

Boodjamulla National Park

Incorporates: Boodjamulla National Park (Aboriginal Land), Boodjamulla (Lawn Hill) National Park, Australian Fossil Mammal Sites (AFMS) World Heritage Area (Riversleigh section), Reserves for Departmental and Official Purposes and Unallocated State Land



Management Plan

2022



This management plan has been prepared and co-designed by the Waanyi People and Queensland Parks and Wildlife Service (QPWS), Department of the Environment, Tourism, Science and Innovation (DETSI).

© State of Queensland, May 2022



Front cover artwork: © Pietta Aplin

This management plan does not affect, diminish or extinguish native title or associated rights.

Aboriginal and Torres Strait Islander people should be aware that this document may contain images or names of deceased persons in photographs and printed material that some people may find distressing.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia (CC BY) licence.



Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication, and the Waanyi People as the copyright owner in relation to traditional cultural knowledge sections of the publication, as well as acknowledging the Waanyi People as the source of that traditional cultural knowledge and site identification information contained in the publication.

For more information on this licence, visit <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Disclaimer

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. The department holds no responsibility for any errors or omissions within this document. Any decisions made by other parties based on this document are solely the responsibility of those parties.

If you need to access this document in a language other than English, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to telephone Library Services on +61 7 3170 5470.

This publication can be made available in an alternative format (e.g. large print or audiotape) on request for people with vision impairment: phone +61 7 3170 5470 or email <library@detsi.qld.gov.au>.



Contents

1. Introduction.....	3
1.1 Approach to best practice management.....	3
1.2 Management planning	5
2. The Waanyi People.....	6
2.1 Waanyi Prescribed Body Corporate	6
2.2 Waanyi Country	7
2.2.1 Waanyi Aboriginal culture.....	7
2.2.2 Waanyi environmental knowledge: plants, animals and seasons.....	8
2.3 Park management arrangements	11
3. Boodjamulla (Lawn Hill) National Park.....	12
3.1 Management plan and thematic strategies	12
3.2 Park overview	12
3.2.1 Planning area tenure	13
3.3 World Heritage.....	14
4. Key values	16
4.1 Waanyi culture – Waanyi lore, custom and heritage.....	18
4.2 Riversleigh's fossil deposits.....	20
4.3 Freshwater systems	22
4.4 Mixed shrubby woodlands on limestone	25
4.5 Lancewood communities.....	27
4.6 Open woodlands and grasslands	28
a. Sandstone spinifex communities	28
b. Tussock grasslands.....	30
4.7 Boodjamulla (Lawn Hill) National Park ecotourism and visitor experience	31
5. Management direction	33
5.1 Waanyi People and cultural heritage.....	34
5.2 Fire management	36
5.3 Pest management	37
5.4 Natural values management.....	38
5.5 Post-contact cultural heritage.....	39
5.6 Visitor management.....	40
5.7 Community, partnerships and other interests.....	42
5.8 Field management capability.....	43
5.9 Operational planning and management support	44
6. Bibliography.....	45
Appendix 1. Glossary.....	46

1. Introduction

The DETSI recognises, respects and values First Nations Peoples and cultures. We recognise that First Nations Peoples have rights and interests in the country on which we work. We are committed to progressing self-determination by working with First Nations Peoples to incorporate their priorities and perspectives in decision-making and operations.

The Gurra Gurra Framework 2020–2026 prioritises and accelerates this commitment. Throughout its development, it has considered what has worked well and what can be done better to improve the way we do business into the future.

The Queensland Parks and Wildlife Service and Partnerships works with First Nations Peoples to ensure the protection of Country and culture. We pay our respects to all peoples, and to the Elders past, present and future, for the land and sea on which we work, live and walk.

In August 2016, the Aboriginal Land Tribunal recommended that the Boodjamulla (Lawn Hill) National Park area be granted under the Aboriginal Land Act 1991 (Qld) (ALA) to the Waanyi People and the Minnie Myboogundji Family group on the grounds of traditional affiliation and historical association. In 2023, two parts of Boodjamulla (Lawn Hill) National Park were transferred to the Waanyi Native Title Aboriginal Corporation Registered Native Title Bodies Corporate (RNTBC) (Waanyi Prescribed Body Corporate (PBC)) and dedicated as Boodjamulla National Park (Aboriginal land). In 2025, an additional area of the national park was transferred as Boodjamulla National Park (Aboriginal Land). An allocation of unallocated State land (previous resource reserves) was dedicated as Boodjamulla (Lawn Hill) National Park. The national park areas are proposed for transfer to the Waanyi PBC and dedication as a national park (Aboriginal land) in the future. For simplicity, in this document we will use 'Boodjamulla National Park' to refer to both the national park and national park (Aboriginal land) and Reserves for Departmental and Official Purpose.

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. The Queensland Parks and Wildlife Service (QPWS) 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 Boodjamulla National Park healthy by:

- managing and protecting the things that matter most – our key values
- integrating Waanyi priorities and aspirations
- strategically directing management effort towards priorities
- delivering the QPWS and Waanyi People's **custodial obligations** as land managers
- 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 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 level of service for each park.



Level of service is a management standard that considers an area's values, **threatening processes**, custodial obligations, risks and overall management complexity.

By assessing an area's key values and levels of service, QPWS 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.

Management plans are legislative requirements under the *Nature Conservation Act 1992* (Qld), and all plans are prepared in keeping with legislated management principles, supporting regulations, government policies and procedures, and international agreements. In keeping with our commitment to cooperative management arrangements and any other future developments, the management plan includes cultural knowledge and perspectives that the Waanyi People have authorised for inclusion, and respectfully supports Waanyi culture and their vision for the park.

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 1.

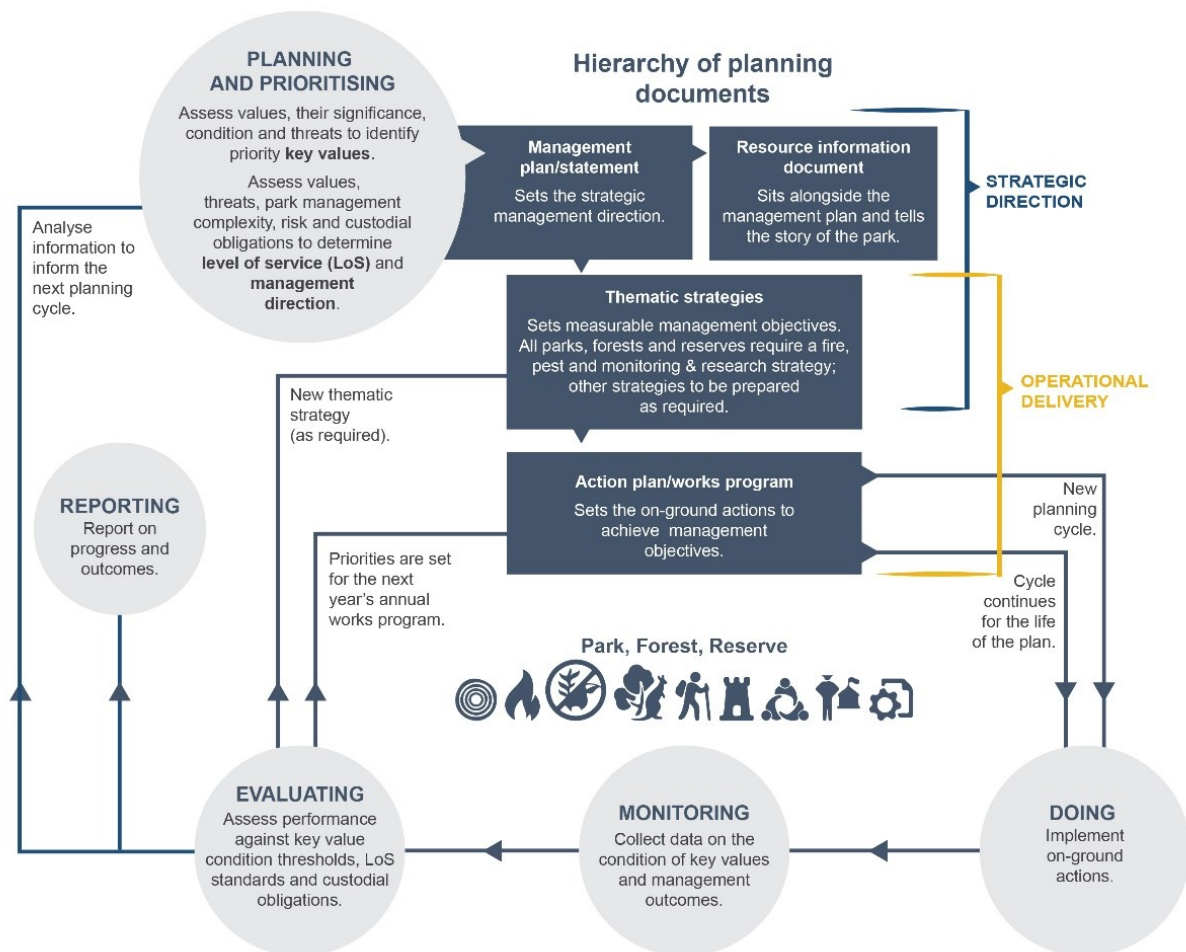


Figure 1. Phases of the VBMF cycle for planning and the hierarchy of planning documents

1.2 Management planning

This management plan was developed through a process of research, assessment and consultation to establish priorities and set the **strategic management direction** for the park. It is a legislative requirement under the *Nature Conservation Act 1992* (Qld) and *Aboriginal Land Act 1991* (Qld). The planning area also includes places inscribed on the UNESCO World Heritage list (*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)). It has been prepared in keeping with relevant legislation, supporting regulations, government policies and procedures, and international agreements. Planning for the park is brought together and communicated through a number of planning documents:

- The management plan provides the high-level strategic direction for managing the area's key values, levels of service and custodial obligations. Management plans are statutory documents and are generally reviewed every 10 years.
- World Heritage specific planning documents set out any special requirements for managing the natural and cultural attributes within the park that are of international significance (also known as Outstanding Universal Value).
- The resource information document supports the management plan and provides a compendium of park information that tells the story of the park. It accompanies the management plan, providing contextual information, but does not provide **management direction**.
- Thematic strategies identify specific objectives to achieve the strategic management directions identified in the management plan. While all parks and forests require a fire strategy, pest strategy and a monitoring & 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.detsi.qld.gov.au.

2. The Waanyi People

“We, the Waanyi People, Traditional Owners of Boodjamulla National Park, welcome you to our Country and ask that you respect our special place.
When we come into the gorge, we feel at home; we feel so safe;
we are visiting our old people.” Waanyi Elders



Figure 2. *Bujimala* © Len Cubby

The Waanyi People have a strong connection with Boodjamulla National Park. Numerous visible and spiritual archaeological and cultural sites demonstrate their continuous occupation and association with the area, with some sites dated at 37,000 years old. Continuing this connection to Country and ongoing use of cultural resources is of great importance to the Waanyi People.

Waanyi traditional culture is multifaceted and complex. This is evidenced by the myriad Dreamings, skins and customs associated with the land. Waanyi culture is rich and remains strong within current generations of leaders, who wish to retain connections to ancestral lands and stories.

The broad range of cultural beliefs, protocols and actions exercised by the Waanyi People are expressive of the need to ensure the proper maintenance, care and protection of the lands and waters within the traditional countries of Boodjamulla National Park. This is part of the rights and responsibilities held collectively by the Waanyi People, which bind individuals and families to the land. While these rights and responsibilities are locality-specific based on skins or lineage, all Waanyi People have demonstrated rights in relation to the entirety of Waanyi traditional territory, including Boodjamulla National Park. Appropriate naming and traditional conventions should be recognised and implemented across the park to respect the cultural connectedness between the Waanyi People and their land, for current and future generations. Boodjamulla National Park represents a critical basis for Waanyi culture that is expressed through Dreamings, stories and dances. The Waanyi People, through cooperative management with QPWS, are investigating how culture is retained and showcased within Boodjamulla National Park to become a ‘centre of culture’.

