World Heritage

Many of the park’s values are of global significance, and this is recognised by the park being included in the Great Barrier Reef World Heritage Area (GBRWHA). The GBRWHA has been inscribed into the World Heritage List of the *Convention concerning the Protection of the World Cultural and Natural Heritage*. This listing confirms the Outstanding Universal Value (OUV) of a cultural or natural property that deserves protection for the benefit of all humanity. Figure 5 shows the listing criteria for the Great Barrier Reef Marine Park with the park’s associated key values.

UNESCO World Heritage Convention criteria	Associated key value
<p>Criterion 7</p> <p>Contains superlative natural phenomena or area of exceptional natural beauty and aesthetic importance.</p> <ul style="list-style-type: none"> Tens of thousands of adult female green turtles, <i>Chelonia mydas</i>, come ashore each year to nest on Raine Island. The numbers of turtles nesting varies throughout the year, with the highest density nesting occurring during the mid-summer months. Numbers of nesting turtles fluctuate each year and can vary from 2,000 in a low season to 80,000 in a high season. The sheer scale, diversity, noise and range of activity of nesting and roosting birds makes for a spectacular natural experience arguably unparalleled in the region. 	<p>Green turtle rookery (4.2)</p> <p>Seabird nesting habitat (4.3)</p>
<p>Criterion 9</p> <p>Outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.</p> <ul style="list-style-type: none"> Raine Island and Moulter and MacLennan cays, and surrounding areas, provide refuge for the internationally endangered green turtles <i>Chelonia mydas</i>. The green turtles, which primarily nest at Raine Island and Moulter Cay (with some incidental nesting at MacLennan Cay), are a genetically distinct population of ancient lineage that has long been isolated from populations in other parts of the world. This population is one of the largest remaining stocks of green turtles in the world. Over eighty bird species have been recorded at Raine Island since the first documented visit in 1842. Some species of seabirds present on Raine Island are not found on any other island within the Great Barrier Reef World Heritage Area. 	<p>Green turtle rookery (4.2)</p> <p>Seabird nesting habitat (4.3)</p>
<p>Criterion 10</p> <p>Contains the most important and significant habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.</p> <ul style="list-style-type: none"> Raine Island is the world’s largest known rookery for the internationally endangered green turtle <i>Chelonia mydas</i>. Raine Island is the most diverse seabird rookery in the Great Barrier Reef region, supporting significant populations of a greater variety of seabirds than anywhere else in the Great Barrier Reef World Heritage Area. 	<p>Green turtle rookery (4.2)</p> <p>Seabird nesting habitat (4.3)</p>

Figure 5. UNESCO World Heritage Convention criteria

4. Key values

All parks, forests and reserves have an array of natural, cultural, social and/or economic values that are important and contribute to the state’s comprehensive and representative protected area and forest estate. The VBMF supports a process for identifying and protecting the most important values, the key values, and this directs the allocation of resources.

In this section, a **key value statement** is provided for each key value, identifying the current **condition and trend**, and a desired condition. The main threatening processes are identified and rated from high to low. A strategic management direction provides a broad strategy to address the threatening process to achieve the **desired outcome** over time. Each strategic management direction is prioritised according to the need for action to prevent further decline, stabilise current condition, or restore and enhance the value (refer to **priority rating** in Appendix 2).

The condition of all key values is (or will be) assessed through regular **health checks** or other monitoring. The monitoring and research strategy outlines opportunities and needs for scientific monitoring and research programs that will enhance our knowledge. Any change to a key value’s condition will be identified through health checks and/or monitoring, enabling QPWS to act quickly, applying best practice adaptive management.

Summary of key values

A summary of the key values for Raine Island National Park (Scientific) is detailed below, Figure 6. The location of each key value is shown in Map 2. Figure 7 provides a key to interpreting the condition and trend icons used in this section.

	Current condition	Confidence in condition assessment	Current trend	Confidence in trend assessment	Desired condition
4.1 Raine Island Country and Culture		Adequate 		Adequate 	
4.2 Green turtle rookery		Adequate 		Adequate 	
4.3 Seabird nesting habitat		Inferred 		Inferred 	
4.4 Raine Island maritime and mining heritage		Limited 		Limited 	

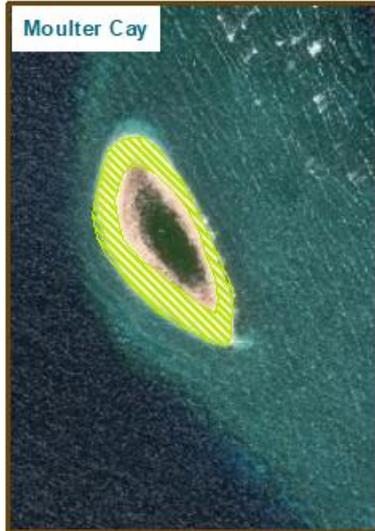
Figure 6. A summary of the key values for Raine Island National Park (Scientific)

Condition of key value	Good 	Good with some concern 	Significant concern 	Critical
	The value is in good condition and is likely to be maintained for the foreseeable future, provided that current measures are maintained	The value is likely to be maintained over the long-term with minor additional conservation measures to address existing concerns	The value is threatened by a number of current and/or potential threats. Significant additional conservation measures are required to preserve the value over the medium to long-term	The value is severely threatened. Urgent additional large-scale conservation measures are required or the value may be lost
Trend rating of condition	Improving 	Stable 	Deteriorating 	No consistent trend
Confidence in assessment	Inferred 	Limited 	Adequate 	

Figure 7. Key to condition, trend and confidence icons

Key Value 1 - Raine Island Country and Culture*

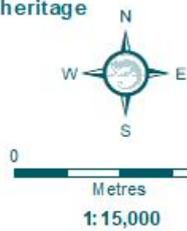
Key Value 2 - Green turtle rookery



Key Value 3 - Seabird nesting habitat



Key Value 4 - Raine Island maritime and mining heritage



- Key Values**
- Seabird nesting habitat
 - Green turtle rookery
 - Raine Island maritime and mining heritage
 - Raine Island Country and Culture (whole of park*)

*While this key value applies only to the national park (scientific) tenure and its corresponding management statement, the Wuthathi People and Meriam Nation People connection to country extends to additionally include the adjoining State and Commonwealth marine park waters.

ACCURACY STATEMENT
Due to varying sources of data, spatial locations may not coincide when overlaid.

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Department of Environment and Science.
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VERSION 202008
RaineIsScNP - KeyValuesmap_20200818 (drovero)



Map 2. Raine Island National Park (Scientific) key values

4.1 Raine Island Country and Culture

Key value statement

Description		Current condition	Current trend	Desired condition
Raine Island National Park (Scientific), along with the surrounding water, sky and reefs, is a complex cultural landscape incorporating a significant cultural and story place for Wuthathi People and Meriam Nation People	Condition and trend	2019 		
	Assessment confidence	Adequate 	Adequate 	

The past and ongoing relationships and interaction of Wuthathi People and Meriam Nation People with Country, language, knowledge and practices past and present, and their shared history with Europeans and other visitors to Country over the last 200 years, all contribute to the cultural values they seek to protect and maintain (ILUAWG 2018b).

Developed by Wuthathi People and the Meriam Nation People through the Raine Island National Park (Scientific) Indigenous Land Use Agreement Working Group as part of a country-based planning process, *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group* (the plan) provides an identification and assessment of the area’s cultural values, and a strategic action-based plan for their management.

