

Queensland Parks
and Wildlife Service
Department of Environment
and Resource Management



Minerva Hills National Park

Management Plan

2011

Brigalow Belt North Bioregion

Prepared by:

Planning Services Unit

Department of Environment and Resource Management

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This management plan has been prepared in accordance with the *Nature Conservation Act 1992*.

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Front cover photograph: Minerva Hills National Park. Photo: Barry Spooner.

Top right photograph: Wallaroo *Macropus robustus*. Photo: Adam Gietzelt.

Centre right photograph: Zamia palm *Macrozamia moorei*. Photo: Adam Gietzelt.

Bottom right photograph: Virgin Rock at Minerva Hills National Park. Photo: Barry Spooner.

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Vision statement

Minerva Hills National Park is being managed to conserve its natural and cultural heritage values, in particular its dramatic geology formed from Tertiary volcanic activity. Visitors are enjoying spectacular views across Springsure and the surrounding Brigalow Belt landscape, and enjoy day-use recreation facilities concentrated at the park's four main lookouts.



Virgin Rock, Minerva Hills National Park. Photo: Barry Spooner.

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1. Management intent

The primary purposes of management for Minerva Hills National Park will be to:

- conserve the park's special geology and natural ecosystems, including regional ecosystems and plant and animal species of conservation significance
- promote the park's natural, cultural and geological values to visitors and the broader community
- identify and protect Indigenous and shared-history cultural heritage places
- reduce and eradicate pest plants and animals where possible, and ensure control methods have no, or minimal, adverse impacts
- provide safe, sustainable, day-use recreation opportunities including walking, sightseeing and picnicking
- involve Traditional Owners in park management including decision making, natural resource and cultural heritage management
- promote good community relationships and community participation in park management.

2. Basis for management

Minerva Hills National Park is managed according to the management principles for national parks defined under the *Nature Conservation Act 1992* to:

- permanently preserve, to the greatest possible extent, the area's natural condition and protect the area's cultural resources and values
- present the area's cultural and natural resources and their values
- ensure that the only uses of the area are nature-based and ecologically sustainable.

The Department of Environment and Resource Management (DERM) is responsible for the day-to-day management of Minerva Hills National Park. The park will be managed according to relevant DERM policies and responsibilities under State and Commonwealth legislation, including controlling declared pest plants and animals in protected areas under the *Land Protection (Pest and Stock Route Management) Act 2002*.

Indigenous people have a strong affiliation with places in the park, and involving Traditional Owner groups will form an important part of all management and interpretive activities.

3. Location and regional context

Minerva Hills National Park is located adjacent to the town of Springsure, 66 km south of Emerald in central Queensland (Appendix A, Map 1). Situated in the Brigalow Belt North bioregion, the park's 2790 hectares lie in the Central Highlands region.

Springsure has a population of around 830 people. Mining has influenced the region's economy. Other major industries are cattle grazing and crop farming. Springsure is a gateway to other national parks in the region, including the popular Carnarvon Gorge and Blackdown Tableland national parks.

Minerva Hills National Park was named after the Minerva Hills volcanics and was dedicated to conserve the sub-volcanic intrusions that create a dramatic backdrop to Springsure. The park has relatively low visitor numbers, but it is highly valued by Springsure residents and local tourism bodies, which actively promote its attractions.

4. Protecting and presenting the park’s values

4.1 Landscape

The Minerva Hills are formed by a group of sub-volcanic intrusive bodies composed of trachyte and or rhyolite, with some closely associated extrusive lavas. They are a particularly good example of their type and are a good illustration of the land-forms that resulted from an episode of volcanic activity in the middle of the Tertiary period, and subsequent erosion processes.

The area was subject to extensive volcanic activity more than 20 million years ago. It was thought to have been a centre of eruption caused when the Australian crustal plate drifted northwards across a ‘hot-spot’ deep below in the Earth’s mantle, causing extensive basalt lavas that cover much of the surrounding region. Exposed scattered plugs, dykes, domes and spectacular peaks all result from their relative resistance to erosion, compared to the basaltic lavas and the sandstones of the Stanleigh Formation and the Staircase Sandstone, which they intrude.