2.1 Waanyi Prescribed Body Corporate

In 1994, a native title claim was lodged on behalf of the Waanyi People. On 9 December 2010, the Federal Court made a determination that recognised the native title rights and interests of the Waanyi People in land and waters covering an area of 1,730,081 hectares north of Mount Isa in Queensland, including Boodjamulla (Lawn Hill) National Park, Boodjamulla National Park (Aboriginal Land) and the Reserves for Departmental and Official Purpose (formerly known as resources reserves). The determination is key to the improvement of the lives and welfare of the Waanyi People.

The Waanyi People continue to use the area for cultural activities and have ongoing commitments and cultural obligations in managing Boodjamulla National Park.

The Waanyi PBC will represent the Waanyi People on all matters relating to their native title rights and interests. The Waanyi PBC has the principal objective of relieving poverty, sickness, destitution, dispossession, suffering and misfortune among the Waanyi People.

The Waanyi PBC will take action to:

- protect the native title rights and interests, and the customary law rights and interests, of Waanyi People (including by supporting further claims for recognition of those native title rights and interests authorised by Waanyi People)
- protect and promote the culture of Waanyi People
- protect the Aboriginal cultural heritage of Waanyi People, including representing Waanyi People in respect of matters relating to Aboriginal cultural heritage
- promote the economic advancement of Waanyi People
- protect the physical environment on Waanyi Country.

The Waanyi PBC's strategic goals are to provide support to make the lives of Waanyi People better in the short term, build assets and businesses in the medium term, and provide a long-term future for Waanyi People through self-determination and sustainable economic development.

2.2 Waanyi Country

Waanyi Country is expansive, covering 14 linked Country land groups that straddle the Queensland–Northern Territory border in the southern Gulf of Carpentaria region. Boodjamulla National Park encompasses four Country land groups:

- Elizabeth and Accident Creeks Country
- Lawn Hill Country
- Louie Creek Country
- Riversleigh Country.

Waanyi People retain strong Dreamings and skin affiliations that describe traditional connections to land with culturally specific rights in particular places. This cultural knowledge and extended family connections are associated with certain responsibilities to what is known as 'Country'. There are historical connections of individuals and families encompassing traditional knowledge about animals, plants and landscape features.

Waanyi People have maintained cultural knowledge of, traditional connections to and ownership of different countries. These systems of knowledge will continue to be adapted based on learnings from previous generations and the continuing focus on the future for Waanyi People.

2.2.1 Waanyi Aboriginal culture

There are multidimensional links between Waanyi People and the four Country land groups associated with Boodjamulla National Park. This is supported through Waanyi oral history and connections founded in the presence and life experiences of both living and deceased generations of Waanyi People. The Waanyi cultural relationships for each country are summarised below.

Elizabeth and Accident Creeks Country

- Focused on the two main watercourses flowing eastwards and northwards that eventually join with the Gregory River, this Country represents the major Dreaming *Wirrigajigaji* (Catfish) said to have travelled down the waterways, leaving distinct signs associated with the Catfish tradition. Manifestations of the Dreaming are represented in the geological formations and spiritual significance found in the upstream sections of Elizabeth Creek, throughout the northern third of Boodjamulla National Park.
- Another significant Dreaming associated with this Country is *Marrarrabana* (Murrurubuna, Water Girls)¹, representing a band of mythic women who travelled all through Waanyi Country.

¹ Where useful, a non-technical spelling of Waanyi words is included in brackets to assist standard English readers with pronunciation.



Lawn Hill Country

- This Country covers an area of at least the middle third of Boodjamulla National Park and is associated both with Lawn Hill Station and Lawn Hill Creek, including the gorge section, lower foothills and as far as Lilydale Spring. Connections to this Country are richly layered and interconnected for Waanyi People.
- There are three significant cultural connections to the Lawn Hill area:
 1. Wuyaliya Dreamings associated with the tract of Country along Lawn Hill Creek and to the north and west through the Constance and Edith ranges. These relate to the course and actions of *Jumburuna* (Joombooroon, Yellow Goanna) in defining the spiritual features of the ranges. *Warrgi* (Dingo) is also associated with this Country
 2. Mambaliya Dreamings associated with the *Duwadari* (Doowadurri, Storm Bird) waterhole close to the Boodjamulla National Park entrance, and land extending to the south-east. The central spiritual features are *Bujimala* (Boojimula, Rainbow Serpent) and *Jarrbigala* (Jurrbigula, Eagle Hawk)
 3. Connections derived from a history of occupation over many generations at semi-sedentary camps on Page Creek, Bujabuja (Boojubooja, near the gorge and Adel's Grove), Wugunjari (Woogoonjuri, Louie Creek) and several camps at Ngumari (Ngoomuri, Lawn Hill Station).

Louie Creek Country

- This Country is a relatively small area including the permanent spring Wugunjari (Woogoonjuri), and was the location of a historical Chinese market garden settlement. The Country provides access to bush resources and the availability of supplies would have contributed to Waanyi People's historical residence in the area.
- The Country supports extensive rock shelters and caves, *gumayungu* (goomayoongoo), located above Louie Creek, used as camping grounds and places of shelter during wet season periods.

Riversleigh Country

- This Country includes the southern third of Boodjamulla National Park and extends from the middle reaches of the Gregory River to the Rankin outstation stock camp.
- A range of Dreamings are associated with this Country, including *Bujimala*, *Jarrbigala* and *Jaangu* (Junggu, Bushfire), and co-exist with local spirits.
- An important feature of the Country is the key site Jirringirri, a spring and associated area created by *Bujimala* and located at the base of a range. The site was an important meeting ground for Waanyi People.

2.2.2 Waanyi environmental knowledge: plants, animals and seasons

Waanyi People have maintained a detailed body of cultural knowledge regarding the location, preparation and use of a wide variety of bush resources. Seasonal exploitation patterns have been developed and tested over time, and this knowledge continues to be *transmitted* and applied. Table 1 lists the Waanyi words that are used throughout this document.

The Waanyi seasonal calendar classifies the following seasons:

- **Gundil** – April to November: 'dry season time – no rain'
- **Gindilgurinya** – November to December: 'first storm', 'thunder' (*gayi*), i.e. the 'build up' period
- **Walangu** – December to January: 'first rain'
- **Wirngil (or Winngi)** – December to March: 'middle of the wet time', 'rain no more stop now, can't walk around', 'wet (*mannga*) all day'
- **Ngajirr** – February to April: 'still wet but starting to get dry', *wurrarra wala gulara* 'wind coming from south', wind had 'turned around'.

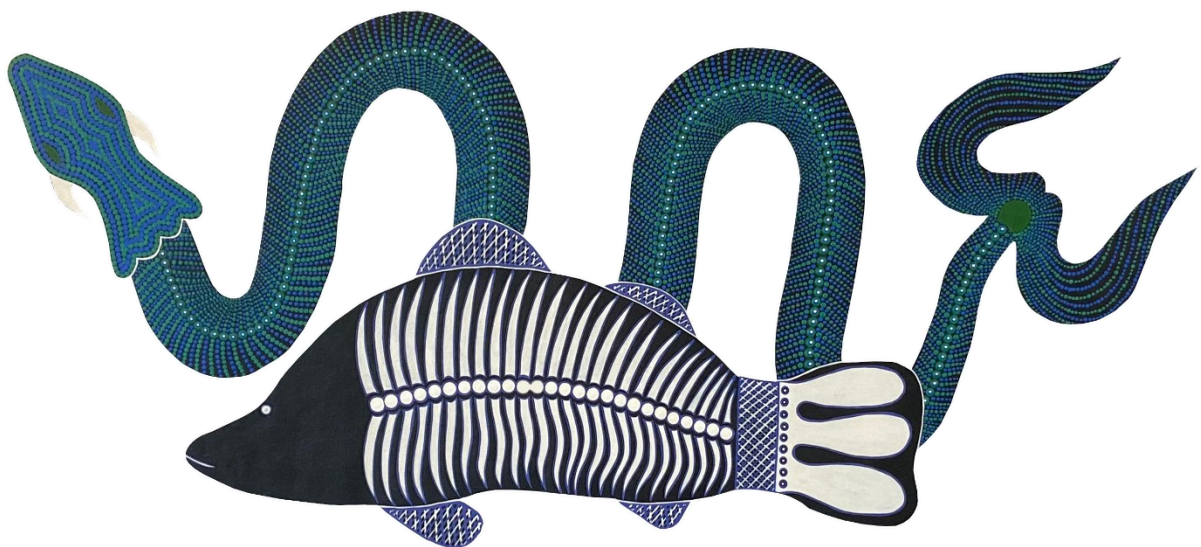


Figure 3. Tommy George indicating an important food source, the nuts of ngaguya, a species of Cycad © David Trigger



Table 1. Waanyi words and the English meaning (*including Waanyi words used in this document*)

Waanyi word	Meaning
<i>Budangku</i>	No
<i>Bujabuja</i>	Semi-sedentary camps on Page Creek (near the gorge and Adel's Grove)
<i>Bujimala</i>	Rainbow Serpent
<i>Burrbijbi</i>	Run
<i>Durururu</i>	Sunrise
<i>Duwadari</i>	Storm Bird
<i>Gayi</i>	Thunder
<i>Gumayungu</i>	Rock shelters and caves located above Louie Creek
<i>Jaanggu</i>	Bushfire
<i>Jamba</i>	Land
<i>Jarrbigala</i>	Eagle Hawk
<i>Jirringirri</i>	Spring and associated area created by <i>Bujimala</i>
<i>Jumburuna</i>	Yellow Goanna
<i>Kamba</i>	Sunlight
<i>Kamu</i>	Suppertime
<i>Karrinja</i>	Stand
<i>Marrarrabana</i>	Water Girls
<i>Ngumari</i>	Lawn Hill Station
<i>Ngunyi</i>	Sleep
<i>Nyil</i>	Yes
<i>Warrgi</i>	Dingo
<i>Wirrigajigaji</i>	Catfish
<i>Wugunjari</i>	Louie Creek Country – permanent spring (and several camps near Lawn Hill Station)
Wuyaliya Dreamings	Tract of Country along Lawn Hill Creek and to the north and west through the Constance and Edith ranges

**Figure 4. *Bujimala* and barramundi** © Pietta Aplin

2.3 Park management arrangements

In recognition of strong and continuing cultural connections, the Waanyi People and the Queensland Government have committed to work in partnership to ensure that both the natural and cultural values of protected areas are conserved for the benefit of all. On Boodjamulla National Park, this includes cooperative management arrangements between the Waanyi PBC and the State of Queensland. QPWS is a division within the DETSI. QPWS will be referred to throughout this document as the State's representative in the cooperative arrangement, which gives effect to this management plan at an operational level.

Boodjamulla (Lawn Hill) National Park was declared by regulation as claimable land under the *Aboriginal Land Act 1991 (Qld)* (ALA) on 9 November 1995. In August 2016, the Aboriginal Land Tribunal recommended that the Boodjamulla (Lawn Hill) National Park area be granted under the ALA to the Waanyi People and the Minnie Myboogundji Family group on the grounds of traditional affiliation and historical association. Since the Land Tribunal's recommendation, the Waanyi PBC has amended its rulebook to recognise the Minnie Myboogundji Family group. The ALA claim was resolved in 2023 and is the first lease back arrangement on National Park in Queensland.