The plan (pp. 39-43) focuses on a number of core cultural themes that combine to shape this highly significant cultural landscape, and define its value:

- Country as the basis for culture
- relationships and interaction with Country
- language, knowledge and practices
- shared history
- living resources as cultural heritage
- culture in practice
- law and culture
- visiting Country.

While the management statement addresses the values of the island and cays only, the plan has a wider cultural landscape focus, which includes cultural values associated with the surrounding marine park waters, including the seabed and certain species most notably sharks.

The ILUA (Section 2.2), as an Area Agreement, provides a management framework to protect the rights and interests of these Native Title Groups.

The connection between sea-faring First Nations people and the islands, cays, reefs and waters of the Great Barrier Reef World Heritage Area is dynamic, multi-layered and rich in cultural values. Strong partnerships and a two-way understanding of values, responsibility and management approaches are required to keep the culture, heritage and environment of the reef alive and strong into the future (Commonwealth of Australia 2019).

This key value relates to Raine Island, Moulter Cay and MacLennan Cay.

Threats

Primary threat: Barriers to First Nations people’s access to and management of Country. Logistical (including access) and communication constraints, loss of knowledge, limited partnership arrangements and management input (including a lack of awareness and understanding between partners). These have the potential to undermine Wuthathi People’s and the Meriam Nation People’s ability to maintain connection to Country and lead management of their cultural heritage (the plan p. 44 and 47). **Threat rating: High**

Secondary threat: Habitat that is subject to natural or human induced impacts rendering it inadequate or dysfunctional for culturally significant species particularly green turtles and seabirds (the plan p. 44 -47).

Threat rating: Very high

Other threat: Impacts on the cultural landscape arising from greater visitation and activity associated with management actions and research. This includes impacts from inadvertently introduced plants, animals and pathogens, as well as physical damage to tangible cultural material and story places through direct habitat modification or management infrastructure (the plan p. 44-47). **Threat rating: High**

Desired outcome and strategic management direction

Desired outcome		
Threatening processes	Strategic management directions	Priority
	<p>The condition of the Wuthathi People’s and the Meriam Nation People’s cultural values will be improved to <i>good</i> by (a) progressing the actions of the <i>Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group</i>; and (b) developing a mutually respectful and trusting partnership between First Nations peoples, QPWS, the Joint Field Management Program, researchers and other relevant stakeholders.</p>	
Loss of connection to Country	Support implementation of <i>Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group</i> to improve awareness, understanding and protection of Wuthathi People’s and the Meriam Nation People’s cultural values.	1
Loss of connection to Country	Support arrangements that enable benefits to flow to Wuthathi People and Meriam Nation People from Indigenous and non-Indigenous use and management of Country [the plan: Goal 1 p. 50].	1
Loss of connection to Country	Facilitate scientific and cultural heritage research that engages and supports Wuthathi People’s and Meriam Nation People’s rights and interests [the plan: Goal 2 p. 50].	1
Loss of connection to Country	Support arrangements that promote Wuthathi and Meriam Nation governance and management of biodiversity and cultural heritage [the plan: Goal 3 p. 50].	1
Other	Deliver positive cultural heritage outcomes through educating and raising awareness about the cultural and natural significance of Country for Wuthathi People and Meriam Nation People, their partners and the broader community [the plan: Goal 4 p. 50].	1
Work or other activities	Develop respectful and trusting relationships to increase capacity within all partners to address threats and impacts from natural system modifications, human intrusion and disturbance on cultural values (including on culturally significant species such as green turtles and seabirds).	1
Loss of connection to Country	Promote further investigation and recording of traditional knowledge and stories.	2

See Appendix 2. Glossary for priority rating definitions.

4.2 Green turtle rookery

World Heritage Criteria 7, 9 and 10

Key value statement

Description		Current condition	Current trend	Desired condition
Raine Island is the world's largest known rookery for the internationally endangered ⁴ green turtle <i>Chelonia mydas</i>	Condition and trend	2019 		
	Assessment confidence	Adequate 	Adequate 	

Ninety per cent of the northern Great Barrier Reef (GBR) population of the green turtle *Chelonia mydas* nest at Raine Island and Moulter Cay with turtles migrating from the GBR, Gulf of Carpentaria, Torres Strait, Papua New Guinea, Arnhem Land, eastern Indonesia and further afield. Numbers of nesting turtles fluctuate each year and can vary from 2,000 in a low season to 80,000 in a high season.

The turtles can lay up to 10 clutches of eggs (with an average of 6 clutches) within a nesting season on the beach around the entire perimeter of Raine Island and Moulter Cay. Nesting can also extend to the centre of the island or cay. Nightly numbers of turtle nesting at Moulter Cay are around one-third to a half of the nightly number of turtles seen at Raine Island. Incidental nesting occurs at MacLennan Cay.

While recent management intervention measures under the Raine Island Recovery Project, including beach re-profiling, have increased hatching success, and other actions such as cliff-top fencing have reduced adult mortality, there are still ongoing measures required to identify and address all threats, as well as maintain quality nesting habitat given the dynamic nature of the island's topography. Recent nesting habitat improvement work will provide benefits in the longer term when these hatchlings return as adults in around thirty years to nest. In the meantime, the adult population coming to the island is still expected to decline due to the downturn in hatching success in the 10 to 15 years prior to the intervention.

This key value relates to Raine Island, Moulter Cay and MacLennan Cay.

Threats

Primary threat: Tidal inundation generally occurs in the swale and back swale parts of the nesting beach. It can lead to low hatching success and low recruitment. **Threat rating: Very high**

Secondary threat: Threats from climate change and severe weather events⁵ including:

- sea level rise affecting available nesting habitat
- high temperature - rise in sand temperature affecting sex ratio of hatchlings (more females) and hatchling success
- ocean acidification causing a decrease in foraminifera⁶ production on the reef flat, in turn reducing the sand budget for the island
- nest moisture - less frequent rainfall causing dryer sand and affecting hatching success.

Threat rating: Very high

Other threat: Adult turtles fall off the phosphate cliff, land upside down and die from exhaustion and exposure. **Threat rating: Very high**

Other threat: Low hatching success may be attributed to unsuitable nest micro-environment (caused by fungi, toxins, and microbes). **Threat rating: Medium**

⁴ *Chelonia mydas* is listed as 'endangered' at an international level [International Union for Conservation of Nature (IUCN)], and 'vulnerable' at both a national Australia level (EPBC) and Queensland level (NCA).

⁵ Longer term, threats from climate change and extreme weather events may prove to be the Primary threat.

⁶ Foraminifera, also commonly referred to as 'forams', are minute marine organisms with a calcareous shell that contribute significantly to sand formation and cay maintenance along the Great Barrier Reef.