The topography of Minerva Hills is characterised by mesa-like plateaus and remnants that rise above the surrounding rolling plains. Mount Zamia (560 m) and Mount Boorambool (600 m) are the two largest and most distinctive peaks that create the park’s dramatic scenery and provide panoramic views over the surrounding area. The park has four lookouts (section 4.5) with excellent views of Springsure, the flat surrounding landscape, distant mines and the main land uses in the region.

Desired outcomes 2021	Actions and guidelines
The natural geological processes associated with the Minerva Hills are maintained.	A1. Restore degraded or eroded areas caused by human activity to naturally functioning ecosystems that support natural geological processes.

4.2 Native plants and animals

Minerva Hills National Park is an area of state biodiversity significance (EPA 2008). The park is a centre of endemism (species found nowhere else) that displays variation in species composition, and is part of an important wildlife refuge and wildlife corridor that links with the Buckland Tableland section of Carnarvon Gorge.

Vegetation communities range from open eucalypt forests with grassy understorey on black cracking clay soils in the western area, to stunted eucalypt, spinifex and acacia heath communities on skeletal trachyte-derived soils on the eastern areas around Mount Zamia. The grassy woodland areas are dominated by a ground cover of kangaroo grass *Themeda triandra* and are the most extensive of their type in the region. Vine thicket communities also occur, which are considered mesic outliers and are particularly significant as refugia with high diversity and displaying distinct variation in species composition.

Eight regional ecosystems occur on the park, including six that have an of concern DERM biodiversity status (Appendix C Table 1). A photo monitoring program was established in 1993 to observe the condition of vegetation communities on the park, but no monitoring has occurred in recent years.

Plant species of conservation significance under the Nature Conservation Act occurring in the park include the vulnerable grass *Dichanthium queenslandicum*, the near threatened *Zornia pallida* and the vulnerable *Eucalyptus sicilifolia*, which is endemic to Minerva Hills. A poorly known legume *Zornia pallida* is recorded on the park and is considered rare in the region.

Minerva Hills National Park provides important wildlife habitat in a landscape that has been substantially altered. At least 56 vertebrate animal species have been recorded, including the square-tailed kite *Lophoictinia isura* and the golden-tailed gecko *Strophurus taenicauda*, which are near threatened under the Nature Conservation Act. The northern quoll *Dasyurus hallucatus* is also recorded on the park and is endangered under the *Environment Protection and Biodiversity Conservation Act 1999*.

Other important animal species found in the park include koalas *Phascolarctos cinereus*, fawn-footed melomys *Melomys cervinipes*, greater gliders *Petauroides volans*, Capricorn worm-skink *Anomalopus brevicollis* and the eastern pebble-mound mouse *Pseudomys patrius*, which was discovered in Queensland in the mid-1990s.

The park and surrounding areas have until recently been a stronghold for koalas, with a viable population at Norwood Creek. However, disease and a wildfire in 1991, followed by a long drought, have seriously impacted upon the population and their habitat. Scientific research conducted over the past three decades shows there has been a substantial and rapid decline in the population in recent years. Koala habitat is being rehabilitated along Norwood Creek through an industry-sponsored program involving Central Queensland University and conservation volunteers.

Desired outcomes 2021	Actions and guidelines
Knowledge and understanding of regional ecosystems and significant plant and animal species continues to increase, and informs future park management decisions.	A2. Conduct plant and animal surveys, where possible, to better understand the native plants and wildlife of the park, in particular threatened and other species of conservation and management significance. A3. Update and re-establish the 1993 vegetation photo monitoring plan.
The potential for the long-term survival of the local koala population is enhanced.	A4. Encourage continuation of koala research and habitat rehabilitation works along Norwood Creek.

4.3 Indigenous culture

Indigenous people have a strong affiliation with the Minerva Hills and associate with the park and the adjacent town of Springsure. The Springsure area is home to descendants of the Kairi Kairi people, who were camping at Springsure at the time Europeans settled in the area. There is still much to be learned about Aboriginal heritage in the area.

Indigenous sites and artefacts, including stone scatters and stone quarries, are found in the park. The Indigenous people of the area wish to be involved in park management activities that could benefit from their experience and cultural knowledge.

At the time of writing, the southern section of Minerva Hills National Park is in an area subject to a native title claim (Application Name: Bidjara People; Tribunal file number: QC08/5; Federal Court file number: QUD216/08). This plan does not affect the claim.