Figure 5. The expansive and sacred Waanyi Country of Boodjamulla © Lea Ezzy

As per legislative requirements, the Waanyi PBC and QPWS have established a Cooperative Management Council (CMC) as a board of management to facilitate a cooperative partnership and work together with partners across the landscape. This management plan will assist QPWS and the Waanyi People to manage Boodjamulla National Park within a cooperative management arrangement. It will also support the Waanyi People to realise their aspirations for Country (including the strategic goals outlined in the *Waanyi Strategic Plan 2020–2025*) and meets the ALA requirement for a management plan to be prepared prior to any ALA grant and leaseback structures being established.

The State and the Waanyi PBC have:

- A registered Indigenous Land Use Agreement (ILUA) which replaces the original ILUA and provides for native title consent for future acts on the granted land.
- A registered perpetual lease which provides for the continued protection and management of the national park (Aboriginal land) in accordance with the *Nature Conservation Act 1992 (Qld)*.
- A Cooperative Management Agreement (CMA) which provided for the future cooperative management of Boodjamulla National Park (Aboriginal Land), including the Riversleigh World Heritage Area.

The ILUA applies to the Boodjamulla National Park, Reserves for Departmental and Official Purpose (formerly known as resources reserves) and unallocated State land (former resources reserves). The implementation of the Lease, CMA and protocols only applies on the NP (AL) tenure.

3. Boodjamulla National Park

3.1 Management plan and thematic strategies

The *Boodjamulla National Park Management Plan* provides the strategic management direction for managing its key values (Section 4) and meeting custodial obligations across nine **management themes** (Section 5). The plan is supported by the *Boodjamulla National Park Resource Information* document, a compendium of park information that tells the story of the park.

The strategic management direction set out in this management plan links 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. Boodjamulla National Park has five thematic strategies:

- Fire
- Pest
- Monitoring and research
- Visitor
- First Nations culture.

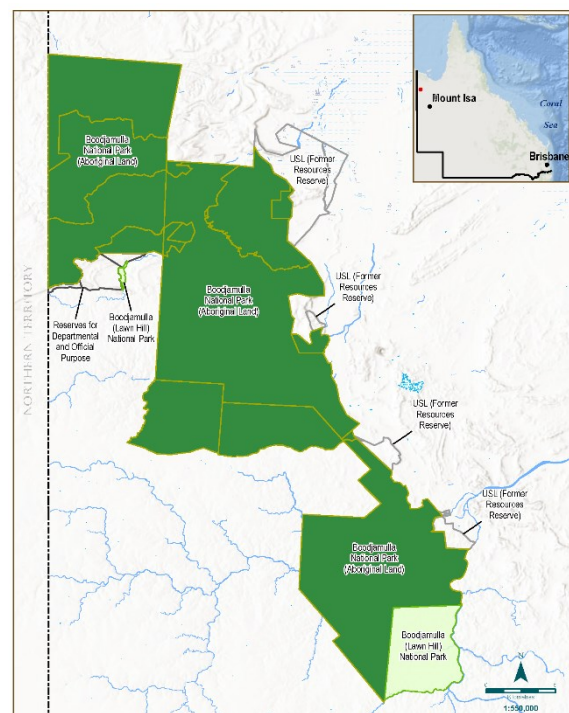
3.2 Park overview

“First time you visit our Country, blow water in the air and wet your head with the water, let the place get used to you, let them know you’re here.” Waanyi Elders

Boodjamulla National Park, formerly known as Lawn Hill National Park, is located in the Gulf Country region of north-western Queensland, approximately 340 kilometres (km) north-west of Mount Isa and 1,837 km north-west of Brisbane. It is in the state electorate of Traeger and within the Mount Isa City Council and Burke Shire Council local government areas.

For at least 37,000 years, Boodjamulla National Park has been occupied and managed by First Nations people. Physical representations of the Waanyi People's occupation are common throughout the park, with camps, rock art, work grounds, shelters and burial areas demonstrating historical and continued use. Customary law remains strong and should be retained with respect for traditional and tourist activities that occur cross their Country. The Waanyi People continue traditional practices including ceremonial activities, sourcing traditional foods and teachings.

In the 1880s, with the onset of colonisation including regional pastoralist activities, First Nations People were subject to systematic atrocities, including massacres and displacement. Between 1880 and 1984, management of the land that now forms Boodjamulla National Park was primarily aimed at fostering economic benefits for pastoral and mining interests. Boodjamulla (Lawn Hill) National Park was gazetted to protect Lawn Hill Gorge in December 1984. Additional areas were subsequently added to the park, which now encompasses 282,000 hectares.



Map 1. Boodjamulla National Park locality map

In 1984, the significance of one of the world's richest fossil mammal sites was recognised by UNESCO through the listing of 10,029 hectares in the Riversleigh section of the park, in conjunction with a very much smaller region at Naracoorte in South Australia, as the Australian Fossil Mammal Sites World Heritage Area. In 2007, the Australian Fossil Mammal Sites (Riversleigh and Naracoorte) were included in the National Heritage List.

Waanyi People have consistently claimed a right to retain occupation and management of the lands on which Boodjamulla National Park is situated. In 1994, the Waanyi People lodged a claim under the *Native Title Act 1993* (Qld) over land that includes Boodjamulla National Park. Native title was determined by the Federal Court in 2010. In 1997, terms for the neighbouring Century Mine were agreed, including training and compensation for the traditional owners. In addition, the Waanyi People lodged a claim under the *Aboriginal Land Act 1991* over the land on which Boodjamulla National Park is situated, which was determined in their favour in 2016.

Waanyi People's cultural knowledge and associated connection with the landscape at Boodjamulla National Park has been documented over many decades, through projects such as the Waanyi Cultural Materials Research Project. This expanse of work will be retained by the Waanyi People and will guide the future management of Boodjamulla National Park. The Waanyi People see Boodjamulla National Park as a key location for building future generations for both Indigenous and non-Indigenous people, a place to raise awareness and to celebrate the richness of Waanyi culture. The park provides opportunities to support the Waanyi People to improve their social and economic outcomes. This is a core objective of the *Waanyi Strategic Plan 2020–2025*.

3.2.1 Planning area tenure

The planning area in this management plan includes:

- Boodjamulla National Park (Aboriginal Land) – 345,135.52 hectares (ha)
- Boodjamulla (Lawn Hill) National Park – 22,298.2 ha
- Australian Fossil Mammal Sites (AFMS) World Heritage Area (Riversleigh section) (within the national park) – 10,029 ha
- Reserves for Departmental and Official Purpose – 6393.4 ha
- Unallocated State lands – 24,738.8 ha

Boodjamulla National Park will be managed in accordance with requirements of the *Nature Conservation Act 1992* (NCA) and *Aboriginal Land Act 1991* (including prescribed management principles), this plan, and any other management agreements and leases. There are 5 parcels of unallocated State land awaiting transfer that is currently managed by DETSI.

3.3 World Heritage



Figure 6. Riversleigh site, Australian Fossil Mammal Sites World Heritage Area © Ellen Thyer 2021

The Australian Fossil Mammal Sites (Riversleigh/Naracoorte) (AFMS) World Heritage Area was inscribed on the World Heritage List in 1994, as part of the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (the World Heritage Convention). The AFMS is one listing comprised of two sites – Riversleigh within Boodjamulla National Park in Queensland and Naracoorte in South Australia. Together, Riversleigh and Naracoorte meet two of the 10 possible World Heritage criteria (criteria 8 and 9) and illustrate key evolutionary stages of Australia's unique fauna through fossils that remain in the landscape.

In 2007, the Australian Fossil Mammal Sites (Riversleigh and Naracoorte) were included in the National Heritage List with values recognised under Criteria a, c and d. As such, Riversleigh's National Heritage values are reflected through the World Heritage values and are a key consideration for determining the levels of service for management outlined in Section 5.

As a signatory to the UNESCO World Heritage Convention, the Australian Government carries primary responsibility for governance and management of World Heritage sites in Australia. This responsibility is shared with the Queensland Government through an intergovernmental agreement and associated ‘project agreement’ funding arrangements. The Riversleigh World Heritage Advisory Committee, administered by QPWS, provides expert advice to the Minister about caring, managing and interpreting the Riversleigh World Heritage site to standards that reflect its World Heritage significance, and protect and present its Outstanding Universal Value. The Waanyi People and QPWS are working towards day-to-day management of the Riversleigh World Heritage site. Extracted fossils that have been formally described by research institutions remain the property of the Queensland Museum in accordance with the *Nature Conservation Act 1992*. The UNESCO World Heritage criteria for the AFMS is provided in Table 2, and is identified in the management plan as key value 4.6 Riversleigh’s geological landscape and fossils.

Table 2: Definitions of UNESCO World Heritage criteria 8 and 9 that support the AFMS listing

UNESCO World Heritage Convention criteria	
Criterion 8	Outstanding examples representing major stages of earth's history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features. Riversleigh provides outstanding and unique examples of mammal assemblages from the Oligocene to Miocene periods. These examples span from 30–10 million years ago and document the changes in habitat from humid, lowland rainforests to dry eucalypt forests and woodlands. The site provides fossil records for distinctive groups of living mammals such as marsupial moles and feather-tailed possums (UNESCO 2019).
Criterion 9	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. Riversleigh provides evidence of key stages in the evolution of the fauna of one of the world's most isolated continents. The history of mammal lineages in modern Australia can be traced through these fossil deposits and, as a consequence, there is a better understanding of the conservation status of living mammals and their communities (UNESCO 2019).



4. Key values

All parks, forests and reserves have an array of natural, cultural, social and 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 1). 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 monitoring, enabling QPWS to act quickly, applying best practice adaptive management.

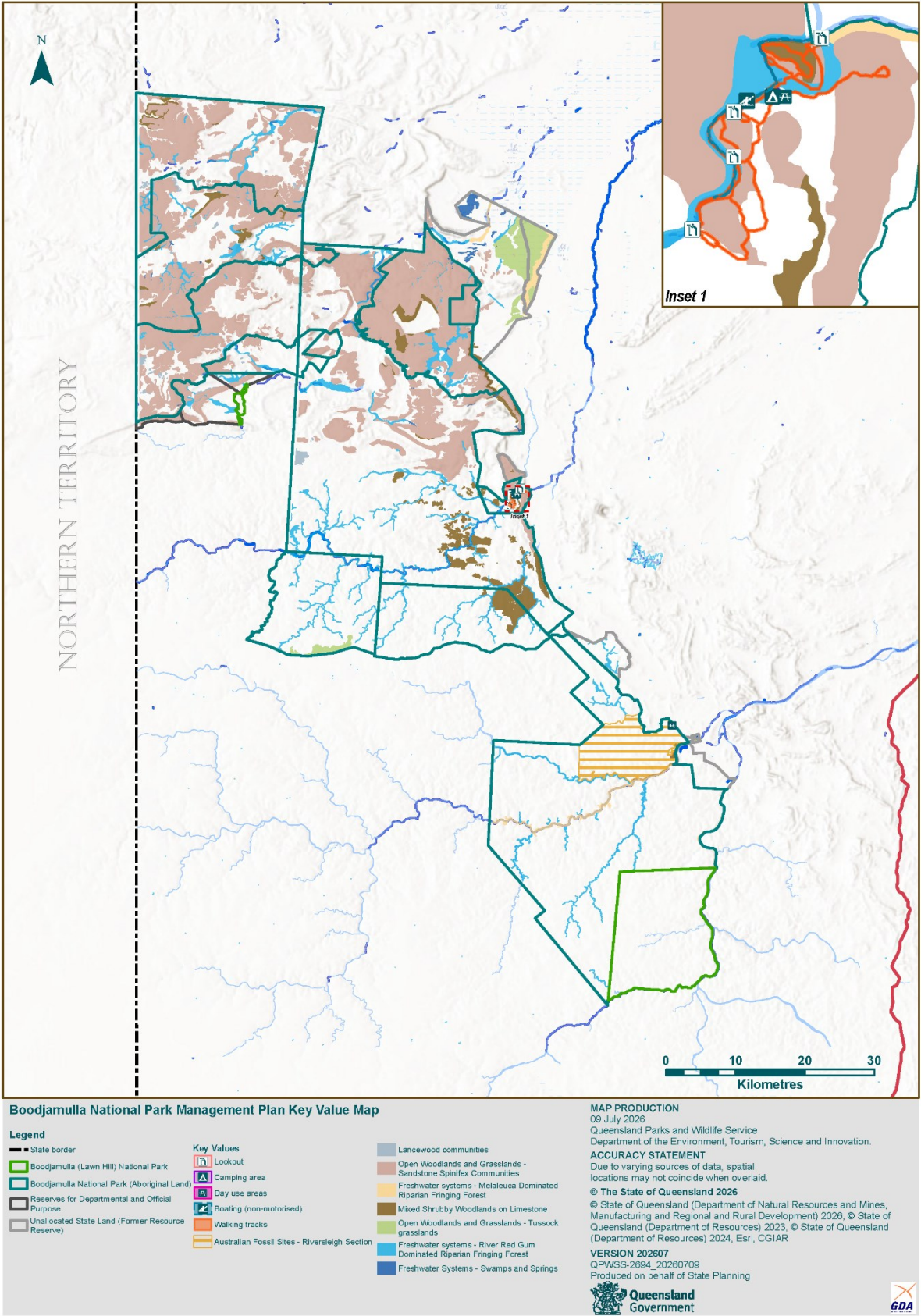
Summary of key values

A summary of the key values for Boodjamulla National Park, and definitions for the condition and trend icons, are detailed in **Figure 7**. The location of each key value is shown in **Map 2**.

	Current condition	Confidence in condition assessment	Current trend	Confidence in trend assessment	Desired condition
4.1 Waanyi culture – Waanyi lore, custom and heritage					
4.2 Riversleigh's fossil deposits		Adequate 		Adequate 	
4.3 Freshwater systems		Limited 		Adequate 	
4.4 Mixed shrubby woodlands on limestone		Limited 		Adequate 	
4.5 Lancewood communities		Adequate 		Adequate 	
4.6 Open woodlands and grasslands: a) Sandstone spinifex communities		Adequate 		Adequate 	
4.6 Open woodlands and grasslands: b) Tussock grasslands		Inferred 		Inferred 	
4.7 Boodjamulla National Park ecotourism and visitor experience		Inferred 		Inferred 	

Condition of key value	Good The value is in good condition and is likely to be maintained for the foreseeable future, provided that current measures are maintained	Good with some concern The value is likely to be maintained over the long term with minor additional conservation measures to address existing concerns	Significant concern 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	Critical 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



Map 2: Boodjamulla National Park key values

4.1 Waanyi culture – Waanyi lore, custom and heritage

Key value statement

Description		Current condition	Current trend	Desired condition
Waanyi people's culture is rich, with language, culture, traditions, stories, songlines and significant Waanyi sites integral to Country	Condition and trend			
	Assessment confidence	Limited 	Limited 	

The integration of Waanyi culture and heritage into cooperative management arrangements will support its preservation and protection at Boodjamulla National Park. Waanyi People identify that language and cultural knowledge are decreasing. The recordings of spoken language and documentation of cultural knowledge to date are significant, providing opportunity for future generations to keep Waanyi cultural knowledge, physical and spiritual, as the centrepiece of Waanyi culture on Boodjamulla National Park.

Boodjamulla National Park areas are culturally significant. Waanyi culture is complex, has changed over time, and some of it has been lost. While there is a significant body of anthropological and historical work recorded and available as a resource, further research and data retention are still required.

Waanyi cultural recognition and reinvigoration is a priority. Significant areas (approximately two-thirds) of Boodjamulla National Park (in particular the western, more inaccessible areas) are not documented and therefore have a high risk of cultural knowledge being lost. It is important to have a full understanding of Country to manage Country.

First Nations people have maintained an uninterrupted connection with Boodjamulla National Park for more than 37,000 years. This sacred landscape of Boodjamulla National Park is the heart of Waanyi Country. The national parks are an important centrepiece for Waanyi culture. Collectively, this represents a significant area for Waanyi culture, including Waanyi information, artefacts, learnings, significant cultural sites, lore, custom and ceremonial activities.

Boodjamulla National Park provides Waanyi People, QPWS and visitors with a place where culture is protected, practised and developed. Valuing and protecting this culture is a shared responsibility for QPWS and Waanyi People to ensure it is appreciated, understood and preserved for current and future generations.

Elevating, protecting and advocating for Waanyi culture will ultimately allow the skills and achievements of the past to be recognised, and the benefits from that expertise and skills set for park management and for Waanyi People themselves to continue. This requires a centralised culture and keeping place, and a space for Waanyi People to return to Country and continue building on cultural knowledge. Further developments to preserve culture will be through the use of traditional place names to improve the understanding of traditional values, storylines and significant Dreamings. Building on data contained in the Cultural Information Management System will allow the Waanyi People to develop and maintain a centralised database of important information.

Threats

Primary threat: Loss of Waanyi culture (including language) and heritage at Boodjamulla National Park. **Threat rating: High**

Secondary threat: Connection to Country. A centre for Waanyi culture for Waanyi People. There is no central repository for the Waanyi People and cultural information. **Threat rating: High**

Other threat: Lack of cultural awareness. Visitors and park staff may not understand the significant Waanyi culture and the strong cultural protocols for certain cultural sites within the park. Lack of knowledge of these protocols could cause damage to Country and sites. **Threat rating: High**

Desired outcome and strategic management direction

Desired outcome		
		
Waanyi lore, custom and heritage will be improved to 'good' by preserving and documenting Waanyi culture as a key priority of cooperative management, and communicating and advocating culture for Indigenous and non-Indigenous people.		
Threatening processes	Strategic management directions	Priority
Lack of cultural awareness	Recognise Waanyi culture through improved interpretation, such as inclusion of language names and appropriate cultural information, in consultation with the Waanyi People.	1
	Improve visitor understanding and experience by building awareness of Waanyi culture through tourism initiatives such as a Waanyi Dreaming trail, bush tucker/botanical trail, centre of culture and a keeping place.	3
	Increase public and QPWS staff's awareness and respect of Waanyi cultural protocols regarding Boodjamulla National Park.	3
Connection to Country	Waanyi People to incorporate and undertake ceremony on park.	1
	Waanyi People to develop a representation of the seasons.	1
	Waanyi People to document songlines.	1
	Enhance cooperative management of the park through shared knowledge of traditional and contemporary park management practices.	1
	Support the Waanyi People to explore new opportunities that are consistent with overall management objectives to increase their cultural connection and economic wellbeing, including commercial and business developments.	2
Loss of Waanyi culture	Engage anthropological surveys to further document and retain Waanyi culture within the park.	3

See Appendix 1. Glossary for priority rating definitions.



Figure 8. Waanyi interpretation of pecked rock art, a nyinbu (echidna), showing legs and body, nose in the middle and eyes on either side © David Trigger

4.2 Riversleigh’s fossil deposits

World Heritage Criteria 8 and 9

Key value statement

Description		Current condition	Current trend	Desired condition
The Australian Fossil Mammal Sites World Heritage Area – Riversleigh section protects the geological landscape and fossils that present a superb illustration of the evolution of Australia’s unique fauna	Condition and trend	●●●●	↔	●●●●
	Assessment confidence	Adequate ●	Adequate ●	



Figure 9. Fossils at Riversleigh World Heritage Area © DES

The Riversleigh section of the Australian Fossil Mammal Sites (AFMS) World Heritage Area covers 10,029 ha of Boodjamulla National Park. It is one of the world's richest Oligo-Miocene mammal fossil sites, linking that period (25–15 million years ago) to the predominantly modern assemblages. The extensive fossil deposits are encased in hard, rough limestone, which was formed in lime-rich freshwater pools. They span a record of mammal evolution of at least 20 million years in length, providing the first records for many distinctive groups of living mammals, such as marsupial moles and feather-tailed possums, as well as many other unique and now extinct Australian mammals, such as 'marsupial lions'.

Riversleigh provides exceptional fossil mammal examples in a continent whose mammalian evolutionary history has been the most isolated and most distinctive in the world. This superb fossil record of the evolution of mammal fauna has been recognised by UNESCO for its Outstanding Universal Value.

The variety of deposits at Riversleigh has led to an understanding of how the environment has changed over time from a rich rainforest community to semi-arid grassland, and how the animals that lived in it have changed too. As such, the fossils indicate the rainforest origins for the majority of mammal groups that today occupy arid Australia and enable a better understanding of the conservation status of living mammals and their communities. They also provide links through time that unify the biotas of the past with those of today in the Wet Tropics of Queensland, the Gondwana Rainforests of Australia and Kakadu National Park World Heritage properties.

The discovery of the fossils at Riversleigh profoundly altered the understanding of Australia's mid-Cainozoic vertebrate diversity. The remains of a 15 million-year-old monotreme have provided new



information about this highly distinctive group of mammals, and several Tertiary thylacines have been identified. Placental mammals are represented by more than 35 bat species; the Riversleigh fossil bat record is the richest in the world.

Early relatives of modern-day kangaroos include the ‘Thingodonta’ *Yalkaparidon*, which had a skull and teeth completely unlike any known marsupial; the ‘Fangaroo’, a small herbivorous kangaroo with huge canine teeth; and the *Ekaltadeta*, a giant rat-kangaroo that ate meat.

At D Site (Map 2), the only area accessible to visitors, interpretative signage provides people with an opportunity to see and understand the value of the fossils visible along the walking trail.

The AFMS Riversleigh section remains in good condition. Riversleigh’s remote location and associated low visitation reduce threats to the site’s Outstanding Universal Value. Small-scale disturbance through visitor theft has been reported. QPWS monitors sites for illicit activity and will investigate and seek to prosecute offenders.

Excavation, removal and the analysis of the fossil record through scientific permit is fundamental to the site’s World Heritage listing and Outstanding Universal Value. Both Australian and Queensland governments acknowledge the significance of ongoing research to fully realise the World Heritage values of the property and create awareness of the globally unique history of Australia’s fossil mammals and the origins of the modern biota. The extent to which Riversleigh’s values are affected by fossil excavation through scientific permit (issued by DETSI) is estimated at less than one per cent.

Threats

Primary threat: Unauthorised removal of fossils from the site. **Threat rating: Low**

Secondary threat: Reduced research activity, resulting in a decreased understanding and passing on of knowledge of values. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
		
The condition of Riversleigh’s fossil deposits will be maintained as ‘good’. Scientific research continues to present the area’s values and fossil theft is minimised by improving the interpretation of World Heritage values through enhanced visitor experiences and regular monitoring.		
Threatening processes	Strategic management directions	Priority
Impact on experience or opportunity	Enhance visitor experience and understanding through regulated, ongoing scientific research and presentation of the AFMS Riversleigh World Heritage Area.	1
Visitor impact	Minimise fossil damage and theft through interpretive signage and ongoing monitoring and compliance.	2

See Appendix 1. Glossary for priority rating definitions.