Figure 8. Green turtles congregating offshore from Raine Island and adjoining reef during the daylight hours of breeding season © QPWS



Figure 9. Green turtle *Chelonia mydas* hatchling, Raine Island © Gary Cranitch, Queensland Museum

Other threat: Introduced animals, such as ants and rodents, that impact on egg laying, eggs or hatchlings. Potential vectors include machinery and equipment, QPWS rangers, researchers, film-makers, First Nations peoples, illegal visitors, rafting and other natural pathways etc. **Threat rating: Medium**

Other threat: Pathogens that affect egg or hatchling development. Potential vectors include machinery and equipment, QPWS rangers, researchers, film-makers, First Nations peoples, illegal visitors, rafting, seabirds and other natural pathways etc. **Threat rating: Medium**

Other threat: Introduced plants that may affect nesting quality such as species that restrict nest building or impact nest micro-climate. Potential vectors include machinery and equipment, QPWS rangers and researchers, First Nations peoples, illegal visitors, rafting, seabirds and other natural pathways etc. **Threat rating: Low**

Other threat: Due to the remoteness of the park and intermittent ranger presence, potential exists for visitors to breach the restricted access area. Visitors bring a biosecurity risk and can disturb the turtle rookery and nesting seabirds. **Threat rating: Medium**

Other threat: Native birds, including silver gulls *Chroicocephalus novaehollandiae* and nankeen-night herons *Nycticorax caledonicus*, have the potential to impact on hatchling numbers. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
Threatening processes	Strategic management directions	Priority
 <p>The condition of the green turtle <i>Chelonia mydas</i> rookery will be improved from <i>critical to significant concern</i> by implementing a program of collaborative research and assessment, adaptive management, and biosecurity, leading to a sustained increase in turtle nesting and hatching success.</p>		
Pest animal/plant	Maintain the health and integrity of the green turtle rookery by developing (and continually refining) a biosecurity plan specific to Raine Island National Park (Scientific).	1
Pest animal/plant	Prevent the arrival of pests and pathogens that have the potential to impact on the green turtle rookery.	1
Pest animal/plant	Prevent the establishment of pests that have the potential to impact on the green turtle rookery.	1
Inadequate habitat	Address green turtle rookery threats by developing adaptive management responses informed by rigorous ongoing collaborative research and other scientific assessment (including in partnership with Wuthathi People and the Meriam Nation People).	1
Inadequate habitat	Reduce impacts of tidal inundation on the green turtle rookery through innovative habitat remediation and other intervention activities.	1
Inadequate habitat	Reduce impacts of negative nest micro-environment factors on the green turtle rookery through innovative habitat remediation and other intervention activities.	1
Inadequate habitat	Reduce adult green turtle mortality through direct habitat intervention that mitigates physical hazards during nesting.	1
Climate change	Maintain green turtle rookery through active management of climate change associated impacts by implementing hard and soft engineering techniques.	1
Visitor impacts	Minimise human disturbance to the green turtle rookery by maintaining the level of legislated access restrictions to Raine Island National Park (Scientific) and surrounding marine park waters to reduce the risk of introducing pest plants, pest animals and diseases.	3
Other	Monitor and minimise unsustainable impacts of silver gulls and nankeen-night herons on the green turtle rookery.	3

See Appendix 2. Glossary for priority rating definitions.

4.3 Seabird nesting habitat

World Heritage Criteria 7, 9 and 10

Key value statement

Description		Current condition	Current trend	Desired condition
Raine Island, Moulter Cay and MacLennan Cay collectively support globally and/or regionally significant nesting populations of seabirds	Condition and trend	2019 		
	Assessment confidence	Inferred 	Inferred 	

Raine Island is the most diverse seabird rookery in the Great Barrier Reef region, supporting significant populations of a greater variety of seabirds than anywhere else in the Great Barrier Reef World Heritage Area (GBRWHA). Located offshore and surrounded by deep water, the island is used for nesting by pelagic, offshore foraging and inshore foraging seabirds.

Raine Island, Moulter Cay and MacLennan Cay collectively support globally significant nesting populations of the brown booby *Sula leucogaster*. Raine Island additionally features globally significant nesting populations of the lesser frigatebird *Fregata ariel* and the red-tailed tropicbird *Phaethon rubricauda*.

Nesting birds across the whole national park (scientific) include:

- **black-naped tern** *Sterna sumatrana*
- **bridled tern** *Onychoprion anaethetus*
- **brown booby** *Sula leucogaster* *
- **buff-banded rail** *Gallirallus philippensis*
- **common noddy** *Anous stolidus* *
- **crested tern** *Thalasseus bergii* (historical record)
- **great frigatebird** *Fregata minor* *
- **Herald petrel** *Pterodroma heraldica* [Listed as Endangered in Queensland (NCA) and Critically Endangered nationally (EPBC)]. Only breeding population in Australia, however regionally abundant outside Australia and listed as Least Concern by the IUCN.
- **lesser frigatebird** *Fregata ariel* *
- **masked booby** *Sula dactylatra* *
- **nankeen night-heron** *Nycticorax caledonicus*
- **red-footed booby** *Sula sula* *
- **red-tailed tropicbird** *Phaethon rubricauda* [Listed as Vulnerable in Queensland (NCA)]. Largest breeding population in Queensland.
- **silver gull** *Chroicocephalus novaehollandiae*
- **sooty tern** *Onychoprion fuscatus* **
- **wedge-tailed shearwater** *Ardenna pacifica*.

* Raine Island supports the second largest breeding population of this species in the GBRWHA (East Fairfax Island population in the Capricornia Cays currently thought to be larger)

** Raine Island supports the fifth largest breeding population of this species in the GBRWHA

Both Raine Island and Moulter Cay provide important nesting habitat above the high water mark. While not as significant, the un-vegetated MacLennan Cay also provides some roosting and nesting habitat.

Raine Island can be divided into three main geographical nesting areas:

- **swale** (on the beach, above high water mark, below the phosphate cliff), commonly used by common noddy *Anous stolidus*
- **on and within the phosphate cliff**, commonly used by red-tailed tropicbird *Phaethon rubricauda* and (to a much lesser extent in burrows under the cliff) wedge-tailed shearwater *Ardenna pacifica*
- **on the interior of the island**, inward of the phosphate cliff, amongst vegetation***, commonly used by red-footed, brown and masked boobies, lesser and great frigatebirds, Herald petrel and wedge-tailed shearwater.

*** a low mat of grasses, herbs and shrubs, comprising 13 species and including stalky grass *Lepturus repens* which may play an important role in island stability, erosion control and seabird nest habitat

Threats

Primary threat: On-ground management activities have the potential to impact seabird nesting habitat, including:

- additional beach reprofiling (redistribution of beach sand to restore turtle nesting habitat) potentially impacting nesting habitat (particularly for common noddy)
- disturbance to birds during bird counts or other management activities, causing birds to take flight and silver gulls sometimes following to prey on eggs and chicks
- potential cliff reprofiling, degrading red-tailed tropicbird habitat
- fencing installed on the cliff (to decrease turtle mortality) causing stress fractures and parts of cliff breaking away, degrading red-tailed tropicbird habitat
- the occurrence of bird strike on infrastructure including fences, poles, towers and stay wires causing wing fractures
- drones used during bird counts causing disturbance to birds
- biosecurity incursions.