Desired outcomes 2021	Actions and guidelines
Indigenous cultural values of the park are well understood by park managers and visitors. Relevant Aboriginal groups help determine and manage the local cultural heritage values on the park.	A5. Work with traditional owners to identify and where appropriate record the cultural heritage values in the park. A6. Establish protocols and/or agreements with Traditional Owners to address park management including cultural heritage issues.

4.4 Shared-history culture

In the early years of settlement, the area was primarily used for sheep grazing, and evidence has been found of a shearers' camp on the park. Old netting fences were built by Chinese settlers in the late 1800s along the western boundary of the park, but have now been replaced. The area was gradually converted to cattle-grazing as cattle were more tolerant of speargrass than sheep (Department of Environment, 1998).

Minerva Hills is relatively undisturbed due to its steep nature and poor grazing potential. In more recent times, before its gazettal as a national park in 1992, the area was a council recreation reserve that contained an ambulance radio repeater. The repeater has now been decommissioned and removed.

The park is a spectacular backdrop to the town of Springsure, making it significant to local people who appreciate the park.

Virgin Rock is significant to the local community and is extensively used to promote the town. It appears in many paintings, poems, postcards, photographs and displays around town, and its history is documented in many texts and historical books about the area. Virgin Rock became well known when a similarity to the Virgin Mary holding the baby Jesus naturally appeared in the rock face due to a rock fall caused by erosion.

4.5 Tourism and visitor opportunities

Minerva Hills National Park is a prominent part of the Springsure landscape and, though managed as a day-use site, is visited by relatively few locals and a small number of tourists—visitor numbers are not monitored. Key visitor attractions in the park include impressive peaks with lookouts and scenic views, picnic areas and a short scenic drive and walk. Remote area bushwalking and bush camping are permitted.

Access to the park is via Dendle's Drive, which begins four kilometres along the Tambo Road from Springsure. It is a scenic drive along a mostly unsealed road that is maintained for dry weather, two-wheel-drive access. This road is prone to erosion and requires significant effort to maintain.

The park has four lookouts (Appendix A, Map 2):

- Springsure Lookout has views to the south-east over the town of Springsure. The lookout’s access road and car parking area are unsealed and are difficult to maintain due to bedrock exposure. Some sections require careful driving in a two-wheel-drive vehicle. There is no clear walking track from the car park to the lookout and no designated viewing points, resulting in erosion and damage to vegetation from uncontrolled foot traffic throughout the site.
- Skyline Lookout has two viewing platforms with views to the south and east over Virgin Rock and the town of Springsure, and to the north towards Emerald and the distant mines and agricultural lands. The lookout is accessed from a formed car park via an 800 m walking track.
- Eclipse Gap offers northerly views up the Gregory Highway towards Emerald. This lookout is located at the end of Dendle’s Drive and is more accessible for the elderly and the less mobile as the viewing area is a short distance from the car park. Infrastructure at this site consists of a vehicle safety barrier.
- Fred’s Gorge offers views to the north through the gorge and is the most developed of the park’s main visitor sites. It has a car park, picnic shelter, toilet block, wood barbecues and a safety rail. The barbecues are often moved by visitors and associated impacts include fire scarring and damage to vegetation due to firewood gathering.

A 2.2 km walking track and picnic area with tables are located at Norwood Creek (Appendix A, Map 2). The walking track has low usage and maintenance has not been a priority. The access road off Dendle’s Drive to this site is recommended as four-wheel drive access only.

A small number of commercial operators use Minerva Hills National Park for guided tours and filming and photography.

A visitor information sheet was prepared for the park in 1999.