4.3 Freshwater systems

Key value statement

Description		Current condition	Current trend	Desired condition
Protected freshwater systems that support life and Waanyi culture in an arid landscape	Condition and trend			
	Assessment confidence	Limited 	Adequate 	

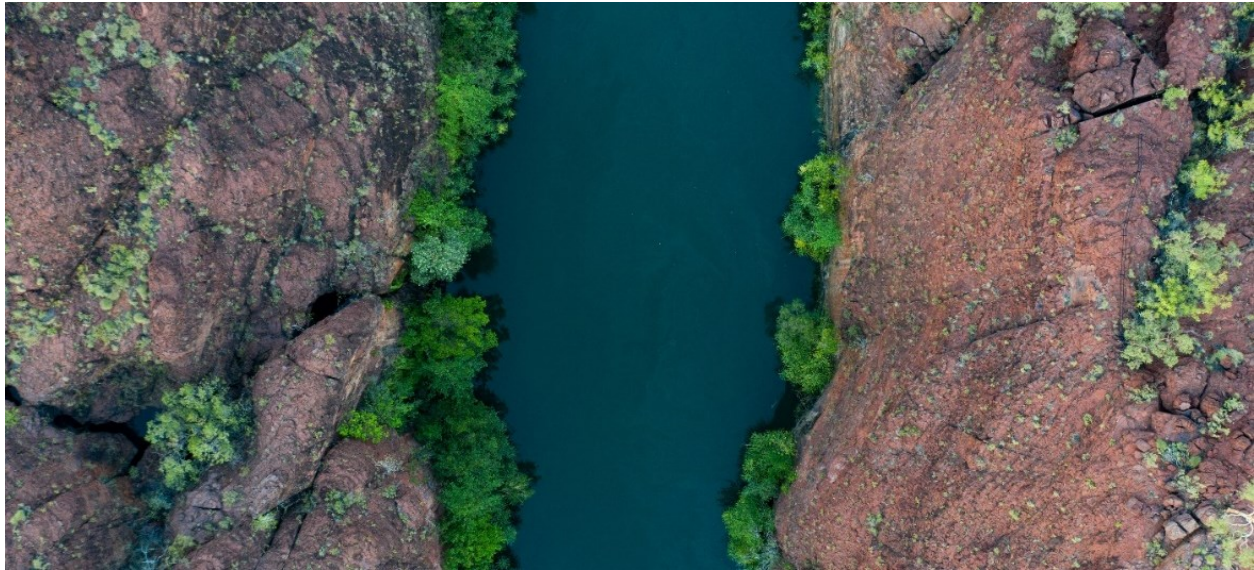


Figure 10. Freshwater systems of Boodjamulla © Tourism and Events Queensland

Boodjamulla National Park was gazetted in part to protect its freshwater systems, which sustain life in an arid landscape. These freshwater systems support significant regional ecosystems (Table 3), some of which are only protected in Boodjamulla National Park. Some regional ecosystems (REs) are the largest representation in Queensland.

Boodjamulla National Park represents the heart of Waanyi Country and is critical in terms of maintaining cultural connection for current and future generations. First Nations people have maintained continuous connection to Boodjamulla National Park for the past 37,000 years. These freshwater systems have provided sustainable resources, and continue to be valuable and culturally significant areas.

The Gregory River, Lawn Hill Creek and O'Shannassy River are spring-fed perennial watercourses fed from karstic rock aquifers. The systems have remained stable through climate changes, supporting long-term occupation by the Waanyi People and providing a refuge for flora and fauna. The Thornton aggregation and Lawn Hill Gorge are recognised as nationally important wetlands.

The northern half of the park is dominated by Musselbrook and Elizabeth creeks, which are ephemeral streams fed from the sandstone ranges on the Queensland and Northern Territory border. The springs and gorges in these catchments provide permanent waterholes, with strongly contrasting flora and fauna assemblages to the limestone derived catchments in the southern half of the park.

Freshwater systems (including riparian ecosystems) provide localised habitat for several significant species of concern, including the purple-crowned fairy wren *Malurus coronatus* (Vulnerable under the NCA) and Gulf snapping turtle *Elseya oneiros* (Endangered under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*). The systems also provide habitat for the geographically limited rock ringtail possum *Petropseudes dahli*.

Table 3. Significant regional ecosystems

Riverine wetlands/fringing riverine wetlands		
1.3.7b	<i>Eucalyptus camaldulensis</i> fringing woodland, usually with <i>Lophostemon grandiflorus</i> and <i>Melaleuca bracteata</i> or <i>M. dissitiflora</i>	Endangered
1.3.7a	<i>Eucalyptus camaldulensis</i> fringing woodland to closed forest, usually with <i>Lophostemon grandiflorus</i> and <i>Melaleuca leucadendra</i> or <i>M. fluviatilis</i>	Endangered
1.3.7f	Woodland including <i>Eucalyptus camaldulensis</i> , <i>Lophostemon grandiflorus</i> , <i>Melaleuca argentea</i> , <i>Terminalia bursarina</i> , <i>Lysiphyllum cunninghamii</i> and <i>Acacia holosericea</i>	Endangered
1.3.7g	<i>Eucalyptus camaldulensis</i> woodland often with <i>Corymbia capricornia</i> and <i>Eucalyptus miniata</i> with a mixed shrub layer in which <i>Melaleuca viridiflora</i> is prominent	Endangered
2.3.26e	<i>Eucalyptus camaldulensis</i> low woodland to woodland, occasionally with <i>Melaleuca fluviatilis</i> , <i>E. microtheca</i> , <i>Cochlospermum gregorii</i> , <i>Terminalia platyphylla</i> , <i>M. nervosa</i> and <i>Corymbia bella</i>	Of concern
2.3.26f	<i>Eucalyptus camaldulensis</i> woodland, commonly with <i>Terminalia bursarina</i> . <i>Lophostemon grandiflorus</i> and <i>Melaleuca</i> spp. may occur in the canopy	Of concern
2.3.17a	<i>Eucalyptus microtheca</i> low open woodland to woodland, commonly with <i>Excoecaria parvifolia</i> and <i>Lysiphyllum cunninghamii</i>	Of concern
2.3.17b	<i>Eucalyptus microtheca</i> woodland	Of concern
Melaleuca dominated communities fringing perennial watercourses		
1.3.9a	Fringing closed forest including <i>Melaleuca fluviatilis</i> , <i>M. leucadendra</i> , <i>Nauclea orientalis</i> , <i>Ficus racemosa</i> , <i>Livistona rigida</i> , <i>Eucalyptus camaldulensis</i> and <i>Lophostemon grandiflorus</i>	Of concern
1.3.9b	Fringing woodland of <i>Melaleuca leucadendra</i> , <i>Lophostemon grandiflorus</i> , <i>Eucalyptus camaldulensis</i> and <i>Livistona rigida</i>	Of concern
Swamps and springs		
1.10.6	Springs mostly associated with quartzose sandstone	Of concern
2.3.13	<i>Acacia stenophylla</i> low open forest in seasonal swamps on active Quaternary alluvial plains	Of concern
2.3.15	<i>Eucalyptus microtheca</i> woodland to low open woodland with <i>Sarga</i> spp. in seasonally flooded depressions on gleyed podsols	Of concern

Threats

Primary threat: Pest animals, particularly cattle, horses, buffalo and pigs, damage ecosystems through soil disturbance, trampling, soil compaction, loss of ground cover and spread of weeds. An ecological baseline has not been established for monitoring the impact of introduced species on the freshwater systems.

Threat rating: High

Secondary threat: Pest plants such as rubber vine *Cryptostegia grandiflora* changing ecosystem composition.

Threat rating: High

Other threat: Fire can impact significantly on riparian and spring communities, which contain fire sensitive species or habitat trees. **Threat rating: High**

Other threat: Potential for increase in human impacts as visitor numbers increase in riparian areas, including widening of the footprint along the creekbanks and increased disturbance to wildlife.

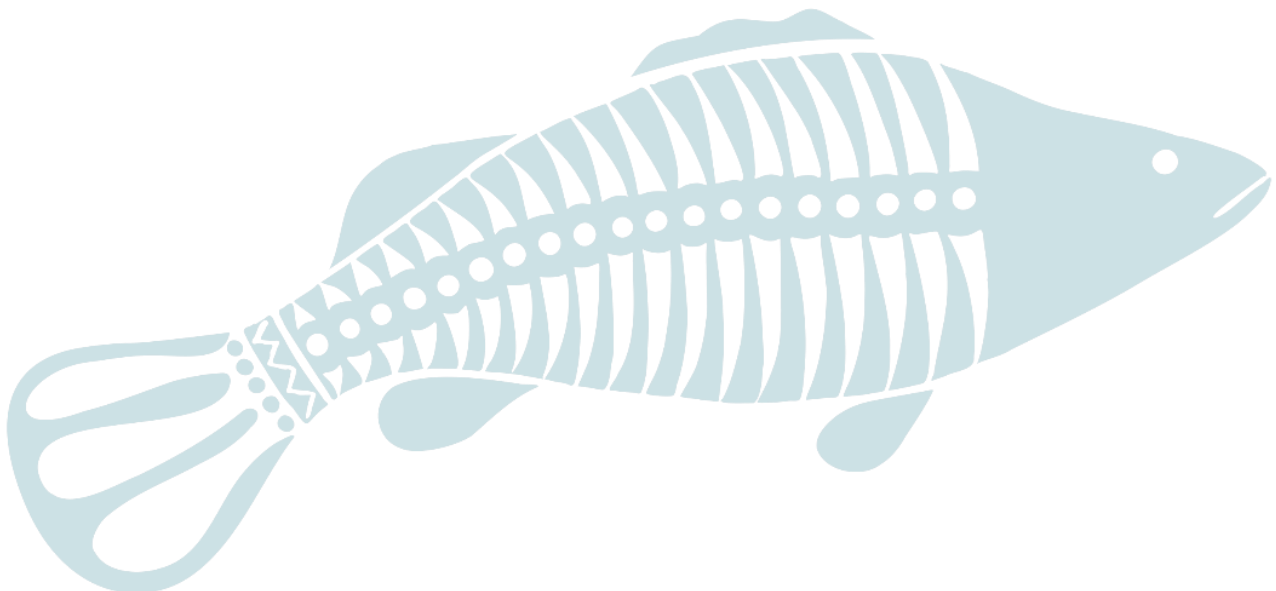
Threat rating: Low

Other threat: Mineral extraction, quarrying and associated works conducted in the Reserves for Departmental and Official Purpose may disturb and potentially remove habitat and vegetation communities associated with the freshwater systems. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
 The condition of freshwater systems will be improved to 'good with some concern' by reducing the impacts of introduced animals, invasive plants and human disturbances, and reducing the adverse impact of bushfire through planned burning in surrounding vegetation.		
Threatening processes	Strategic management directions	Priority
Pest plant	Reduce the impacts of rubber vine along the Gregory River.	1
	Prevent the establishment of rubber vine along Lawn Hill Creek.	1
Pest animal	Reduce the impacts of cattle, horses and buffalo on freshwater systems.	2
	Reduce the impacts of pigs on freshwater systems and Waanyi freshwater cultural sites.	2
Fire	Maintain healthy freshwater systems through culturally and other appropriate fire management to limit bushfire encroachment.	2
Mining and quarrying	Minimise the impacts of mining and quarrying activities carried out in Reserves for Departmental and Official Purpose by ensuring they are appropriately located and managed.	4
Visitor impact	Minimise visitor impacts in freshwater systems and riparian areas caused by an increase in visitor numbers.	4

See Appendix 1. Glossary for priority rating definitions.



4.4 Mixed shrubby woodlands on limestone

Key value statement

Description		Current condition	Current trend	Desired condition
Fragmented mixed shrubby woodlands on limestone pavements	Condition and trend	●●●●	↑	●●●●
	Assessment confidence	Limited Ⓛ	Adequate ●	



Figure 11. Limestone outcrops © Queensland Government

Most of the park is dominated by open woodland and grassland, but there are important fire-sensitive communities within this fire-prone landscape. These landscapes are important areas of Waanyi Country that represent rich songlines and Dreamings, and provide evidence of continued occupation with many shelters, campsites and rock art sites.