Threat rating: Low

Secondary threat: Potential for invasive plants to outcompete natives and degrade nesting habitat. Potential vectors include machinery and equipment, QPWS rangers, researchers, film-makers, First Nations peoples, illegal visitors, rafting and other natural pathways etc. **Threat rating: Low**

Other threat: Introduced animals, such as ants and rodents, that impact on egg laying, eggs or chicks. Potential vectors include machinery and equipment, QPWS rangers, researchers, film-makers, First Nations peoples, illegal visitors, rafting and other natural pathways etc. **Threat rating: Medium**

Other threat: Potential for introduced pathogens to impact on nesting habitat and nesting itself. Potential vectors include machinery and equipment, QPWS rangers, researchers, film-makers, First Nations peoples, illegal visitors, rafting and other natural pathways etc. **Threat rating: Low**

Other threat: Potential for rising sea levels, overtopping, and increased severe storms (and storm surge) to impact nesting habitat. Poor climatic conditions particularly increases in sea surface temperature may reduce food availability. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
Threatening processes	Strategic management directions	Priority
 <p>The condition of the seabird nesting habitat will be maintained as <i>good</i> by implementing a program of ongoing monitoring, assessment and (where necessary) adaptive management; with particular attention given to biosecurity and potential impacts from research and intervention activities associated with managing other values.</p>		
Pest animal/plant	Prevent the arrival of pests which have the potential to impact on seabird nesting habitat.	1
Pest animal/plant	Prevent the establishment of pests which have the potential to impact on seabird nesting habitat.	1
Inadequate habitat	Monitor the health of the seabirds and their habitat on Raine Island, Moulter Cay and MacLennan Cay through ongoing collaborative monitoring, research and assessment (including in partnership with Wuthathi People and the Meriam Nation People).	2
Work or other activities	Minimise impacts of beach re-profiling, fencing, and other turtle management actions on seabird nesting habitat.	3
Work or other activities	Minimise impacts of seabird counts/monitoring on seabird nesting habitat.	5
Climate change	Monitor condition and climate associated changes of seabird nesting habitat to assess impacts and determine future management.	5

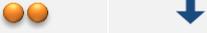
See Appendix 2. Glossary for priority rating definitions.



Figure 10. Nesting red-tailed tropicbird *Phaethon rubricauda* on Raine Island © QPWS

4.4 Raine Island maritime and mining heritage

Key value statement

Description	Current condition	Current trend	Desired condition
<p>Raine Island is listed on the Queensland Heritage Register for associations with northern navigation, the penal system and early island industry, as well as for the aesthetic values of the beacon in its dramatic, isolated setting.</p> <p>Key tangible features of this association include the Raine Island Beacon, Annie Eliza Ellis's grave and other guano mining relics. The beacon, in particular, is also an important post-contact component of the Wuthathi People's and Meriam Nation People's wider cultural landscape.</p>	<p>Condition and trend</p> <p>2019</p> 		
	<p>Assessment confidence</p> <p>Limited</p> 	<p>Limited</p> 	

The Raine Island Beacon is a 14m stone tower located on the eastern side of Raine Island. Built in 1844 by convict stonemasons from Sydney, the beacon was constructed as an aid to navigation and shelter for ships journeying between Australia and Asia through the Torres Strait. Although never lit, the beacon is visible for approximately 13 nautical miles and by providing safe passage, played a vital role in Australia's emerging colonial economy.

Constructed mostly of local materials – coral limestone quarried onsite, shells burned to make lime for mortar, timber from a nearby shipwreck the *Martha Ridgway* – the beacon is the oldest stone structure in the Australian tropics, and one of only three surviving convict-built structures in Queensland.

In the early 1890s the island was briefly the site of the Arundel guano mining operation. Evidence of the extensive quarrying remains visible across the island, although few signs are left of the once 100-strong workforce, its buildings, tramway or jetty. The gravesite⁷ of the manager's mother, Annie Eliza Ellis, lies adjacent to the beacon, a stark reminder of this period. Apart from documented history, there appears to be little or no tangible evidence of the beche-de-mer fishery crews that used the island in the 1870s.

More than 900 legible inscriptions have been carved or painted inside the beacon, providing an important record of human movement and activity in the region. A large number of these are from the crews of British Admiralty and other European vessels and help convey the significance of the beacon in facilitating safe vessel traffic and economic trade between the New South Wales colony and Britain. However, many of these inscription names are also Wuthathi, Erubam, Meriam and Ugarem Le. These First Nations peoples recognise the beacon as being of significant shared historical value: "the beacon shows common interest in navigation between our cultures and has family names of our people who have passed away" (ILUAWG 2018b; p.45). Wuthathi People and Meriam Nation People also hold a



Figure 11. Jimmy Gela, Meriam Nation, cleaning Annie Eliza gravesite on Raine Island © Gus Burrows, Styledia

⁷ The current gravestone associated with this gravesite is actually a replica commissioned by the Raine Island Corporation, with the original being kept at the Queensland Museum.

strong sense of care and responsibility for maintaining the Annie Eliza Ellis gravestone, amongst other shared history items.

As an early aid to navigation built of masonry on an isolated coral cay, the Raine Island Beacon is unique in form and context. It remains a landmark structure with aesthetic appeal generated by its rustic materials, early workmanship, and dramatic, isolated ocean setting. Its associations with northern navigation and maritime transport, as well as the colonial penal system are reflected in the fabric of the structure, and the later attempts at island industry appear through the island’s archaeology.

Listed on the Queensland Heritage Register, the heritage boundary encompasses the whole island, providing statutory protection for the beacon, the quarry remnants, Annie Eliza Ellis’s grave, and all remaining evidence of former industry (including jetty, buildings, tramway and locomotive). The National Trust (Australian Heritage Database) cites the beacon as a significant early vernacular building in Northern Australia.

This key value relates to Raine Island.

Threats

Primary threat: General weathering to the beacon affects the whole structure, including the footings. The beacon has developed structural weaknesses in response to a variety of environmental factors, including the erosion and movement of the underlying rock platform, and settlement of the stonework due to the ingress of water into the rubble core. Previous stonework repairs to the underlying rock platform in some locations have proved successful, although the northwest section remains under particular threat. In addition to overall structural integrity, the beacon’s inscriptions are also prone to weathering damage. **Threat rating: High**

Secondary threat: Storms and lightning strike have the potential to destroy or severely impact the beacon. **Threat rating: High**

Other threat: Ongoing weathering has the potential to also damage the grave sites and other archaeological sites on Raine Island. **Threat rating: Medium**

Other threat: Work activities to manage turtle and bird nesting on the island have the potential to impact the beacon and other sites on the island. **Threat rating: Medium**

Other threat: Ongoing natural deterioration of the historical features of Raine Island could hasten loss of knowledge and appreciation of the island’s significant maritime and mining heritage. **Threat rating: Medium**

Desired outcome and strategic management direction

Desired outcome		
Threatening processes	Strategic management directions	Priority
 <p>The condition of the Raine Island Beacon and other maritime and guano mining heritage values will be improved to <i>good with some concern</i> by implementing a program of conservation measures to address existing challenges particularly including physical threatening processes, logistical and resource constraints, and knowledge gaps.</p>		
Natural deterioration Storms/lightning strike	Restore the Raine Island Beacon to maintain structural integrity.	1
Natural deterioration Work activities	Preserve the grave sites and archaeological sites on Raine Island by reducing impacts of weathering and management activities.	2
Natural deterioration	Tell the story of Raine Island maritime and mining heritage to prevent loss of knowledge.	3

See Appendix 2. Glossary for priority rating definitions.



Figure 12. Raine Island Beacon © Gus Burrows, Styledia

5. Management direction

QPWS manages protected areas and forests to protect their values and deliver our custodial obligations as a land manager. Levels of service (LoS) assessment allows QPWS to consider the management of each park in a State-wide context and determine desired levels of management effort for each park in a consistent and equitable way. LoS assessment lets QPWS staff and the public know what type or level of management activity to expect on each park, forest and/or reserve. There are five LoS ratings ranging from 'acceptable' to 'exceptional': an acceptable rating is the minimum standard required to deliver good management and meet our legislative and custodial obligations.

The key areas for management on Raine Island National Park (Scientific) are Pests; Natural values; Historic cultural heritage; Community, partnerships and other interests; Field management capability; and Operational planning and management support. This section provides a **management direction statement** for each management theme, identifying its current LoS, desired LoS and the strategic management direction for management.

Summary of management direction

A summary of the current and desired LoS for Raine Island National Park (Scientific) is shown below; Figure 13 provides a key to the LoS icons.

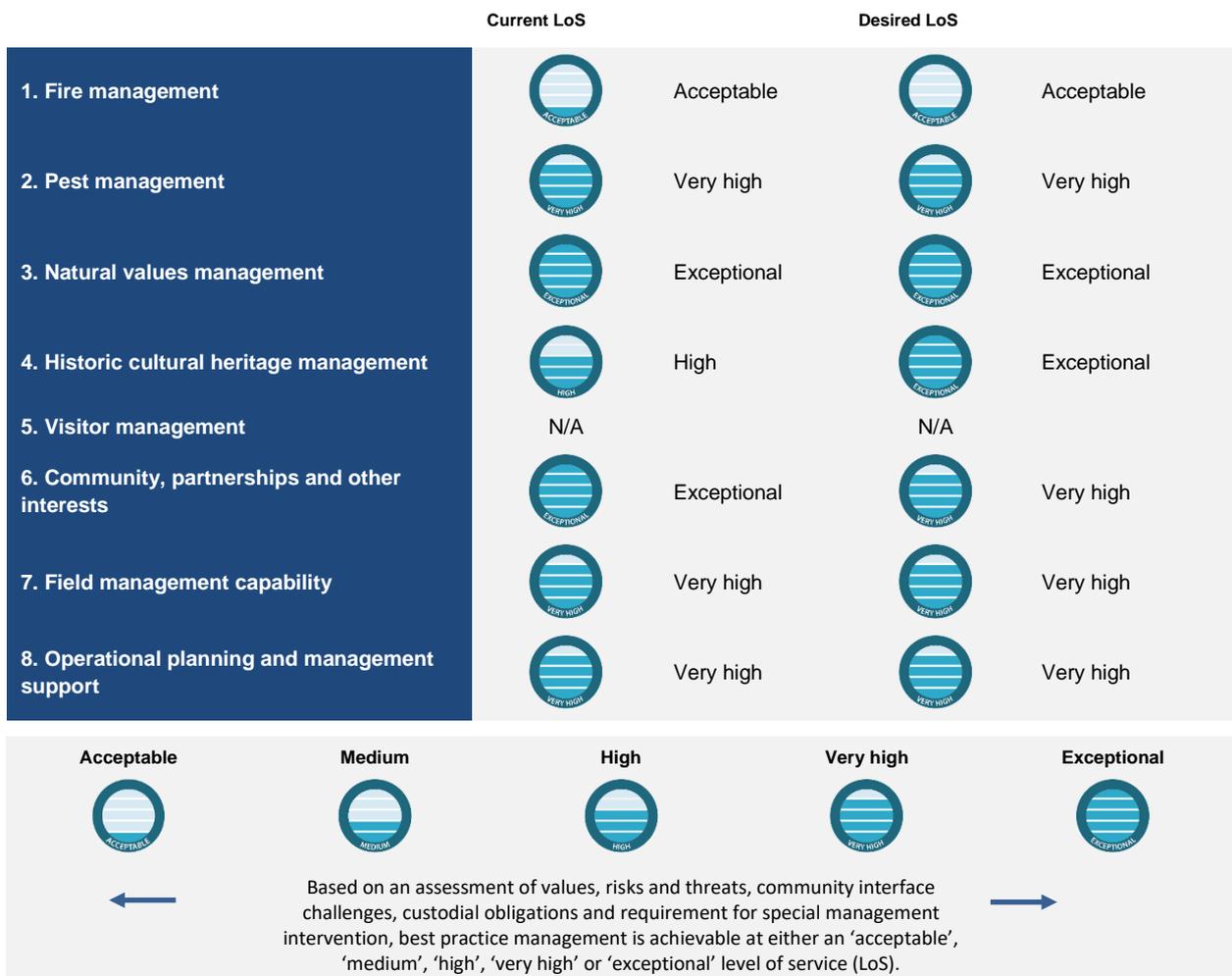


Figure 13. Key to condition, trend and confidence icons

5.1 Fire management

Management direction statement

Description	Current level of service
Fire management for Raine Island National Park (Scientific)	

Fire management is core business for QPWS to protect life and property, mitigate bushfires and maintain natural diversity in accordance with the NCA and the *Fire and Emergency Services Act 1990* (Qld) for the control and prevention of fires. QPWS works cooperatively with First Nations peoples, state and local government agencies, rural fire brigades, adjoining landholders, and local communities to manage fire across the landscape.

Wuthathi People and the Meriam Nation People do not support planned burning of the vegetation on Raine Island and Moulter Cay. Nonetheless, they assert a right for small ceremonial fires on the beach to meet ‘welcome to country’ and related cultural obligations. Further, the Queensland Government’s *Planned Burn Guidelines: Cape York Peninsula Bioregion of Queensland* identifies that ‘all dune and coral cay communities are fire-sensitive and do not require fire’ (p. 81). Consequently, a ‘no burning/fire exclusion’ approach is a conscious management decision and a specific fire strategy is not proposed for Raine Island National Park (Scientific).

Desired level of service and strategic management direction

Desired level of service	
	Fire will be maintained at an <i>acceptable</i> LoS by excluding fire from the fire-sensitive vegetation important as habitat for significant species.

Strategic management directions	Priority
Custodial obligations	
Work in good faith with Wuthathi People and the Meriam Nation People in managing the national park (scientific) consistent with State obligations under the Raine Island ILUA, the <i>Nature Conservation Act 1992</i> and elsewhere.	1
Level of service:	
Fire will continue to be managed through a strategic ‘watch and observe’ and ‘fire exclusion’ approach (apart from First Nations peoples’ ceremonial fires on the beach) to preserve the integrity of the fire-sensitive vegetation.	M
Maintain visitor access restrictions and compliance activities to reduce the risk of anthropogenic fire and its impacts on habitat and cultural heritage.	2

*KEY: Priority ratings: M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.2 Pest management

Management direction statement

Description	Current level of service
Pest management for Raine Island National Park (Scientific)	

Pest management is core business for QPWS to mitigate the threats to biodiversity in accordance with the NCA. QPWS has a responsibility under the *Biosecurity Act 2014* (Qld) to take all reasonable and practical steps to minimise the risks associated with plant and animal pests on lands under our control. Recognising that effective management of pests across the landscape is a shared responsibility, QPWS works cooperatively with First Nations peoples, other state and local government agencies, landholders and natural resource management groups.

The strategic management directions in this management statement will guide the formation of the Raine Island National Park (Scientific) Pest Strategy. The strategy details pest management objectives for preventing and mitigating pest impacts on key values and QPWS’s custodial obligations for managing pests and priority pest species.

Desired level of service and strategic management direction

Desired level of service	
	The current level of pest management meets requirements and will be maintained at a <i>very high</i> level of service.

Strategic management directions	Priority
Custodial obligations	
Work in good faith with Wuthathi People and the Meriam Nation People in managing the national park (scientific) consistent with its obligations under the Raine Island ILUA, the <i>Nature Conservation Act 1992</i> and elsewhere.	1
Take ‘reasonable and practical’ steps to mitigate biosecurity risks as part of QPWS general biosecurity obligation under the <i>Biosecurity Act 2014</i> .	1
Level of service:	
Maintain comprehensive park biosecurity measures to protect key values and minimise risk of pest plant, pest animal and disease incursions.	1
Improve knowledge of potential pests and pathogens through regular monitoring and assessment of key values.	2

*KEY: Priority ratings: M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.3 Natural values management

Management direction statement

Description	Current level of service
Natural values management for Raine Island National Park (Scientific)	

QPWS manages natural values in accordance with the NCA, EPBC and *Environmental Protection Act 1994* (Qld) and relevant international agreement guidelines.

Raine Island National Park (Scientific) has significant values including threatened species and species listed in international agreements (including in relation to migratory birds). The *Recovery Plan for Marine Turtles in Australia* (Commonwealth of Australia, 2017) and the *Queensland Marine Turtle Conservation Strategy* (Queensland Government, 2018) will guide the management of green turtles. The condition of natural values will be monitored through implementing the Raine Island National Park (Scientific) Monitoring and Research Strategy, and more specifically in relation to birds, the *Coastal Bird Monitoring and Information Strategy: Seabirds 2015-2020*.

Threatening pest processes will be managed through implementing the Raine Island National Park (Scientific) Pest Strategy.

Desired level of service and strategic management direction

Desired level of service	
	The current level of natural values management meets requirements and will be maintained at an <i>exceptional</i> level of service.

Strategic management directions	Priority
Level of service:	
Maintain current approach to natural values management in partnership with the Wuthathi People and Meriam Nation People.	M
Increase knowledge of tidal inundation impacts on green turtle rookery through monitoring and assessment.	1
Increase knowledge of interactions between nest micro-environment and green turtle hatching success through research.	1
Increase knowledge of the health of seabird nesting habitat and seabird populations at Raine Island, Moulter Cay and MacLennan Cay through monitoring and assessment.	1
Improve knowledge of all natural values of Raine Island National Park (Scientific) to protect World Heritage values.	3
Increase knowledge of the impacts of silver gulls and nankeen night-herons on the green turtle rookery.	4
Increase knowledge and awareness of impacts of work activities and infrastructure on all listed World Heritage values, including natural beauty and aesthetic importance.	4
Health check monitoring:	
Monitor the condition of natural key values through health check monitoring.	1

*KEY: Priority ratings: M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.4 Historic cultural heritage management

Management direction statement

Description	Current level of service
Historic cultural heritage management for Raine Island National Park (Scientific)	

QPWS manages historic sites in accordance with the NCA, *Queensland Heritage Act 1992* (Qld) and *Historic Shipwrecks Act 1976* (Cwlth).

The Raine Island Beacon is listed on the Queensland Heritage Register and the Australian Heritage Database.

Threatening processes will be managed through the implementation of the Raine Island National Park (Scientific) Historical Cultural Heritage Strategy.

Desired level of service and strategic management direction

Desired level of service	
	Historic cultural heritage management will be improved to an <i>exceptional</i> level of service through the development of a historic cultural heritage strategy, and increasing collaborative partnerships with the Wuthathi People and the Meriam Nation People and other stakeholders.

Strategic management directions	Priority
Level of service:	
Improve the collaborative partnership with the Wuthathi People and the Meriam Nation People to conserve heritage values.	1
Improve engagement with heritage, research and conservation stakeholders (including the Queensland Museum) regarding the management of historic cultural heritage values.	2
Improve historic cultural heritage management through increased awareness and understanding of historic cultural heritage values by all who visit Raine Island.	2
Improve the level of knowledge of historic cultural sites on Raine Island.	3

*KEY: Priority ratings: M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.5 Community, partnerships and other interests

Management direction statement

Description	Current level of service
Community, partnerships and other interests associated with Raine Island National Park (Scientific)	

Queensland’s parks, forests and reserves provide sustainable environmental, economic and social benefits. The agency is committed to working with its partners and the community to ensure activities and infrastructure are ecologically sustainable and continue to benefit Queensland’s economic and social wellbeing as outlined in *A Master Plan for Queensland’s parks and forests to 2025* (NPRSR, 2014). Permitted activities are administered in accordance with the requirements of the NCA and other relevant legislation.

Raine Island National Park (Scientific) is an important park for developing strong research, funding and monitoring partnerships that lead to collaborative management activities to protect significant species and cultural heritage. QPWS is committed to supporting enhanced collaboration between Wuthathi People and Meriam Nation People, researchers, philanthropic groups, scientific film makers, the non-government conservation sector, and other government natural and cultural resource management organisations (including the Great Barrier Reef Marine Park Authority and Parks Australia) in a manner consistent with this management statement and *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group*.

QPWS also supports the development of a partnership with Wuthathi People and Meriam Nation People that sees transitional progression, over time, towards Indigenous-led management.

Desired level of service and strategic management direction

Desired level of service	
	The current level of management for community, partnerships and other interests exceeds requirements and will be maintained to at least a <i>very high</i> level of service.
Strategic management directions	Priority
Level of service:	
Maintain current approach to wider ‘community, partnerships and other interests’ management to meet high expectations for partnership, communication and engagement.	M
Strengthen the management partnership with Wuthathi People and Meriam Nation People to promote a steady transition towards Indigenous-led management, where capacity and desire exists.	2
Support opportunities for Wuthathi People and Meriam Nation People led sustainable tourism (including in partnership with other interests), where capacity and desire exists.	4

*KEY: **Priority ratings:** **M** – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.6 Field management capability

Management direction statement

Description	Current level of service
Field management capability for Raine Island National Park (Scientific)	

Managing natural and cultural areas has varying degrees of complexity. Field management capability is a measure of this complexity and considers the significance of the planning area’s values, potential threats, intensity of visitor use and community expectations. It considers the required proximity, frequency and intensity of on-ground management that is needed to manage key values and meet custodial obligations. The rating provides QPWS with a means for gauging resource requirements and staff training needs.

Desired level of service and strategic management direction

Desired level of service	
	The current level of field management capability meets requirements and will be maintained at a <i>very high</i> level of service.

Strategic management directions	Priority
Level of service:	
Maintain current level of field management capability, in part through securing ongoing support from external partners.	2
Promote information exchanges between Wuthathi People, Meriam Nation People and QPWS, researchers and other stakeholders to facilitate the application of ‘both ways’ knowledge and understanding to research and management.	2
Improve field management capability for historic cultural values through adequate resourcing and appropriately skilled departmental staff and partner managers.	2

*KEY: Priority ratings: M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

5.7 Operational planning and management support

Management direction statement

Description	Current level of service
Operational planning and management support for Raine Island National Park (Scientific)	

Operational planning and management support covers all aspects of management direction including information, assessments, systems, tools and monitoring. As with field management capability, the area’s values, potential threats, intensity of visitor use and community expectations are considered when determining the appropriate levels of service.

Desired level of service and strategic management direction

Desired level of service	
	The current level of operational planning and management support meets requirements and will be maintained at a <i>very high</i> level of service.
Strategic management directions	Priority

Level of service:

Maintain current level of operational planning and management support.	M
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*KEY: **Priority ratings:** M – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

6. References

Commonwealth of Australia, 2017, *The Recovery Plan for Marine Turtles in Australia*, the Department of the Environment and Energy, Canberra.