Desired outcomes 2021	Actions and guidelines
Minerva Hills National Park continues to be promoted as a local tourism attraction.	A7. Work with local tourism bodies to promote the attractions of the park.
Visitation patterns to the park are understood and inform park planning and management.	A8. Develop and implement an appropriate visitor monitoring program to determine the impacts of visitor activity on the park. Ensure the results of visitor monitoring inform the planning and management of visitor sites and infrastructure.
Recreation facilities are adequate, safe and complement the park’s natural setting. Adequate signs are located at key visitor sites. Lookouts are safe and their scenic values are maintained.	A9. Design, locate, construct, operate, maintain and inspect all recreation facilities in accordance with the QPWS systems, policies and guidelines, including QPWS’s strategic asset management system, the facilities QPWS manual and the DERM infrastructure delivery – site planning process. A10. Provide no formal camping areas in the park and discourage vehicle-based camping.
Visitors understand and appreciate the park’s natural, cultural and geological values. Visitors are aware of threats to safety and risks are minimised within reasonable and acceptable limits.	A11. Provide visitors and tourism bodies with accurate and up to date information on park values and visitor safety.
Commercial operations continue to benefit from using the national park and all commercial activities are managed in an environmentally sustainable manner.	A12. Ensure commercial operators use existing infrastructure and do not cause negative impacts on the park values.

4.6 Education and science

The distinct character of the Minerva Hills volcanics in the surrounding region, and their relationship to the eastern Australian hotspots chain, makes them scientifically and educationally important. Minerva Hills National Park has substantial educational and research potential because of its interesting geology, diversity of vegetation and the presence of threatened species.

Permits have been issued for scientific studies in the park. The koala population at Minerva Hills has been researched since the 1980s and is one of the longest-studied populations in Queensland. Although the results of koala research are available, findings from other studies have not been provided to DERM and it is unclear how many scientific research permits have been acted upon.

Desired outcomes 2021	Actions and guidelines
The park is used for scientific research and research contributes to improved park management.	A13. Encourage collaborative arrangements with educational and research organisations and scientific research on the park values.

4.7 Partnerships

Fostering and maintaining open, positive and respectful relationships with neighbours and local communities is an important priority for DERM staff. Several properties share a common boundary with Minerva Hills National Park, making cooperation with these landholders vital for effective and efficient management of the park as the natural elements do not recognise park boundaries. Shared management issues include fire, pest plant and animal control, and boundary maintenance.

Minerva Hills National Park is an important part of the Springsure area and the local tourism bodies, including Springsure Progress and Tourism Association and the Springsure Information Centre, actively promote its attractions.

Desired outcomes 2021	Actions and guidelines
Good working relations with park neighbours, natural resource management groups, other government agencies and local fire authorities are maintained.	A14. Continue to build and maintain partnerships with Queensland Fire and Rescue Service (rural), emergency service providers, neighbours and Traditional Owners.

5. Other key issues and responses

5.1 Pest management

Pest plant species occurring on the park include parthenium *Parthenium hysterophus*, rubber vine *Cryptostegia grandiflora*, Japanese sunflower *Tithonia diversifolia* and buffel grass *Cenchrus* sp. Progress has been made in eradicating rubber vine, but it still occurs in scattered patches. Parthenium and Japanese sunflower remain a problem.

Pest animals include pigs *Sus scrofa*, goats *Capra hircus*, cats *Felis catus*, wild dogs *Canis familiaris*, rabbits *Oryctolagus cuniculus* and possibly fox *Vulpes vulpes*, but there is no pest management strategy for the park. Cats are presumed to be impacting on the native eastern pebble-mound mouse population, but there is no research to confirm this. A control program has targeted feral goats. Domestic dogs are often seen in the park, due to its proximity to the town of Springsure.

Desired outcomes 2021	Actions and guidelines
Pests posing a threat to the park's natural values are controlled and, where possible, eradicated.	A15. Develop and implement a Level Two Pest Management Strategy for the park under the QPWS Pest Management System.

5.2 Fire management

Uncontrolled wildfires pose a serious threat to national park visitors, infrastructure, neighbouring properties and biodiversity values. However, fire is a feature of the park’s forest ecosystem processes and some level of fire is necessary to maintain the health of some vegetation communities.

The park has a mixture of fire-tolerant and fire-sensitive species and vegetation communities, which require fire regimes to be carefully managed. Fire regimes for areas, such as the acacia spinifex heath around Mount Zamia, are unknown.

A statement of fire management intent has been developed for the national park and guides the annual burn program. A wildfire response procedure has also been developed in accordance with the QPWS fire management system.

A wild fire in 1991 caused significant damage to vegetation at Norwood Creek, but this area has now substantially recovered.