These sparse woodlands are characterised by *Lysiphyllum cunninghamii*, *Terminalia aridicola* and *Brachychiton* species, and contain two regional ecosystems – ‘Mixed shrubby low open woodland dominated by *Terminalia aridicola*, *Lysiphyllum cunninghamii* and *Corymbia terminalis*’ (RE 1.9.4b), and ‘*Corymbia terminalis* and *Lysiphyllum cunninghamii* low open woodland’ (RE 1.9.11a). The diverse karst landforms provide habitat for rock wallabies, while cave systems and sink holes are important for a diversity of bats, including the endangered ghost bat *Macroderma gigas* and the vulnerable orange horseshoe bat *Rhinonictes aurantius*.

Threats

Primary threat: Fire that is high intensity or fast moving can impact fire-sensitive species and habitat trees.

Threat rating: High

Secondary threat: Mineral extraction, quarrying and associated works conducted in the Reserves for Departmental and Official Purpose may disturb and potentially remove habitat and vegetation communities associated with the mixed shrubby woodlands on limestone. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
	The condition of the mixed shrubby woodlands communities will be maintained at 'good' by protecting communities from bushfire.	
Threatening processes	Strategic management directions	Priority
Fire	Maintain healthy mixed shrubby woodlands and lancewood communities through culturally appropriate fire management to reduce risk of bushfire encroachment.	1
Mining and quarrying	Minimise the impacts of mining and quarrying activities carried out in Reserves for Departmental and Official Purpose by ensuring they are appropriately located and managed.	4



4.5 Lancewood communities

Key value statement

Description		Current condition	Current trend	Desired condition
Fragmented mixed shrubby woodlands on limestone pavements and lancewood communities with limited distribution	Condition and trend			
	Assessment confidence	Adequate 	Adequate 	

Small lancewood communities occur on ironstone jump-ups that are scattered throughout Boodjamulla National Park. These communities contain the regional ecosystem '*Acacia shirleyi* low woodland on lateritic scarps and hills' (RE 1.7.5a), and are important as they are highly fragmented and have a very limited distribution in the North West Highlands. Lancewood communities provide a rich source of habitat for insects, which feed a particular suite of birds and reptiles.

Threats

Primary threat: Fire that is high intensity or fast moving can impact fire-sensitive species and habitat trees.
Threat rating: High

Secondary threat: Mineral extraction, quarrying and associated works conducted in the Reserves for Departmental and Official Purpose may disturb and potentially remove habitat and vegetation communities associated with the lancewood communities. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
	The condition of lancewood communities will be maintained to 'good with some concern' by protecting communities from bushfire.	
Threatening processes	Strategic management directions	Priority
Fire	Maintain healthy mixed shrubby woodlands and lancewood communities through culturally and ecologically appropriate fire management to reduce risk of bushfire encroachment.	1
Mining and quarrying	Minimise the impacts of mining and quarrying activities carried out in Reserves for Departmental and Official Purpose by ensuring they are appropriately located and managed.	4

4.6 Open woodlands and grasslands

a. Sandstone spinifex communities

Key value statement

Description		Current condition	Current trend	Desired condition
Sandstone spinifex communities	Condition and trend	●●●●	↔	●●●●●
	Assessment confidence	Adequate ●	Adequate ●	



Figure 12. Spinifex dominated ground stratum © Lea Ezzy

The sandstone spinifex communities are structurally complex and dominate the park's landscape. This key value includes the 'of concern' regional ecosystem '*Eucalyptus miniata* woodland on sandstone plateaus' (RE 1.10.2), as well as the '*Corymbia aspera* low open woodland on rocky soils' (RE1.10.3), '*Eucalyptus leucophloia* low open woodland on sandstone plateaus' (RE 1.10.4b) and '*Corymbia capricornia* and/or *Eucalyptus miniata* low open woodland often with *Eucalyptus herbertiana*, *Eucalyptus leucophloia* and/or *Corymbia ferruginea*' (RE 1.7.7b).

Waanyi People retain strong Dreamings and significant cultural connections to these landscapes within their Country and can contribute to improving fire and landscape management.

The communities provide important habitat for a range of declining species, particularly the nationally listed species Carpentarian grasswren *Amytornis dorotheae* and the Gouldian finch *Erythrura gouldiae*, both listed as endangered under the EPBC Act, as well as the vulnerable painted honeyeater *Grantiella picta*. The grasswren habitat is predominantly in mature spinifex with sparse small-fruited bloodwood *Corymbia capricornia* in dissected rocky sandstone slopes and ranges. The grasswrens prefer mature spinifex for their breeding and foraging requirements. The habitat also extends into snappy gum *Eucalyptus leucophloia* open woodland with spinifex and acacia ranges and rocky creeklines and boulders. Other species within this habitat include rock ringtail possums *Petropseudes dahli*, spinifexbird *Eremiornis carteri* and black-tailed treecreepers *Climacteris melanurus*.

Significant flora species include the vulnerable *Solanum carduiforme*, and the near threatened *Trachymene glandulosa* and *Ipomoea antonschmidii*.

Threats

Primary threat: Intense and broad-scale bushfire can reduce biodiversity by simplifying the age-class structure of vegetation. **Threat rating: High**

Secondary threat: Stock grazing on hummock grasses prevents native grasses from setting seed and can limit regeneration. This also impacts on a range of species that rely on the grasses as a food source.
Threat rating: Medium

Other threat: High biomass grasses, such as buffel grass *Cenchrus ciliaris*, change the ground understorey by outcompeting native flora species. Buffel grass also increases fire intensity and alters fire regimes.
Threat rating: Low

Other threat: Mineral extraction, quarrying and associated works conducted in the Reserves for Departmental and Official Purpose may disturb and potentially remove habitat and vegetation communities associated with the sandstone spinifex communities. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
	The condition of open woodlands and grasslands will be improved to 'good' by reducing the adverse impacts of bushfire through planned and culturally appropriate burning and reducing impacts of invasive grasses and stock grazing.	
Threatening processes	Strategic management directions	Priority
Fire	Maintain healthy low open woodlands with spinifex understorey through culturally and ecologically appropriate fire management by limiting bushfire extent.	1
Pest animal	Reduce the impacts of introduced grazing animals on the low open woodlands with spinifex understorey communities.	3
Pest plant	Reduce the impacts of high biomass grasses on open woodlands with spinifex understorey.	4
Mining and quarrying	Minimise the impacts of mining and quarrying activities carried out in Reserves for Departmental and Official Purpose by ensuring they are appropriately located and managed.	4

See Appendix 1. Glossary for priority rating definitions.



b. Tussock grasslands

Key value statement

Description		Current condition	Current trend	Desired condition
Tussock grasslands are poorly represented in Queensland's protected areas and provide habitat for many species	Condition and trend			
	Assessment confidence	Inferred 	Inferred 	

Boodjamulla National Park contains two types of significant tussock grasslands growing on cracking clay soils, the 'of concern' regional ecosystem 'Mixed tussock grassland on shallow alluvium' (RE 1.3.10), and '*Eulalia aurea*, *Panicum decompositum*, *Astrelia pectinata* and *Dichanthium* spp. in mixed tussock grasslands on active Quaternary alluvial plains within Tertiary clay deposits' (RE 2.3.4). '*Astrelia pectinata* and *Iseilema* spp. Grassland' (RE 4.4.2) is also present.

Mitchell grass *Astrelia pectinata* and Flinders grass *Iseilema* spp. grasslands are very poorly represented in protected areas, with Boodjamulla National Park providing small but important representation of these communities.

Blue grass *Dichanthium* spp grows on cracking clay soils on the eastern side of the park.

These native grasslands provide habitat for the northern nail-tail wallaby *Onychogalea unguifera* and many grass finch populations. Waanyi People maintain strong cultural links to the countries associated with natural grasslands and retain complex Dreamings and stories.

Threats

Primary threat: Grazing pressure from introduced grazing animals such as horses and cattle can degrade the grasslands by limiting growth and regeneration and facilitating pest plant invasion. **Threat rating: Medium**

Secondary threat: Invasive plants such as woody weeds and high biomass grasses, parkinsonia *Parkinsonia aculeata* and prickly acacia *Vachellia nilotica*, can change species composition, structure and fire regimes. **Threat rating: Low**

Other threat: Mineral extraction, quarrying and associated works conducted in the Reserves for Departmental and Official Purpose may disturb and potentially remove habitat and vegetation communities associated with the tussock grasslands. **Threat rating: Low**

Desired outcome and strategic management direction

Desired outcome		
	The condition of tussock grasslands will be maintained to 'good with some concern' by reducing grazing impacts of introduced stock and controlling invasive plants.	
Threatening processes	Strategic management directions	Priority
Pest animal	Reduce the impacts of horses and cattle on tussock grasslands.	2
Pest plant	Reduce the impacts of high biomass grasses, parkinsonia and prickly acacia on tussock grasslands.	5
Mining and quarrying	Minimise the impacts of mining and quarrying activities carried out in Reserves for Departmental and Official Purpose by ensuring they are appropriately located and managed.	4

See Appendix 1. Glossary for priority rating definitions.

4.7 Boodjamulla National Park ecotourism and visitor experience

Key value statement

Description		Current condition	Current trend	Desired condition
Boodjamulla (Lawn Hill) National Park and Boodjamulla National Park (Aboriginal Land) (including Riversleigh World Heritage Area) is a significant regional tourism destination for outback Queensland. Tourists are attracted by the park's rugged outback scenery, the fossils and significant Waanyi cultural diversity	Condition and trend	●●●	↑	
	Assessment confidence	Inferred ○	Inferred ○	●●●●

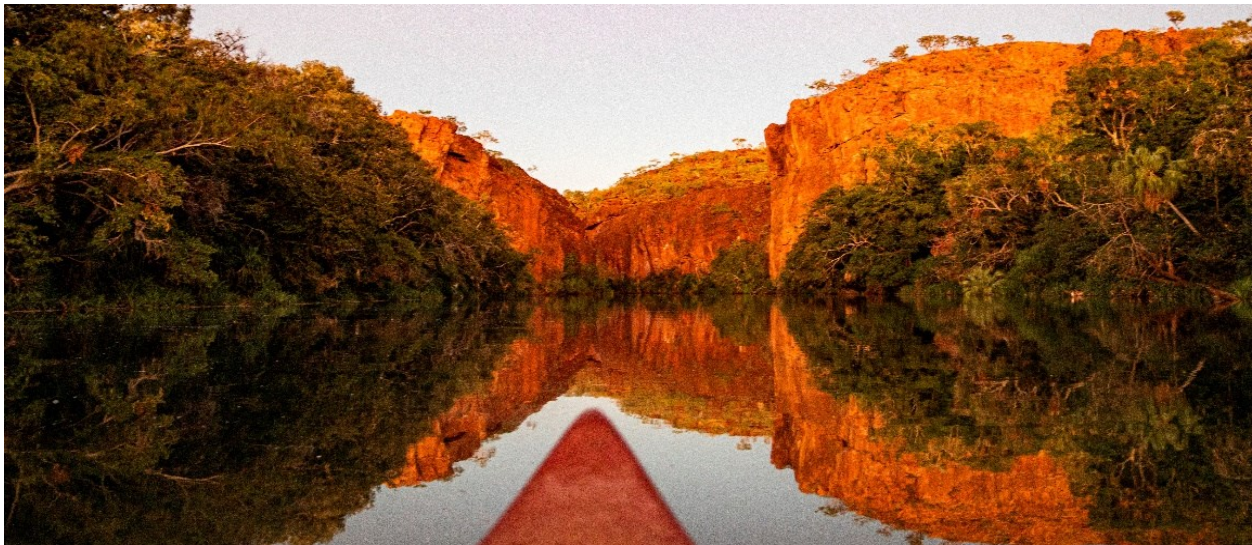


Figure 13. Lawn Hill Gorge provides a true Boodjamulla experience © Tourism and Events Queensland

Waanyi Country draws people from near and far to experience the striking beauty of a cultural and spiritual landscape. Boodjamulla National Park's rugged sandstone ranges, deep gorges, freshwater springs and creeks, limestone hills and black soil plains have very high aesthetic and scenic values. Immersing in the park's dramatic landscape is an experience that attracts regional, national and international tourists. Since Lawn Hill Gorge was declared a national park in 1984, visitor numbers have steadily increased.