Commonwealth of Australia, 2019, *Aboriginal and Torres Strait Islander Heritage Strategy for the Great Barrier Reef Marine Park*. Great Barrier Reef Marine Park Authority, Townsville.

Indigenous Land Use Agreement Working Group, 2018a, *Caring for Raine Island Country and Culture* Poster Display, Cairns.

Indigenous Land Use Agreement Working Group, 2018b, *Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group*, Cairns.

Queensland Government, 2014, *A Master Plan for Queensland's parks and forests to 2025*, Department of National Parks, Recreation, Sport and Racing, Brisbane.

Queensland Government, 2013, *Raine Island National Park Management Statement 2013*, Department of National Parks, Recreation, Sport and Racing, Brisbane.

Queensland Government, 2015, *Raine Island Beacon*. Report on condition of structure – site visit 6-12 July 2015. Internal report, Department of Environment and Heritage Protection, Brisbane.

Queensland Government, 2018, *Queensland Marine Turtle Conservation Strategy*. Department of Environment and Science, Brisbane.

Queensland Government, 2020, *The Gurra Gurra Framework 2020-2026*, Department of Environment and Science, Brisbane.

The Raine Island National Park (Scientific) Indigenous Land Use Agreement, 2007, http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/ILUA_details.aspx?NNTT_FileNo=QI2006/044

Appendix 1. Summary of strategic management directions

A summary of strategic management directions for Wuthathi People and Meriam Nation People (Table 1), key values (Table 2) and management direction (Table 3).

Table 1. Summary of strategic management directions for Wuthathi People and Meriam Nation People

Strategic management directions	Priority (1-5) *
Support implementation of <i>Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group.</i>	1
Work together cooperatively to ensure that the significant conservation and cultural values are protected.	1
Move towards governance and management driven by Wuthathi People and Meriam Nation People, resulting in Indigenous-led collaborative partnerships for the benefits of all people.	1
Share and use Traditional Knowledge alongside scientific knowledge to understand, better protect and manage cultural and biological systems on Country.	1
Support, as far as practicable (including within available departmental resources and vessel operating guidelines), Wuthathi People and Meriam Nation People to bring their children to the park to pass on and maintain culture for generations to come.	1
Support, as far as practicable, the aspiration of the Wuthathi People and Meriam Nation People for a review of the Raine Island Indigenous Land Use Agreement.	1

See Appendix 2. Glossary for key value priority rating definitions.

Table 2. Summary of strategic management directions for key values

Key value	Current	Desired	Threatening processes	Strategic management directions	Priority (1-5) *
Raine Island Country and Culture			Loss of connection to Country	Support implementation of <i>Caring for Raine Island Country and Culture. A strategic plan for the Indigenous cultural heritage management of the Raine Island Group</i> to improve awareness, understanding and protection of Wuthathi People's and the Meriam Nation People's cultural values.	1
			Loss of connection to Country	Support arrangements that enable benefits to flow to Wuthathi People and Meriam Nation People from Indigenous and non-Indigenous use and management of Country [the plan: Goal 1 p. 50].	1
			Loss of connection to Country	Facilitate scientific and cultural heritage research that engages and supports Wuthathi People's and Meriam Nation People's rights and interests [the plan: Goal 2 p. 50].	1
			Loss of connection to Country	Support arrangements that promote Wuthathi and Meriam Nation governance and management of biodiversity and cultural heritage [the plan: Goal 3 p. 50].	1
			Other	Deliver positive cultural heritage outcomes through educating and raising awareness about the cultural and natural significance of Country for Wuthathi People and Meriam Nation People, their partners and the broader community [the plan: Goal 4 p. 50].	1
			Work or other activities	Develop respectful and trusting relationships to increase capacity within all partners to address threats and impacts from natural system modifications, human intrusion and disturbance on cultural values (including on culturally significant species such as green turtles and seabirds).	1
			Loss of connection to Country	Promote further investigation and recording of traditional knowledge and stories.	2

Key value	Current	Desired	Threatening processes	Strategic management directions	Priority (1-5) *
Green turtle rookery			Pest animal/plant	Maintain the health and integrity of the green turtle rookery by developing (and continually refining) a biosecurity plan specific to Raine Island National Park (Scientific).	1
			Pest animal/plant	Prevent the arrival of pests and pathogens that have the potential to impact on the green turtle rookery.	1
			Pest animal/plant	Prevent the establishment of pests that have the potential to impact on the green turtle rookery.	1
			Inadequate habitat	Address green turtle rookery threats by developing adaptive management responses informed by rigorous ongoing collaborative research and other scientific assessment (including in partnership with Wuthathi People and the Meriam Nation People).	1
			Inadequate habitat	Reduce impacts of tidal inundation on the green turtle rookery through innovative habitat remediation and other intervention activities.	1
			Inadequate habitat	Reduce impacts of negative nest micro-environment factors on the green turtle rookery through innovative habitat remediation and other intervention activities.	1
			Inadequate habitat	Reduce adult green turtle mortality through direct habitat intervention that mitigates physical hazards during nesting.	1
			Climate change	Maintain green turtle rookery through active management of climate change associated impacts by implementing hard and soft engineering techniques.	1
			Visitor impacts	Minimise human disturbance to the green turtle rookery by maintaining the level of legislated access restrictions to Raine Island National Park (Scientific), and surrounding marine park waters to reduce the risk of introducing pest plants, pest animals and diseases.	3
			Other	Monitor and minimise unsustainable impacts of silver gulls and nankeen-night herons on the green turtle rookery.	3
Seabird nesting habitat			Pest animal/plant	Prevent the arrival of pests which have the potential to impact on seabird nesting habitat.	1
			Pest animal/plant	Prevent the establishment of pests which have the potential to impact on seabird nesting habitat.	1
			Inadequate habitat	Monitor the health of the seabirds and their habitat on Raine Island, Moulter Cay and MacLennan Cay through ongoing collaborative monitoring, research and assessment (including in partnership with Wuthathi People and the Meriam Nation People).	2
			Work or other activities	Minimise impacts of beach re-profiling, fencing, and other turtle management actions on seabird nesting habitat.	3
			Work or other activities	Minimise impacts of seabird counts/monitoring on seabird nesting habitat.	5
			Climate change	Monitor condition and climate associated changes of seabird nesting habitat to assess impacts and determine future management.	5
Raine Island Maritime and Mining Heritage			Natural deterioration Storms/lightning strike	Restore the Raine Island Beacon to maintain structural integrity.	1
			Natural deterioration Work activities	Preserve the grave sites and archaeological sites on Raine Island by reducing impacts of weathering and management activities.	2
			Natural deterioration	Tell the story of Raine Island maritime and mining heritage to prevent loss of knowledge.	3

See Appendix 2. Glossary for key value priority rating definitions.