Desired outcomes 2021	Actions and guidelines
<p>Human life, property, cultural values, and the biological diversity and integrity of plant and animals communities are protected through the responsible management of fire.</p> <p>Fire is managed in a cooperative manner across the whole landscape.</p>	<p>A16. Develop a fire management strategy, which incorporates a review of the park’s statement of fire management intent.</p>

6. References

Department of Environment, 1998. *Minerva Hills National Park Recreational Management Plan*. State of Queensland, Brisbane.

Environmental Protection Agency, 2008. *Biodiversity Planning Assessment – Brigalow Belt North Landscape Expert Panel Report*. State of Queensland, Brisbane.

7. Hyperlinks

Biodiversity status <www.derm.qld.gov.au>

China–Australia Migratory Bird Agreement <www.austlii.edu.au>

DERM website <www.derm.qld.gov.au>

Environment Protection and Biodiversity Conservation Act 1999 <www.deh.gov.au>

Japan–Australia Migratory Bird Agreement <www.austlii.edu.au>

Landscape Classification System for Visitor Management <www.derm.qld.gov.au>

Nature Conservation Act 1992 <www.legislation.qld.gov.au>

Nature Conservation (Wildlife) Regulation 2006 <www.legislation.qld.gov.au>

Queensland Heritage Act 1992 <www.legislation.qld.gov.au>

Regional ecosystems <www.derm.qld.gov.au>

Regional Ecosystem Description Database <www.derm.qld.gov.au>

8. Appendixes

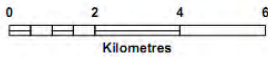
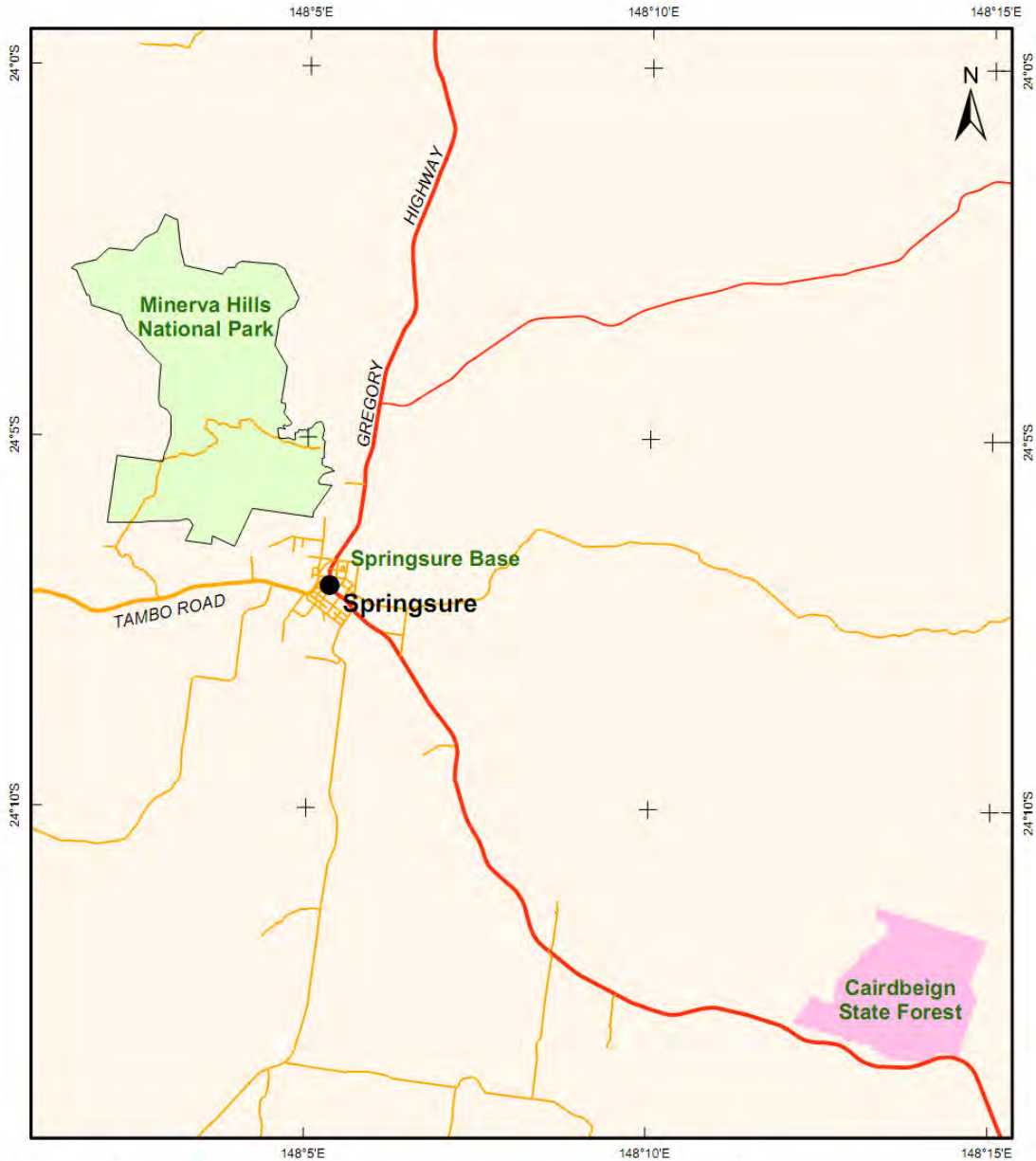
Appendix A – Maps

Appendix B – Definitions

Appendix C – Regional ecosystems

Appendix A – Maps

Map 1 Location



Map Projection:
 Universal Transverse Mercator (MGA) zone 55
 Horizontal Datum:
 Geocentric Datum of Australia 1994 (GDA94)
 Map Production:
 Spatial Services,
 Queensland Parks and Wildlife Service,
 Department of Environment and Resource Management,
 18 November 2010

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Accuracy statement:
 Due to varying source, accuracy or currency of data layers used in this map, the spatial locations of features may not coincide when overlaid.

Legend	
QPWS Estate	
	National Park (scientific)
	National Park
	National Park (recovery)
	Conservation Park
	Resources Reserve
	Forest Reserve
	State Forest
	Timber Reserve

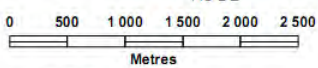
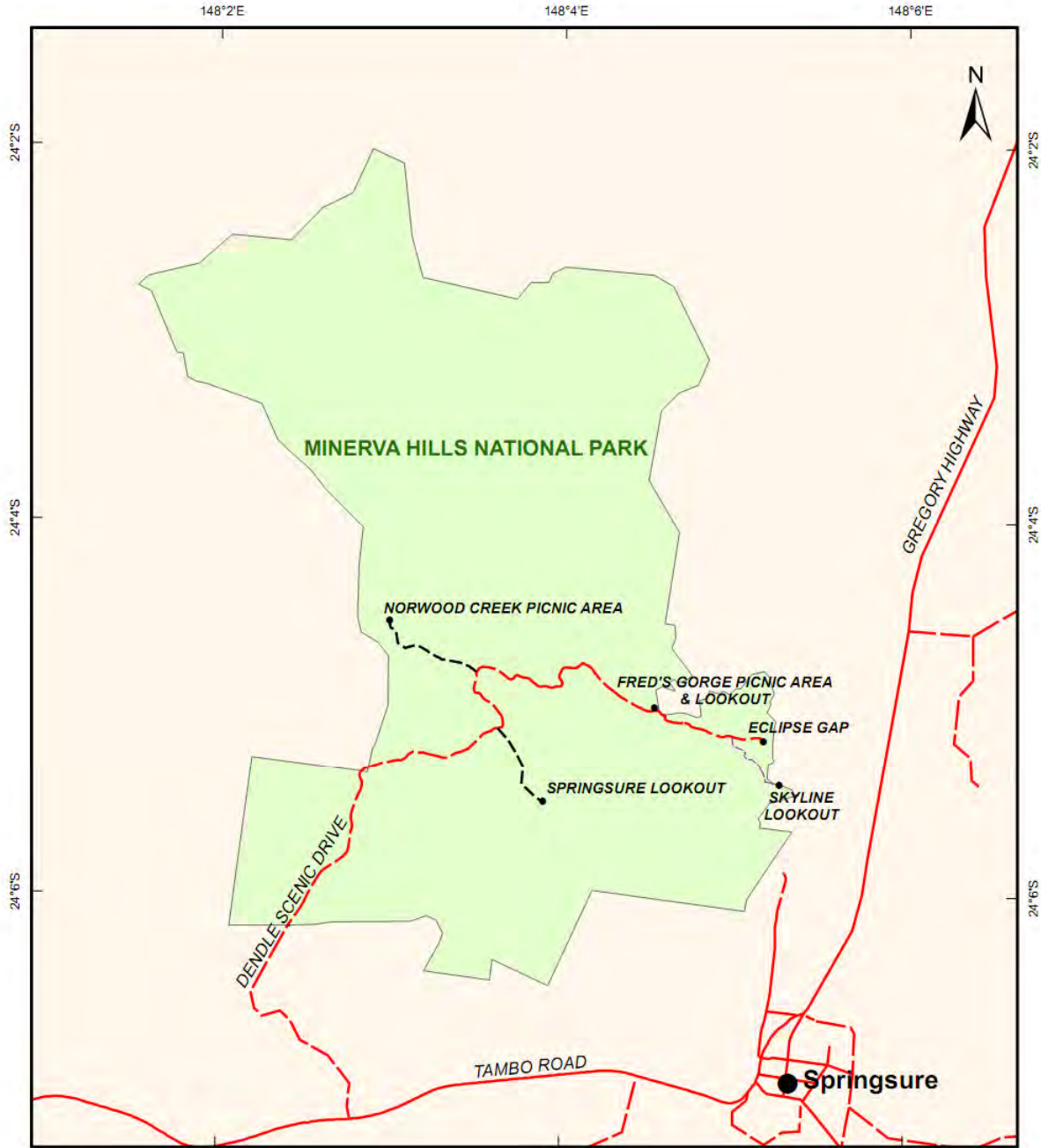
Source Material:
 • State Digital Road Network (SDRN); September 2010
 • Pitney Bowes MapInfo Australia Pty Ltd 2010
 • QPWS Estate; June 2010