Boodjamulla National Park offers visitors a diverse range of experiences and ways to explore the culturally rich landscape. With 20 km of walking tracks, visitors can access stunning locations with exceptional views, learn about the sacred culture of the Waanyi People, and simply observe an abundance of flora and fauna.

Lawn Hill Gorge and Lawn Hill Creek are picturesque locations where lush green vegetation contrasts with orange rocks that are often mirrored in emerald waters (Figure 14). It is a place people can visit to experience a sense of wonder, have quiet reflection and connect with nature. Visitors can also canoe the still waters to explore the middle and upper gorges of the creek. Lawn Hill Gorge is a popular destination for commercial tourism companies travelling the Savanna Way and the Overlanders Way.

The Boodjamulla area was once a lush rainforest scattered with lime mineral-rich freshwater pools – evidence of this can be found within the Riversleigh World Heritage Area, where some of the world's most outstanding fossils from between 30 and 10 million years ago have been uncovered. Visitors can discover the unique story of the evolution of Australia's wildlife by seeing some of these fossilised animals along the walking track at D Site. Together with other regional fossil tourism centres, Riversleigh presents an opportunity for 'fossil tourism' in Outback Queensland. Fossils of ancient animals capture the interests of young and old and attract a diverse range of travellers.

Boodjamulla National Park provides a unique opportunity for Waanyi People to develop economic opportunities such as ecotourism in a sustainable way. It is an ideal location, within their broader Waanyi territory, to retain Waanyi culture, build awareness, and ensure culture and cultural knowledge is maintained for future generations. The high level of cultural connection with the natural landscape is significant for Waanyi People. The protection of culture can be expressed through a centre of culture, provision of educational and Dreaming walks and extension activities, and the establishment of a custodian knowledge database.

Ecotourism and business development opportunities have potential to improve the social and economic outcomes for the Waanyi People and Queenslanders. Proposals that acknowledge the role of the Waanyi People as traditional custodians, have respect for their lore and culture, and provide opportunities for the Waanyi people to improve social and economic outcomes will be encouraged. This is a core objective of the *Waanyi Strategic Plan 2020–2025*.

Threats

Primary threat: Increasing visitor numbers in a limited space may result in overcrowding at Lawn Hill Gorge and the breaking of cultural rules and protocols. **Threat rating: High**

Secondary threat: Development of highly visible park infrastructure may impact the aesthetic and cultural values of Boodjamulla National Park. **Threat rating: Medium**

Other threat: Pigs, invasive vines and lion's tail *Leonotis leonurus* will cause ecosystem change and disturbance in Lawn Hill Gorge. **Threat rating: Medium**

Desired outcome and strategic management direction

Desired outcome		
	The condition of the high tourism value of Lawn Hill Gorge will be improved to 'good' through enhancing visitor experiences, reducing visual and noise impacts, and reducing the impacts of introduced animals and plants.	
Threatening processes	Strategic management directions	Priority
Pest animal	Reduce the impacts of pigs on the aesthetic values of Lawn Hill Gorge.	2
Pest plant	Reduce the impacts of invasive vines on the aesthetic values of Lawn Hill Gorge.	2
	Prevent the establishment of lion's tail on the aesthetic value of Lawn Hill Gorge.	2
Inappropriate Park development	Ensure the visitor experience is sustainable and appropriate governance is applied to low impact developments.	2
Impact on experience or opportunity	Enhance the visitor experience at Boodjamulla National Park by ensuring the remote, cultural and natural values are not compromised by unsustainable visitor use.	2
	Investigate opportunities to develop culturally appropriate visitor facilities, such as a centre of culture.	3
	Reduce visual and noise impacts from infrastructure and visitors in Lawn Hill Gorge area.	4

See Appendix 1. Glossary for priority rating definitions.

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 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 in Boodjamulla National Park are establishing cooperative management arrangements between the Waanyi People and QPWS, fire management, pest management, natural values management and visitor management. This section provides a **management direction statement** for each management theme, identifying its current LoS, desired LoS and the strategic direction for management.

Summary of management directions

A summary of the current and desired LoS for Boodjamulla National Park is shown below; Figure 15 provides a key to the LoS icons.

	Current LoS		Desired LoS	
1. Waanyi People and cultural heritage		Below acceptable		Exceptional
2. Fire management		High		Very high
3. Pest management		High		Very high
4. Natural values management		Very high		Exceptional
5. Post-contact cultural heritage		Acceptable		Acceptable
6. Visitor management		High		Exceptional
7. Community, partnerships and other interests		Acceptable		Acceptable
8. Field management capability		Very high		Exceptional
9. Operational planning and management support		High		Exceptional

Below acceptable	Acceptable	Medium	High	Very high	Exceptional
					
Based on an assessment of values, risks and threats, community interface challenges, custodial obligations and requirement for special management intervention, best practice management is achievable at either an 'acceptable', 'medium', 'high', 'very high' or 'exceptional' LoS.					

Figure 14. Key to condition, trend and confidence icons

5.1 Waanyi People and cultural heritage

Management direction statement

Description	Current level of service
The relationship between the Waanyi People and QPWS will be built through cooperative management by improving knowledge, recognising access, control and connection to Country, and our role in managing cultural heritage values that occur across Boodjamulla National Park	



Figure 15. Sandstone spinifex systems © Lea Ezzy DETSI

The Waanyi People's connection to land and traditional lore and custom are key to the cooperative management arrangements with QPWS. Together, the Waanyi People and QPWS will manage Boodjamulla National Park to protect the integrity of the diverse natural, social and cultural values in accordance with traditional and contemporary knowledge.

The Waanyi People and QPWS will support each other to ensure the delivery of:

- a park management agreement for cooperative management
- recognition and respect for Waanyi People's native title rights, interests, cultural values and aspirations
- cultural heritage management through the development of a cultural heritage management plan
- the development of the First Nations strategy.

Protecting and enhancing Waanyi culture at Boodjamulla National Park is fundamental to park management. Across the majority of Boodjamulla National Park, Waanyi culture has not been documented, some has been lost, and significantly more areas will be lost if anthropological work is not undertaken. The Waanyi culture is a living and breathing culture that needs to be protected and conserved for current and future generations. Protection of culturally significant areas in accordance with Waanyi lore, enhancing and advocating for Waanyi culture, and visitors abiding by Waanyi lore and traditions need to be aligned to the Waanyi People's expectations and measured. The LoS rating provides the Waanyi People and QPWS with a means for gauging resource requirements, staff training needs and infrastructure priorities.

Desired level of service and strategic management direction

Desired level of service	
	Cooperative management arrangements and cultural heritage management will be managed to an 'exceptional' level of service through a meaningful partnership with the Waanyi People, improved knowledge and management capacity, and incorporation of Waanyi People's rights, interests, cultural heritage and responsibilities in park management.
Strategic management directions	Priority
Custodial obligations	
Enhance existing formal partnerships between the Waanyi People and QPWS through continued and meaningful collaboration, discussions and working relationships.	1
Maintain formal and informal agreements to manage cultural heritage sites.	1
Strengthen the relationship between the Waanyi People and QPWS by developing and implementing a Park Management Agreement that supports cooperative management.	1
Level of service	
Waanyi People to develop and run cultural heritage projects and activities.	1
Improve protection of culture through contributing to the cultural heritage guideline and investigating the development of a keeping place and cultural centre.	1
Improve knowledge of Waanyi cultural sites and incorporate management options for sites in partnership with the Waanyi People.	1
Improve management capacity and opportunities for the Waanyi People through employment, commercial activities, contracting and training opportunities.	1
Support the Waanyi people to develop skills and expertise in archaeology, research, commercial businesses and employment associated with the park.	1
Improve awareness of visitors through the development of a Waanyi-led interpretative program and a suite of culturally appropriate educational materials and resources.	3
Improve collaboration between QPWS and the Waanyi People to develop works and services contracts or other work placement arrangements, particularly supporting the Waanyi Ngumari Ranger Program.	1
Improve QPWS staff's engagement in cultural learning opportunities and inductions to increase understanding and appreciation of Waanyi culture, histories and achievements.	2

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.2 Fire management

Management direction statement

Description	Current level of service
Fire management for Boodjamulla National Park	



Figure 16. Broadscale burning in Boodjamulla National Park © DETSI

Fire management is core business for QPWS to protect Country and culture, life and property. QPWS aims to 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 will work cooperatively with the Waanyi PBC, Waanyi BoM, state and local government agencies, rural fire brigades, adjoining landholders and local communities to manage fire across the landscape.

The strategic management direction in this management statement, combined with the Waanyi People's knowledge of traditional burning practices and the Queensland Government's *Planned Burn Guidelines: Northwest Highlands Queensland Bioregion of Queensland*, will guide the formation of the Boodjamulla National Park Fire Strategy. The fire strategy details QPWS's custodial obligations for protecting life and property, and fire management objectives for maintaining key values using fire management zones.

Desired level of service and strategic management direction

Desired level of service	
	Fire will be managed to a 'very high' level of service through improved partnerships to protect natural values, reduce risks to life and property, and enhance Waanyi cultural values.
Strategic management directions	
Custodial obligations	
Protect life, property, identified cultural heritage, visitor facilities and management infrastructure from fire through the implementation of traditional burning practices, planned burn guidelines and the Boodjamulla National Park Fire Strategy.	1
Level of service	
Improve understanding of contemporary and traditional fire management among the Waanyi People, QPWS and neighbouring landholders.	2
Improve the skills and capacity of the Waanyi People and QPWS to plan and undertake fire management.	2
Maintain a contemporary understanding of the fire requirements for the park's key values.	2
Collaboratively develop and implement planned burn programs to maintain, conserve and improve condition of key and other values, and ensure cultural fire management obligations are being met.	1

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.3 Pest management

Management direction statement

Description	Current level of service
Pest management for Boodjamulla National Park	

Pest management is core business for the Waanyi People and QPWS to mitigate the threats to biodiversity in accordance with the NCA. The Waanyi People and QPWS have 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, the Waanyi People and QPWS will continue to work cooperatively with other state and local government agencies, landholders and natural resource management groups to manage pests.

The strategic management directions in this management statement will guide the formation of the Boodjamulla National Park Pest Strategy. The strategy details pest management objectives for preventing and mitigating pest impacts on key values, and joint management obligations for managing pests and priority pest species.

Desired level of service and strategic management direction

Desired level of service
 Pests will be managed to a 'very high' level of service through improved partnerships and knowledge, and a more strategic approach to management.

Strategic management directions	Priority
Custodial obligations	
Mitigate biosecurity risks by undertaking 'reasonable and practical' steps that meet general biosecurity obligations under the <i>Biosecurity Act 2014</i> .	1
Level of service	
Improve capacity and capability to support pest management within key and other values.	1
Improve collaboration with the Waanyi People for pest management in the park.	2
Improve collaboration with neighbours and relevant stakeholders for pest management in the park.	2
Improve the skills and capacity of the Waanyi People and QPWS to plan and undertake pest management.	3
Improve management of permitted and unpermitted stock on the Reserves for Departmental and Official Purpose through working with neighbouring property owners and formalising agreements.	3
Improve knowledge of the distribution and population structure of vertebrate pest species occurring on the park.	3
Maintain current level of consultation and stakeholder engagement for pest management.	3

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.4 Natural values management

Management direction statement

Description	Current level of service
Natural values management for Boodjamulla National Park	

Boodjamulla National Park has significant natural values including endangered regional ecosystems, threatened species, and fossils recognised for their Outstanding Universal Value. These natural values are closely associated with the Waanyi People's cultural value of healthy Country and landscapes. The Waanyi People and QPWS will manage natural values in accordance with the NCA, EPBC Act, and relevant international agreements and guidelines, and through the incorporation of traditional knowledge.