Table 3. Summary of strategic management directions for Levels of Service

Management theme	Current LoS	Desired LoS	Strategic management directions	Priority (1-5) *
Fire			Fire will continue to be managed through a strategic 'watch and observe' and 'fire exclusion' approach (apart from First Nations peoples' ceremonial fires on the beach) to preserve the integrity of the fire-sensitive vegetation.	M
			Work in good faith with Wuthathi People and the Meriam Nation People in managing the national park (scientific) consistent with State obligations under the Raine Island ILUA, the <i>Nature Conservation Act 1992</i> and elsewhere.	1
			Maintain visitor access restrictions and compliance activities to reduce the risk of anthropogenic fire and its impacts on habitat and cultural heritage.	2
Pests			Work in good faith with Wuthathi People and the Meriam Nation People in managing the national park (scientific) consistent with its obligations under the Raine Island ILUA, the <i>Nature Conservation Act 1992</i> and elsewhere.	1
			Take 'reasonable and practical' steps to mitigate biosecurity risks as part of QPWS general biosecurity obligation under the <i>Biosecurity Act 2014</i> .	1
			Maintain comprehensive park biosecurity measures to protect key values and minimise risk of pest plant, pest animal and disease incursions.	1
			Improve knowledge of potential pests and pathogens through regular monitoring and assessment of key values.	2
Natural values			Monitor the condition of natural key values through health check monitoring.	1
			Maintain current approach to natural values management in partnership with the Wuthathi People and Meriam Nation People.	M
			Increase knowledge of tidal inundation impacts on green turtle rookery through monitoring and assessment.	1
			Increase knowledge of interactions between nest micro-environment and green turtle hatching success through research.	1
			Increase knowledge of the health of seabird nesting habitat and seabird populations at Raine Island, Moulter Cay and MacLennan Cay through monitoring and assessment.	2
			Improve knowledge of all natural values of Raine Island National Park (Scientific) to protect World Heritage values.	3
			Increase knowledge of the impacts of silver gulls and nankeen night-herons on the green turtle rookery.	4
			Increase knowledge and awareness of impacts of work activities and infrastructure on all listed World Heritage values, including natural beauty and aesthetic importance.	4
Historic cultural heritage			Improve the collaborative partnership with the Wuthathi People and the Meriam Nation People to conserve heritage values.	1
			Improve engagement with heritage, research and conservation stakeholders (including the Queensland Museum) regarding the management of historic cultural heritage values.	2
			Improve historic cultural heritage management through increased awareness and understanding of historic cultural heritage values by all who visit Raine Island.	2
			Improve the level of knowledge of historic cultural sites on Raine Island.	3

Management theme	Current LoS	Desired LoS	Strategic management directions	Priority (1-5) *
Community, partnerships and other interests	Exceptional 	Very high 	Maintain current approach to wider 'community, partnerships and other interests' management to meet high expectations for partnership, communication and engagement.	M
			Strengthen the management partnership with Wuthathi People and Meriam Nation People to promote a steady transition towards Indigenous-led management, where capacity and desire exists.	2
			Support opportunities for Wuthathi People and Meriam Nation People led sustainable tourism (including in partnership with other interests), where capacity and desire exists.	4
Field management capability	Very high 	Very high 	Maintain current level of field management capability, in part through securing ongoing support from external partners.	2
			Promote information exchanges between Wuthathi People, Meriam Nation People and QPWS, researchers and other stakeholders to facilitate the application of 'both ways' knowledge and understanding to research and management.	2
			Improve field management capability for historic cultural values through adequate resourcing and appropriately skilled departmental staff and partner managers.	2
Operational planning and management support	Very high 	Very high 	Maintain current level of operational planning and management support.	M

*KEY: Priority ratings: **M** – maintain current priorities; Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent).

Appendix 2. Glossary

Interpreting key Values-Based Management Framework concepts

Adaptive management	The process of adjusting and improving how we manage parks, forests and reserves after assessing the outcomes of previous strategies and on-ground actions.
Condition and trend	The condition of a key value is assessed as either good, good with some concern, significant concern or critical. Trend describes what is happening to the condition: is it improving, stable, or deteriorating. A key value's current condition is determined during the planning process. A desired condition is a realistic goal for the future condition of the key value. The ongoing condition of key values is assessed with regular health checks, monitoring and scientific assessment.
Custodial obligations	The requirements in legislation and government policies that we, as the land management agency, have to ensure QPWS&P's parks, forests and reserves are lawfully managed and good neighbours. Management provides for the protection of life and property, biosecurity and positive relationships with adjacent communities and landholders, as well as enhancing and protecting our values.
Desired outcome	A statement in the key value and management direction statements about moving from the current status (condition or LoS) to a desired status. The goal for management.
Health check	Basic form of monitoring that uses indicators and visual assessments to regularly evaluate the condition of key values. Regular health checks ensure QPWS&P can respond quickly to adverse change and redirect management priorities.
Key value	A natural, cultural, social and/or economic value that is of most significance to that area. It is what makes the area special and if lost, would diminish what makes the area distinct from others.
Key value statement	A statement in the management plan/statement that is developed for each key value. It describes the key value, current condition, desired condition, current threats and threat ratings, strategic management direction and priorities for further thematic strategy planning and on-ground management action.
Levels of service (LoS)	A planning tool used to identify the acceptable management standard, or level of resourcing that is required to maintain an area based on its values, threats and the complexity of management. There are five LoS ratings ranging from 'acceptable' to 'exceptional' noting that an acceptable rating is the minimum standard required to deliver good management and meet our custodial obligations under law as a land manager. A 'current' LoS rating is the level at the time of planning, the 'desired' LoS is where we want to be.
Management direction	How we manage each management theme to protect and enhance our key values and meet our custodial management obligations.
Management direction statement	A statement in the management plan/statement, developed for each management theme that describes the current LoS, desired LoS, custodial obligations, strategic management direction and priorities for further thematic strategy planning and on-ground management action.
Management theme	QPWS&P has identified a number of management themes that are common to most of the parks, forests and reserves in our estate: fire management; pest management; natural values management; historic cultural heritage management; visitor management; community, partnerships and other interests; field management capability; operational planning and management support.
Management instrument	A management plan or management statement.
Priority rating (key value SMDs)	<p>A rating given to a strategic management direction according to the need for action to prevent further decline, stabilise current condition, or restore and enhance values, with consideration given to legislative obligations, cost, social, economic and political factors.</p> <p>Critical (1) - Loss or very significant decline in the condition of key value/s is highly likely if action not taken OR significant improvement in the condition of key value/s is highly likely if action is taken.</p> <p>Very high (2) - Significant decline in the condition of key value/s is likely if action is not taken OR significant improvement in the condition of key value/s is likely if action is taken.</p> <p>High (3) - Decline in the condition of key value/s is likely if action is not taken OR improvement in the condition of key value/s is likely if action is taken.</p> <p>Moderate (4) - Some decline in the condition of key value/s is possible if action is not taken OR some improvement in the condition of key value/s is possible if action is taken.</p> <p>Desirable (5) - While decline in the condition of key value/s is not likely in the short term, the action, if taken would help build long-term resilience of key value/s.</p>
Priority rating (LoS SMDs)	A rating given to a LoS or custodial obligation strategic management direction. A scale from 1 (extremely urgent) – 5 (not urgent or optional) is assigned, with consideration given to legislative obligations, cost, social, economic and political factors.
Strategic management direction	A broad strategy aimed at mitigating or removing a threat to a key value and maintaining or improving the condition of a park's value; or addressing the gap between the current LoS and desired LoS for a management theme.
Threat or threatening process and threat rating	Based on IUCN's classifications, QPWS&P has identified threatening processes that have the potential to affect Queensland's values (e.g. natural systems modifications, invasive species etc.). Current threats to key values are identified and given a threat rating based on a combination of the extent of the impact, the severity of the impact, and the urgency of action.