

Hell Hole Gorge National Park Management Statement 2013

Park size:	12,700ha
Bioregion:	Mulga Lands
QPWS region:	South West
Local government estate/area:	Quilpie Shire Council
State electorate:	Gregory



Hell Hole Gorge National Park. Photo: NPRSR.

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

✓	China–Australia Migratory Bird Agreement
✓	Japan–Australia Migratory Bird Agreement
✓	Republic of Korea–Australia Migratory Bird Agreement

Thematic strategies

✓	Level 2 Fire Management Strategy
✓	Level 2 Pest Management Strategy

Vision

Hell Hole Gorge National Park will be managed as an undisturbed area where natural processes continue with minimal disturbance. Species of conservation significance will be protected from loss and damage and the impacts of pest species will be managed and controlled.

Tourism and visitor opportunities will continue to be managed within the constraints of park access issues and permitted activities to retain the remote experience for self-reliant visitors. Scientific values will be maintained and research into the ecology of significant native species will be encouraged and supported. Cultural heritage values will be identified and protected.

Conservation purpose

Hell Hole Gorge National Park is located approximately 57km north-west of Adavale on the Grey Range. It is centred on the waterholes and gorges of the rugged Powell Creek drainage system and its associated plateau. The park is part of a network of protected areas in the Mulga Lands bioregion with Idalia National Park located to the north-east and Mariala National Park to the south-east. It was gazetted national park to protect a number of plant species of high biogeographic significance that are poorly preserved in Queensland. The purpose is also to protect ecosystems which are typical of the central-northern part of the Mulga Lands bioregion.

Protecting and presenting the park's values

Landscape

Hell Hole Gorge National Park lies in the Cooper Creek catchment and consists mostly of dissected ranges and stony tablelands. The Powell plateau forms part of the Grey Range, and the deeply incised Powell Creek drains through the centre of the area. Spencer and Gorge creeks are also significant drainage lines. The plateau is capped by silcrete and overlies altered Cretaceous Winton formation sediments which may be exposed on escarpments. Soils are shallow, gravely lithosols and red earths, frequently with a surface cover of ironstone gravel and areas of exposed rocks are common. Quaternary deposits give rise to flat to gently undulating plains in places. North of Powell Creek sand plains are present with deep, sandy red earth soils.

Hell Hole Gorge National Park was part of the Milo Holding prior to gazettal but because of the rugged nature and general lack of natural herbage of the Powell Creek valley and associated landscape, it was only lightly grazed. Powell Creek has steep, dissected escarpments, vertical cliffs (to 45m), gorges and permanent waterholes; the largest is Hell Hole Waterhole. There are also waterholes located along Spencer and Harvey creeks; some provide permanent water sources and important refuge for wildlife in prolonged dry periods. Gravely or sandy alluvial soils are associated with the main channels of the creeks.

The rock holes have ground cover on their edges and natural erosion is proceeding without need of intervention, although creek flows can be strong after heavy rainfall. The only major ground disturbance on the park has come from seismic line exploration in the early 1980s, and clearing for boundary fencing.

The park is surrounded by cattle grazing properties consisting mainly of unimproved land and rangelands.

Regional ecosystems

There are no regional ecosystems of concern on the park. Vegetation is dominated by mulga *Acacia stowardii*, bendee *A. catenulata* and lancewood *A. petraea* communities, with mulga *A. aneura* communities on the associated flat to gently undulating plains. The soft and hard mulga communities have flourished recently due to above average rainfall, and young mulga is colonising the area. These communities can change rapidly, with prolonged dry, hot weather.

Native plants and animals

Hell Hole Gorge National Park protects three vulnerable plant species. They are climbing caustic *Euphorbia sarcostemmoides*, *Acacia ammophila* and *Hakea maconochieana* (Table 1). *Croton phebalioides*, quinine *Petalostigma pubescens*, *Plectranthus parviflorus*, green wattle *A. deanei*, *A. sparsiflora*, red ash *Alphitonia excelsa*, dogwood *Jacksonia scoparia* and wilga *Geijera parviflora* are at the western extreme of their range. *A. cowleana* is nearing the north-western extremity of its range, and *A. holosericea* is at the south-western limit of its range.

Plant lists have been identified as incomplete in the past and surveys have been conducted recently. Knowledge gaps remain about species types and extent which needs to be addressed.