The Commonwealth's EPBC Act is the statutory mechanism for protecting and managing World Heritage properties in Australia. The Australian and Queensland governments have obligations under the World Heritage Convention to protect and manage Australia's World Heritage listed properties. The Australian Fossil Mammal Sites – Serial Property Management System (AFMS – SPMS) meets Australia's obligations under the World Heritage Convention. The AFMS – SPMS describes the over-arching management system for the AFMS World Heritage Area, and provides a commitment by both Queensland and South Australia to manage and protect the Outstanding Universal Value of the Riversleigh section of the World Heritage Area.

The rights and interests and native title of the Waanyi People are recognised over the World Heritage Area, despite cultural values not currently being recognised as a World Heritage value for Riversleigh.

Threatening processes will be managed through the implementation of Boodjamulla National Park's fire, pest and visitor strategies. World Heritage status is acknowledged in the planning and assessment of values within these internationally recognised areas. The condition of the key natural values will be monitored through implementation of the Boodjamulla National Park Monitoring and Research Strategy.

Desired level of service and strategic management direction

Desired level of service	
	Natural values will be managed to an 'exceptional' level of service through improved partnerships, shared knowledge and a more strategic approach to management and monitoring to protect the park's exceptional natural values.
Strategic management directions	Priority
Level of service	
Improve knowledge of natural assets within Boodjamulla National Park (terrestrial, geological and aquatic) to establish baseline information and comprehensive understanding, in partnership with the Waanyi People.	2
Improve consultation and engagement with relevant stakeholders in the management of the natural values.	2
Improve monitoring and evaluation of key values to inform management decisions.	3
Improve the understanding of the significance of the Outstanding Universal Value of Riversleigh's fossils through continued research.	1
Health check monitoring	
Monitor the condition of natural key values through health checks.	1

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.5 Post-contact cultural heritage

Management direction statement

Description	Current level of service
Post-contact cultural heritage management for Boodjamulla National Park	

Post-contact cultural heritage sites are managed in accordance with the NCA and *Queensland Heritage Act 1992* (Qld) and in consultation with the Waanyi People to identify risks, threats and opportunities for appropriate management action.

No sites within Boodjamulla National Park are listed on the Queensland Heritage Register. The Australian Fossil Mammal Sites (Riversleigh) is listed on the Australian National Heritage List. The Waanyi People are aware of some remains from the old Chatswood House near the Gregory River and ruins at Lilydale Springs. Sites are managed as ruins in keeping with the Australian Heritage Council's guidelines for managing heritage ruins.

Desired level of service and strategic management direction

Desired level of service	
	Post-contact cultural heritage values will be managed to an 'acceptable' level of service.
Strategic management directions	Priority
Level of service	
Manage post-contact cultural heritage sites as ruins while addressing any safety issues.	4
Improve knowledge of post-contact cultural heritage sites and ensure staff are aware of threatening processes.	5

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.6 Visitor management

Management direction statement

Description	Current level of service
Visitor management for Boodjamulla National Park	



Figure 17. A variety of visitor experiences are provided at Boodjamulla © Tourism and Events Queensland

Queensland’s parks, forests and reserves provide local communities and visitors from around the world with opportunities to experience their rich natural and cultural heritage, as well as a diverse range of recreational and ecotourism opportunities.

For Boodjamulla National Park, the Waanyi People and QPWS seek a responsible balance between providing world-class visitor opportunities and protecting the park’s cultural and natural resources in accordance with the Waanyi cultural obligations and interests, the NCA, and government policies and procedures. Permitted ecotourism, commercial tour activities, agreements and events are administered in accordance with the NCA and other relevant legislation, including the department’s *Implementation Framework for Ecotourism Facilities in National Parks* and the *Best Practice Ecotourism Development Guidelines*.

The strategic management direction in this management plan guides the formation of the Boodjamulla National Park Visitor Strategy. The visitor strategy details management objectives for key values and the desired management outcomes for managing visitor sites through zoning. Zones and management objectives consider the physical, social and managerial impacts of the

visitor experiences and sustainability of the sites. Visitor strategies clearly state the desired site capacity to provide a diversity of experiences for visitors and achieve site sustainability. The strategy also explores visitor opportunities that complement other experiences in the landscape and region.

The condition of, and visitor satisfaction with, visitor experiences will be monitored through the implementation of the Boodjamulla National Park Monitoring and Research Strategy and Boodjamulla National Park Visitor Strategy.

The Waanyi People have social and economic aspirations to develop ecotourism opportunities. Aligned with the *Waanyi Strategic Plan 2020–2025*, opportunities to increase economic independence and build employment and capability are priorities.



Desired level of service and strategic management direction

Desired level of service	
	Visitor values will be managed to an 'exceptional' level of service through improved knowledge and a more strategic approach to management to ensure world-class visitor experiences, management of high visitor numbers and protection of park values.
Strategic management directions	Priority
Level of service	
Improve current level of knowledge and understanding of visitor use, opportunities and expectations.	3
Improve current approach to visitor management by providing a diversity of camping and day use opportunities and standards.	2
Enhance visitor opportunities by expanding, defining and improving opportunities outside of Lawn Hill Gorge.	3
Foster and support ecotourism initiatives and partnerships where appropriate.	2
Enhance visitor experience by incorporating Waanyi language and culture into visitor signage and interpretation to raise awareness of the richness of Waanyi culture.	2
Improve interpretation and presentation of research on the fossil record (Riversleigh's World Heritage value) so that this information is transmitted to future generations, locally, nationally and internationally.	1
Improve visitor knowledge of the Waanyi People and QPWS's cooperative management by advocating through interpretative materials and activities.	2
Improve relationship with key tourism bodies and the Riversleigh World Heritage Advisory Committee through better consultation about visitor management and opportunities.	2
Health check monitoring	
Monitor the condition of visitor key values through health check monitoring.	1

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.7 Community, partnerships and other interests

Management direction statement

Description	Current level of service
Community, partnerships and other interests associated with Boodjamulla National Park	

Boodjamulla National Park provides sustainable environmental, economic and social benefits. The Waanyi People and QPWS are committed to working with the community and their partners to ensure activities and infrastructure are ecologically sustainable and culturally appropriate, and benefit Queensland's economic and social wellbeing as outlined in *Queensland's Protected Area Strategy 2020-2030*. Permitted activities are administered in accordance with cultural rules as well as the requirements of the NCA and other relevant legislation.

The park is important for Waanyi culture, tourism, remote area recreation, nature-based activities and visitors, and is well supported by local community groups, recreational associations and the Burke and Mount Isa local councils.

The Queensland Museum is an important partner in the management of fossils extracted from Riversleigh for research purposes. Fossils from the Riversleigh World Heritage Area can only be removed from the site with a scientific permit. Once it is formally described by a research institution, extracted fossil material becomes the property of the Queensland Government. The Queensland Museum is identified as the Queensland Government organisation designated to hold these collections.

The Waanyi People, the broader community and scientists play an important role on the Riversleigh World Heritage Advisory Committee. Advisory committees are established for each World Heritage Area in Queensland. The Riversleigh World Heritage Advisory Committee provides advice to the Queensland and Commonwealth Ministers responsible for World Heritage, and to managing agencies to ensure the Riversleigh World Heritage Area is cared for, managed and interpreted to standards that reflect its Outstanding Universal Value.

Desired level of service and strategic management direction

Desired level of service	
	Community, partnerships and other interests will be managed to an 'acceptable' level of service through increased collaboration to ensure the continuing relationship with neighbours and agreement holders.
Strategic management directions	
Level of service	
Improve collaborative management of fencing, stock, pest and fire by developing neighbour agreements.	2
Maintain partnerships with the Queensland Museum and the Riversleigh World Heritage Advisory Committee for the management of the Riversleigh World Heritage Area.	2
Maintain ongoing relationships with external researchers for the park's key values.	2
Improve knowledge and understanding of the Riversleigh fossil site through broader community education.	2
Improve planning and management of the Riversleigh World Heritage Area through advice provided by the Riversleigh World Heritage Advisory Committee.	2

5.8 Field management capability

Management direction statement

Description	Current level of service
Field management capability for Boodjamulla National Park	



Figure 18. Rangers at Boodjamulla © DETSI

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 natural and cultural values, potential threats, intensity of visitor use and community expectations. It considers the required proximity, frequency and intensity of on-ground management needed to manage key values and meet custodial obligations. The rating provides the Waanyi People and QPWS with a means of gauging resourcing requirements, infrastructure priorities and staff training needs.

Desired level of service and strategic management direction

Desired level of service
 Field management capacity will be managed to an 'exceptional' level of service through additional support to manage, protect and enhance the park's key values.

Strategic management directions	Priority
---------------------------------	----------

Level of service

Improve field capability and capacity through additional support from the Waanyi Ngumari Ranger Program, volunteers and stakeholders as required.	2
Maintain departmental infrastructure that effectively supports park management operations.	2
Investigate the development of a new ranger station for the Waanyi People.	2
Maintain on-ground ranger presence to ensure the delivery of exceptional standards of management.	4
Improve cooperative management by working collaboratively with Waanyi's Ngumari rangers to plan, deliver and monitor operational programs.	4
Improve QPWS staff's understanding and appreciation of Waanyi culture, history and achievements by engaging in cultural learning opportunities.	2
Improve knowledge of fossil research through training of QPWS staff and Waanyi's Ngumari rangers to increase understanding about the significance and management requirements of fossil sites.	2

Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)

5.9 Operational planning and management support

Management direction statement

Description	Current level of service
Operational planning and management support for Boodjamulla National Park	



Figure 19. Carpentarian grasswrens © Henry Stoetzel

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 natural and cultural 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	
	Operational planning and management support will be managed to an ‘exceptional’ level of service through increased awareness of resources and cultural priorities required to manage, protect and enhance the park’s key values.
Strategic management directions	
Level of service	
Improve operational planning and management support through the development of a Master Plan to review the base and workforce infrastructure and management.	1
Improve management support of the fossils at Riversleigh World Heritage Area by partnering with the Riversleigh World Heritage Advisory Committee and research and monitoring specialists to develop a fossil monitoring program.	2

* Priority ratings Scale 1 (extremely urgent and extremely necessary) to 5 (optional and not urgent)



6. Bibliography

Waanyi Native Title Aboriginal Corporation (RNTBC) 2020, Strategic Plan 2020–2025, ICN 7448, Waanyi Native Title Aboriginal Corporation.

Department of Agriculture, Water and the Environment (DAWE) 2021, World heritage criteria, viewed 22 February 2022, <https://www.environment.gov.au/heritage/about/world/world-heritage-criteria>

UNESCO 2021, Australian Fossil Mammal Sites (Riversleigh/Naracoorte), UNESCO World Heritage Centre, viewed 22 February 2022, <http://whc.unesco.org/en/list/698>

Department of Environment and Science (DES) 2020, The Gurra Gurra Framework 2020–2026, Queensland Government.



Figure 20. *Ctenophorus caudicinctus* © DETSI 2007

Appendix 1. 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'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 can respond quickly to adverse change and redirect management priorities.
Key value	A natural, cultural or social 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.
Level 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 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; post-contact cultural heritage; 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)	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, and social, economic and political factors. 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. 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. 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. 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. 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.
Priority rating (LoS SMDs)	A rating given to an LoS or custodial obligation strategic management direction. A scale from 1 (extremely urgent) to 5 (not urgent or optional) is assigned, with consideration given to legislative obligations, cost, and social, economic and political factors.
Strategic management direction (SMD)	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 (International Union for Conservation of Nature) classifications, QPWS has identified threatening processes that have the potential to affect Queensland's values (e.g. natural systems modifications, invasive species). 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.

