

Great Basalt Wall National Park

Management Statement

2013



The Department of Environment, Science and Innovation acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and custodians of the land. We recognise their connection to land, sea and community, and pay our respects to Elders past and present.

The department is committed to respecting, protecting, and promoting human rights, and our obligations under the Human Rights Act 2019.

This management statement does not intend to affect, diminish, or extinguish native title or associated rights.

The Queensland Government supports and encourages the dissemination and exchange of its information. This work is licensed under a Creative Commons Attribution 4.0 International License.



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.

For more information on this licence, visit <https://creativecommons.org/licenses/by/4.0/>

Disclaimer

All due diligence and care has been taken in the preparation of this document based on the information in the 2013 management statement. 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.

Great Basalt Wall National Park Management Statement 2013 has been extended in 2024 in line with the Queensland *Nature Conservation Act 1992* (s120G). Minor amendments have been made. There has been no change to the statement's original management intent and direction.

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@des.qld.gov>.

Park size:	35,200ha
Bioregion:	Einasleigh Uplands Bioregion
QPWS region:	Central
Local government estate/area:	Charter Towers Regional Council
State electorate:	Dalrymple

Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Native Title Act 1993 (Cwlth)</i>
✓	<i>Nature Conservation Act 1992</i>

Plans and agreements

✓	Bonn Convention
✓	China—Australia Migratory Bird Agreement
✓	Japan—Australia Migratory Bird Agreement

Vision

Great Basalt Wall National Park conserves diverse landscapes associated with the Toomba Basalt Flow.

Due to access constraints, recreation opportunities remain minimal and visitors who wish to experience the basalt formations are directed toward Dalrymple National Park to the east.

Management focuses on protecting habitat values significant to the animal assemblages found in the basalt flow.

The Gudjala people, the Aboriginal people with traditional affiliations in the area, are involved with managing cultural heritage places, assets and issues.

Conservation purpose

Great Basalt Wall National Park was gazetted in 1987 to conserve the significant geological features, the semi-evergreen vine thicket and the fauna associated with the Toomba basalt flow. The basalt flow provides ecosystem services as an extensive wetland that stores and releases water to the surrounding environment.

Great Basalt Wall National Park hosts significant and disjunct communities of mammals. Woodland pockets captured within the basalt flow provide an important opportunity to study the effects of grazing and fire on Australian savanna. These woodland and vine forest communities have existed without the influence of grazing and frequent fire and provide important benchmarks for comparative studies.

Protecting and presenting the park's values

Landscape

Great Basalt Wall National Park is situated on the Toomba Basalt Flow in the Nulla Province. The Toomba flow is considered to be the third youngest basalt flow event in Australia forming around 13,000 years ago (Webb et.al. 1982). The basalt flow commences at an inconspicuous volcano 100 metres (m) higher than the surrounding landscape and 775m above sea level. The flow extends for 120 kilometres (km) to the east north east, where it meets the Burdekin River and Dalrymple National Park. It concludes 6.6km south of a feature on the river known as Big Bend. The total area of the basalt flow and the encapsulated woodland pockets is approximately 72,000ha, with over half of the basalt flow conserved in the Great Basalt Wall National Park and Dalrymple National Park.

The flow surface is highly irregular with an abundance of low ridges and depressions. The edges of the lava flow are generally 3–5m high, giving rise to the name 'Great Basalt Wall'. During the course of its formation, the lava flow braided the existing land surface leaving enclosed pockets of the older, weathered basalt and enclosing woodland pockets. The flow dammed Allingham Creek and diverted Fletcher and Lolworth creeks which now run along the northern edge and southern edge of the basalt respectively. This caused extensive ponding and the formation of several lakes on the perimeter and within the flow. The basalt flow acts as a sink for considerable quantities of water which emerge as springs within the formation and on the margins.

Great Basalt Wall National Park is separated into two distinct sections. The larger western section covers the vent end of the flow. The small eastern section is known as the Red Falls section and is named after a section of waterfalls on Lolworth Creek.

Regional ecosystems

Fifteen regional ecosystems have been mapped within the two sections of Great Basalt Wall National Park. Five are classed as of concern regional ecosystems under their biodiversity status (Table 1). The remainder are listed as not of concern at present. Nearly 95% of the national park has been mapped as semi-evergreen vine thicket on cones, craters and rocky basalt flows (9.8.7), providing significant bat maternity sites in the lava tunnels. The lava flow provides a physical refuge against disturbance, particularly fire. The spring and wetland communities are significant feeding, breeding and areas of refugia for fauna, particularly water birds.

Native plants and animals

In the early 1980s a fauna survey of the 28,500 square kilometres of Dalrymple Shire recorded 395 species of mammals, birds, reptiles and frogs. Of this, 71.6% (or 283) were recorded from the Toomba flow area. Currently there are 67 plant species and 70 animal species recorded on the park. The reason for this diversity of species is the complex nature of the habitats represented with the flow, from the vine thickets, the variety of woodland pockets and the seasonal and permanent wetlands and watercourses.

Great Basalt Wall National Park is currently known to provide habitat for seven animal species of state or national

significance (Table 2). Four birds recorded from the park are listed in international agreements (Table 3). A further 14 species have been listed as being of local or regional conservation significance during the Einasleigh Uplands Bioregion biodiversity and planning assessment in 2009.

Aboriginal culture

The Gudjala people have traditional links to the area—including Great Basalt Wall National Park. Native Title claim QC01/26 was lodged in 2001 and encompasses a previous claim (QC98/2) by the same applicants.

Places of material culture are known to exist within the park and include stone arrangements and blazed trees. Stone fish traps have been recorded in the rivers that surround the park (Rowland and Ulm 2011).

'The Wall' as it is referred to in historical documents played a significant role during the contact period when Aboriginals from the area were forced off their traditional lands to make way for pastoral enterprises. Notes from a pastoralist's diary records events during the late 1870s where Aboriginal people taking shelter in 'the Wall' would raid 'weaners', or young cattle, for food. The pastoralists then hunted down and killed as many Aboriginal people as they could find (Babidge et.al. 2007).

Shared-history culture

This area holds interest for many local people because of its varied history. However, very few relics of European pastoral heritage are present on the park.

Tourism and visitor opportunities

Currently, no formalised gazetted access is provided to the park and any access needs to be negotiated with the adjoining neighbours. Due to the nature of the volcanic flow, there are no access roads or tracks within the park. The park has mostly a rocky surface which is difficult to traverse on foot and any visitors must be self-reliant and well prepared.

Visitors wishing to experience the diversity of the basalt flow and associated communities will be directed towards Dalrymple National Park to the east. Dalrymple National Park is situated on the Burdekin River and is easily accessed from the Gregory Developmental Road (Lynd Highway).

Education and science

The unique nature of the Toomba volcanic flow at Great Basalt Wall National Park has captured components of the surrounding ecosystems and isolated them. The isolation has protected these woodland and wetland communities from disturbance by fire and grazing. Researchers have used some of the isolated pockets as benchmarks to compare ecological change in the broader area and to conduct manipulative research into the effects of fire on eucalypt savanna.

Queensland Parks and Wildlife Service (QPWS) maintains photographic and vegetation monitoring plots to assess the impacts and outcomes of fire management.

Partnerships

Partnerships are important to effectively manage Great Basalt Wall National Park; particularly for fire and pest management, and park access. Good working relationships have been developed with neighbouring pastoralists with a strong focus on fire and pest management. The success of future vertebrate pest management programs is reliant on these partnerships. Good working relationships need to be developed with the Gudjala people to improve cultural heritage management.

Other key issues and responses

Pest management

Rubber vine *Cryptostegia grandiflora* (Class 2, WONS) is a vigorous climber found within the park. Rubbervine is a significant threat to the communities present and is managed through a range of strategic control methods. Parthenium weed *Parthenium hysterophorus* (Class 2, WONS) has been found and controlled on the park. Ongoing monitoring occurs to ensure control of new infestations. Lantana *Lantana camara*, (Class 3), is present on the park and poses a threat the semi-evergreen vine thicket through displacement.

Feral pigs *Sus scrofa* (Class 2) have the potential to significantly impact the springs and wetland environments. The potential to include targeted baiting will be explored to improve management outcomes. Baiting programs should consider the potential presence of the endangered northern subspecies of the spotted tail quoll.

Fire management

An active fire management program exists at Great Basalt Wall National Park. This program aims to maximise conservation outcomes such promoting and maintaining the diversity in fire-adapted ecosystems in the woodland pockets, to minimise fuel loads in the area bordering semi-evergreen vine thicket and as a tool for managing the pest plant rubber vine.

References

- Baidge S, Alberts V and Dallache P 2007 Written True Not Gammon: A History of Aboriginal Charters Towers.
- Burnett S 1993 The conservation status of the tiger quoll, *Dasyurus maculatus gracilis* in North Queensland, Report prepared for Queensland Department of Environment and Heritage, James Cook University.
- Rowland MJ and Ulm S 2011 Indigenous fish traps and weirs of Queensland. Queensland Archaeological Research 14, 1–58.
- Webb JA, Joyce EB and Stevens NC 1982 Lava caves of Australia. Proceedings, Third International Symposium on Vulcanospeleology, Oregon, USA. pp 74–85.

Management directions

Desired outcomes	Actions and guidelines
<p>Landscape</p> <p>Landscape and regional ecosystem values are protected.</p> <p>The health and integrity of watercourses, perennial springs, groundwater and catchments are maintained.</p>	<p>Implement fire regimes that maintain regional ecosystems and contribute to the diversity of the Great Basalt Wall National Park.</p> <p>Implement and review pest management programs.</p> <p>Exclude stock from the park by maintaining effective boundary fences where practical.</p>
<p>Native plants and animals</p> <p>The range of species and their habitat requirements are protected through active management.</p>	<p>Facilitate surveys aimed at confirming the presence of the spotted-tailed quoll.</p> <p>Maintain an active fire management program design in order to maximise diversity.</p>
<p>Aboriginal culture</p> <p>Indigenous people with traditional affiliations in the area are involved with managing cultural heritage issues.</p>	<p>Liaise with Gudjala people about identifying, managing and interpreting the park's Indigenous cultural heritage.</p> <p>In consultation with Gudjala people, protect any identified Indigenous cultural heritage places.</p>
<p>Tourism and visitor opportunities</p> <p>Great Basalt Wall remains as a remote destination for self-reliant visitors.</p>	<p>Allow for remote and challenging walking opportunities where applicants demonstrate the necessary planning and awareness of environmental conditions which they will encounter.</p>
<p>Education and science</p> <p>Research and monitoring programs increase understanding of values and provide information to improve management decisions.</p>	<p>Actively support research activities, in particular the Herbarium's long-term fire research in 'Pyro Pocket'.</p> <p>Maintain existing QPWS photo monitoring sites as these have the potential to track ecosystem changes and effects of fire management.</p>
<p>Pest management</p> <p>The integrity of native plant and animal communities is maintained through strategic, sustained pest management.</p>	<p>Develop and implement a Level 2 pest management strategy that considers the most effective methods for control and involves cooperative management of species where appropriate.</p>
<p>Fire management</p> <p>The integrity of native plant and animal communities is maintained through strategic, sustained fire management.</p>	<p>Ensure a diversity of post-fire ages is maintained between the woodland pockets.</p> <p>Review and implement the fire management strategy.</p>
<p>Partnerships</p> <p>Relationships with neighbours are maintained and collaborative management occurs.</p>	<p>Develop cooperative pest management programs to ensure that park management does not occur in isolation.</p>

Tables - Conservation values management

Table 1: Of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
9.3.1	<i>Eucalyptus camaldulensis</i> and/or <i>E. tereticornis</i> +/- <i>Melaleuca</i> spp. +/- <i>Casuarina cunninghamiana</i> fringing woodland on channels and levees	Of concern
9.3.4	Permanent or seasonal wetlands frequently fringed by narrow bands of trees and shrubs including various mixes of <i>Melaleuca</i> spp. and <i>Eucalyptus</i> spp. on alluvial plains	Of concern
9.3.11	Wetlands (sometimes ephemeral) with aquatic species and fringed with <i>Eucalyptus</i> spp. communities within basalt plains and flows	Of concern
9.3.23	<i>Acacia tephрина</i> open forest on alluvial clay plains	Of concern
9.8.7	Semi-evergreen vine thicket on cones, craters and rocky basalt flows with little soil development	Of concern

Table 2: Species of conservation significance

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Animals				
<i>Acanthopis antarcticus</i>	common death adder	Near threatened	-	Medium
<i>Dasyurus maculatus</i>	spotted tail quoll (northern subspecies)	Endangered	Endangered	Critical
<i>Ephippiorhynchus asiaticus</i>	black-necked stork	Near threatened	-	Low
<i>Geophaps scripta scripta</i>	squatter pigeon (southern subspecies)	Vulnerable	Vulnerable	Medium
<i>Nettapus coromandelianus</i>	cotton pygmy-goose	Near threatened	Vulnerable	Low
<i>Lophoictinia isura</i>	square-tailed kite	Near threatened	-	Low
<i>Poephila cincta cincta</i>	black-throated finch (white-rumped subspecies)	Endangered	Endangered	High

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Ardea modesta</i>	eastern great egret	-	✓	✓	-
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	✓	-	-
<i>Merops ornatus</i>	rainbow bee-eater	-	-	✓	-
<i>Pandion cristatus</i>	eastern osprey	✓	-	-	-

Bonn: Bonn Convention; CAMBA: China–Australia Migratory Bird Agreement; JAMBA: Japan–Australia Migratory Bird Agreement; ROKAMBA: Republic of Korea–Australia Migratory Bird Agreement