Department of Environment and Resource Management 2010



Map 2 Assets



Map Projection:
 Universal Transverse Mercator (MGA) zone 55
 Horizontal Datum:
 Geocentric Datum of Australia 1994 (GDA94)

Map Production:
 Spatial Services,
 Queensland Parks and Wildlife Service,
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 of features may not coincide when overlaid.

Legend

- National Park
- 2wd all weather
- 2wd dry weather
- 4wd all weather
- walking track

Source Material:
 •QPWS Points; October 2009
 •QPWS Roads; October 2010



Department of Environment and Resource Management 2010
 © The State of Queensland



Appendix B – Definitions

Biodiversity status (regional ecosystems)

The biodiversity status is based on an assessment of the condition of remnant vegetation in addition to the pre-clearing and remnant extent of a regional ecosystem. The current biodiversity status of regional ecosystems is available via the Regional Ecosystem Description Database on DERM's website along with information on the criteria used to assess each status.

Commercial activity

Any activity that is conducted for gain is considered a commercial activity and can be conducted only under a permit or agreement. Examples of commercial activities include the hire or sale of goods or services; supplying services or facilities; commercial photography and filming; undertaking a guided tour, safari, scenic flight, cruise or excursion; advertising or promoting the use of a protected area or recreation area as part of a tour, safari, scenic flight, cruise or excursion; and advertising or promoting the use of a protected area or recreation area as a feature associated with a resort or tourist facility.

Cultural heritage significance

Cultural heritage significance is defined by the *Queensland Heritage Act 1992*.

Endangered (species)

At the state level, endangered species are those species listed as endangered under schedule 2 of Queensland's Nature Conservation (Wildlife) Regulation 2006. At the national level, endangered species are those species listed as endangered under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

Landscape Classification System (LCS)

The Landscape Classification System (LCS) is a standard classification system for characterising the biophysical, social and management attributes of sites and areas within QPWS-managed areas, from a visitor management perspective.

The LCS framework for assessing a site or area systematically describes settings on the basis of biophysical, social and managerial features.

The LCS is a tool for assessing the naturalness of landscape settings from a visitor use and management perspective. Naturalness is expressed on a range from completely untouched, wild, natural or remote to completely modified, built or developed depending on the proportion of natural and human-modified elements (post-1788) in the landscape. However, naturalness is not an absolute condition. The naturalness of a particular site or area can vary over time and natural events do not change the degree of naturalness although they may change the natural look of an area.

Management principles for national parks

Under Section 17, *Nature Conservation Act 1992*:

- (1) A national park is to be managed to—
 - (a) provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values
 - (b) present the area's cultural and natural resources and their values
 - (c) ensure that the only use of the area is nature-based and ecologically sustainable.
- (2) The management principle mentioned in subsection (1)(a) is the cardinal principle for the management of national parks.

Near threatened

Near threatened species are those species listed as near threatened under schedule 4 of Queensland's Nature Conservation (Wildlife) Regulation 2006. Near threatened species will be individually reassigned to appropriate status categories.

Regional ecosystems

Regional ecosystems were defined by Sattler and Williams (1999) as vegetation communities in a bioregion that are consistently associated with a particular combination of geology, landform and soil. Readers should refer to this publication for background information about regional ecosystems and the bioregional planning framework used in Queensland.

Compilation of the information about regional ecosystems presented in Sattler and Williams (1999) was derived from a broad range of existing information sources including land system, vegetation and geology mapping and reports. However, the framework is dynamic and is regularly reviewed as new information becomes available. During the past few years the Queensland Herbarium has developed a program for explicitly mapping regional ecosystems across Queensland. This has resulted, and will continue to result, in updates to the descriptions and status of regional ecosystems. Therefore, updated regional ecosystem descriptions in the format of Sattler and Williams (1999) are maintained in DERM's Regional Ecosystem Description Database.

Threatened (species)

Threatened species generally refers to those species that are endangered or vulnerable species. The term may also refer to other species of conservation significance that are subject to substantial threats at a regional or local level.

Vulnerable (species)

At the state level, vulnerable species are those species listed as vulnerable under schedule 3 of Queensland's Nature Conservation (Wildlife) Regulation 2006. At the national level, vulnerable species are those species listed as vulnerable under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

Appendix C – Regional ecosystems

Table 1: Of concern or endangered regional ecosystem for Minerva Hills National Park.

Regional ecosystem number	Regional ecosystem name	DERM biodiversity status	Reason for status and the threats to ongoing sustainability
11.3.3a	Riverine wetland or fringing riverine wetland. <i>Melaleuca bracteata</i> woodland. On alluvial plains.	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining. This community requires a fire regime that maintains a diverse understorey. Extensive wildfire can alter the vegetation composition, structural diversity, and wildlife habitat. Over grazing encourages encroachment of woody-stemmed plants, such as acacia and atalaya.
11.3.4	<i>Eucalyptus tereticornis</i> and/or <i>Eucalyptus</i> spp. tall woodland on alluvial plains.	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining. Extensive wildfire can alter the vegetation composition, structural diversity, wildlife habitat and damage culturally significant (scar) trees.
11.3.25	<i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines.	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining. Extensive wildfire can alter the vegetation composition, structural diversity and wildlife habitat. Fringing communities are critical habitat. Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining. This community requires protection from wildlife. Risk of wildfire is increased by introduced grasses.
11.8.3	Semi-evergreen vine thicket on Cainozoic igneous rocks.	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining. This community requires protection from wildlife. Risk of wildfire is increased by introduced grasses.
11.8.7	Shrubland (heath) on Cainozoic igneous rocks	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining.
11.8.11	<i>Dichanthium sericeum</i> grassland on Cainozoic igneous rocks	Of concern	Remnant extent is >10 000 ha and with 10–30 % of the pre-clearing area remaining.

Department of Environment and Resource Management (2007). Regional Ecosystem Description Databases (REDD). Version 5.2 Updated November 2007.

Database maintained by Queensland Herbarium, Department of Environment and Resource Management, Brisbane.

Appendix D – Animals and plants of conservation significance

Table 1: Vulnerable, endangered or near threatened native animals and plants for Minerva Hills National Park.

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>	DERM Back on Track species prioritisation framework rank
<i>Lophoictinia isura</i>	square-tailed kite	Near threatened		Low
<i>Dasyurus hallucatus</i>	northern quoll	Least concern	Endangered	Medium
<i>Strophurus taenicauda</i>	golden-tailed gecko	Near threatened		Medium
<i>Zornia pallida</i>		Near threatened		Data deficient
<i>Eucalyptus sicilifolia</i>		Vulnerable		Low
<i>Dichanthium queenslandicum</i>		Vulnerable	Vulnerable	Low