Of the 162 animal species recorded on the park, the only threatened species identified has been the infrequently sighted vulnerable Major Mitchell's cockatoo *Lophochroa leadbeateri*. Other notable species include the square-tailed kite *Lophoictinia isura* and the red throat *Pyrrholaemus brunneus*. These species are near threatened, although it is believed that Hell Hole Gorge National Park is not their main habitat. The yellow-footed rock-wallaby *Petrogale xanthopus celeris* is recorded on Hell Hole Gorge National Park. The species is geographically restricted and considered to be of high conservation significance in South West Queensland. Major threats to yellow-footed rock-wallaby populations include predation from foxes *Vulpes vulpes*, wild dogs *Canis lupus familiaris*, dingoes *Canis lupus dingo* and feral cats *Felis catus*, and potential displacement due to loss of habitat and competition for food by goats *Capra hircus*.

The spinifex pigeon *Geophaps plumifera* has been sighted and is at the south-eastern limit of its distribution here.

Native animal species are attracted to the permanent waterholes in the creek systems. Water rats *Hydromys chrysogaster* have been seen at the waterholes and evidence found of their predation on turtles and yabbies, however little information about their numbers or distribution has been collected.

Aboriginal culture

The protected area landscape is of intrinsic cultural value to Traditional Owners. There are significant Aboriginal cultural heritage sites on the park although no detailed survey has been carried out. Stone arrangements can be found in several places and include male and female ceremonial sites. A rock quarry for making tools is located near the western boundary of the park. Erosion and inundation from fast water flows in the creek are a serious threat to the quarry which is at risk of being washed away.

Shared-history culture

The park was formerly part of a grazing property, and there are a number of cultural artefacts on the park that illustrate the shared-history culture of the area. These include the remnants of a stock fence across the gorge on Spencer Creek; Harvey Stake Yards, which are of a particular type of construction designed by a local stockman, Jack Harvey, and are located on the western boundary adjacent to Powell Creek; and a steam engine that was stranded when being transported between the Milo and Budgerygar properties. The stock fence is most at risk due to rushing water after heavy rain. The stake yards are located along the fence line on the western boundary and may be impacted by earthworks on the adjoining property. Further assessment of the significance and future management of cultural heritage items is required.

Tourism and visitor opportunities

The park is relatively remote from any main, formed roads and can only be reached via private property. There is a gazetted road to the boundary of the park but this road has not been formed. Hell Hole Gorge National Park is scenically attractive and there is potential for camping and related activities such as walking, bird watching and photography. The rugged gullies associated with Powell Creek invite exploratory walks for unusual plants or glimpses of diverse animal life. The rock holes provide welcome scenic relief in a hard landscape, and Hell Hole Waterhole, with its steep rocky banks and cascades that run after heavy rainfall, is the largest. Washpools and cascades also occur along the length of Spencer and Powell creeks. Other scenic attractions include cliff faces and stunning seasonal wildflower displays. There is no visitor infrastructure on the park.

Due to the parks extremely remote and rugged nature, significant safety issues have been identified for visitors. There are no public roads to provide visitor access to the park with management access only possible by permission to use private roads on adjacent properties. A gazetted road to the park boundary has not been formed and further investigation is required to determine options for public access, including commercial tourism.

There is very limited potential for visitor opportunities to be developed until the issues of safety and access are resolved.

The current management intent is to continue to manage the park as an undisturbed and completely natural area until the safety and access issues are resolved. A draft visitor management strategy was developed in 2003 to address safety and access issues.

Education and science

Until safety and access issues are addressed satisfactorily Hell Hole Gorge National Park is not suitable for use by groups for educational purposes.

Opportunities exist for research into the aquatic systems and riparian ecosystems which occur within the park. Scientific importance is also attached to the yellow-footed rock-wallaby and plants of conservation significance found on the park. Permits are required to conduct research in the park. Researchers also require permission to travel through private property and be completely self reliant and mindful of the safety issues.

Partnerships

The remoteness of the park poses challenges for day-to-day management. Neighbours are important partners for Queensland Parks and Wildlife Service (QPWS) in park management and assist greatly by checking park boundary fences and keeping stock off the park—alerting QPWS about any unlawful use of the park and cooperating in managing fire and pest species. It is extremely important for positive and complementary relationships to exist between QPWS and park neighbours. This partnership is also critical to resolving issues regarding visitor access which currently is at the discretion of the property owners.

Consultation also occurs with other stakeholders on a regular basis. Discussions with commercial tourism operators and the Quilpie Shire Council on resolving access issues are ongoing.

Other key issues and responses

Pest management

The ecosystems on the park were in very good condition at the time the national park was gazetted. Plant communities were mature and largely free of both herbaceous and woody weeds. Noogoora burr *Xanthium pungens* grows along the Powell Creek system upstream of the main rock hole. Recent consistent and heavy rainfall is likely to have resulted in some pest plant spread along the creek systems.

Stock proof fencing has been completed along all boundaries and will prevent further stock incursions. Goats *Capra hircus* are present but their numbers are low and they are controlled by strategic ground shooting. Ground and aerial baiting performed along the boundary and creek lines in cooperation with neighbours are used to control wild dogs *Canis lupus familiaris*. Cats *Felis catus*, rabbits *Oryctolagus cuniculus* and pigs *Sus scrofa* are known to be present in small numbers. Control measures are being taken in accordance with the Level 2 pest management strategy for the park.

Fire management

Due to the landscape and vegetation structure in the park, fire risk is low. Exposed rock forms natural fire barriers throughout the park and there are few areas of the park that can generally carry a fire. A Level 2 fire management strategy is in place and QPWS works cooperatively with neighbours regarding fire management.

Management directions

Desired outcomes	Actions and guidelines
<p>Native plants and animals</p> <p>Ecological information is consolidated and accessible to management and decision-makers, and knowledge gaps are addressed.</p> <p>Integrity of ecosystems and plant species is protected from disturbance due to recreational activities, management activities and inappropriate fire.</p> <p>Populations of animal species of conservation significance are conserved, and habitat diversity is protected and maintained.</p>	<p>A1. Develop monitoring objectives for ecosystems and species of conservation significance which will focus on the following priorities plant surveys to fill identified knowledge gaps and mapping the distribution and locations of plants of conservation significance.</p> <p>A2. Implement pest, fire and visitor management strategies that are consistent with the known ecology of vegetation and animal communities.</p> <p>A3. Develop or review key monitoring objectives for species of conservation significance, particularly the distribution and activity of the yellow-footed rock-wallaby, and support monitoring programs that achieve these objectives. Collate and report on results from QPWS and partner surveys.</p>
<p>Aboriginal cultural</p> <p>QPWS engages with Traditional Owners for their input into managing the park, especially cultural heritage values.</p>	<p>A4. Consult with Traditional Owners in the development of park management strategies to ensure Aboriginal cultural heritage values are protected.</p> <p>A5. Encourage and support Traditional Owners in conducting a survey of Aboriginal cultural heritage values of the park. Priority will be placed on the rock quarry due to the threat posed by water erosion.</p>
<p>Shared-history culture</p> <p>Sites and materials of shared-history cultural significance are recorded, protected and, where appropriate, presented.</p>	<p>A6. Record and document materials and places of historical significance on Hell Hole Gorge National Park.</p> <p>A7. Assess the significance of heritage materials and places and formulate future management measures within a statewide, regional or local context.</p>
<p>Tourism and visitor opportunities</p> <p>The park is retained in its natural state for the use of self-reliant visitors.</p>	<p>A8. Finalise the visitor management strategy to address the safety and access issues for the park and respond sensitively to park management needs.</p>
<p>Research</p> <p>High quality, fact based monitoring and research results support long-term ecosystem and cultural heritage management.</p>	<p>A9. Actively support new and ongoing research proposals that will help improve management of the park and the surrounding landscape.</p>
<p>Partnerships</p> <p>Strong, cooperative partnerships are maintained with neighbours and stakeholders in protecting conservation and cultural values of the park.</p>	<p>A10. QPWS engages neighbours, Traditional Owners, shared-history interest groups, local tourism and development representatives, commercial operators, local government and other land and water management bodies, and fire management authorities in consultation about park management.</p> <p>A11. QPWS continues to support and participate in joint pest and fire management initiatives with neighbours and other interested parties.</p>
<p>Pest management</p> <p>An effective pest control program is implemented to contain or reduce impacts to manageable levels.</p>	<p>A12. Implement and review the Level 2 pest management strategy.</p>

Tables – Conservation values management

Table 1: Species of conservation significance

Scientific name	Common name	Status under the <i>Nature Conservation Act 1992</i>	Status under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>	Back on Track status
Plants				
<i>Acacia ammophila</i>	-	Vulnerable	-	Low
<i>Euphorbia sarcostemmoides</i>	climbing caustic	Vulnerable	-	Low
<i>Hakea maconochieana</i>	-	Vulnerable	Vulnerable	Low
<i>Thryptomene hexandra</i>	-	Near threatened	-	Low
Animals				
<i>Lophochroa leadbeateri</i>	Major Mitchell's cockatoo	Vulnerable	-	High
<i>Lophoictinia isura</i>	squared-tailed kite	Near threatened	-	Low
<i>Pyrrholaemus brunneus</i>	redthroat	Near threatened	-	Low

Table 2: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Ardea modesta</i>	eastern great egret	-	✓	✓	-
<i>Merops ornatus</i>	rainbow bee-eater	-	-	✓	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement