

Brigalow Belt North Bioregion

Prepared by:

Planning Services Unit, Department of Environment and Science (DES)

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The Mount Aberdeen National Park Management Plan 2011 has been extended in 2023 in line with the Queensland *Nature Conservation Act 1992* (s120G). Minor amendments have been made. There has been no change to the plan's original management intent and direction.

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Front cover photograph: Mount Aberdeen National Park. Photo: DES.

Top right photograph: Red backed fairy wren Malurus meanocephalus (female). Photo: DES.

Centre right photograph: Unadorned rock wallaby Petrogale inornata. Photo: DES.

Bottom right photograph: Heteronotia binoei. Photo: C. Dollery, DES.

Vision statement

Mount Aberdeen National Park is being managed to conserve its special natural values, in particular the cloud forest and snow grass communities at the summit of Mount Aberdeen. The park's cultural values are managed appropriately by involving Traditional Owners. Self-reliant, low-impact nature-based recreation opportunities are available and scientific research contributes to a better understanding of the park's unique conservation values.

Contents

1.	IV	lanagement intent	1
2.	В	Basis for management	1
3.		ocation and regional context	
4.	Р	rotecting and presenting the park's values	2
4	.1	Landscape	
4	.2	Native plants and animals	2
4	.3	Indigenous culture	
4	.4	Shared-history culture	4
4	.5	Tourism and visitor opportunities	
4	.6	Education and science	
4	.7	Partnerships	5
5.	O	Other key issues and responses	
5	.1	Pest management	
5	.2	Fire management	
5	.3	Access	
5	.4	Climate change	
6.	R	References	
7.		lyperlinks	
8.		ppendixes	
		·	
		endix A – Mapsendix B – Definitions	



Variety of forest types and exposed granite faces. Photo: Bill McDonald, DES.

1. Management intent

The primary purposes of management for Mount Aberdeen National Park will be to:

- protect the natural ecosystems of the park including regional ecosystems and plant and animal species of conservation significance
- conserve the park's special values associated with the snow grass and cloud forest communities
- reduce and eradicate pest plants and animals where possible, and ensure control methods have no, or minimal, adverse impacts
- · encourage scientific research, surveys and monitoring
- identify and protect Indigenous cultural heritage places
- encourage Indigenous involvement in park management and decision-making
- provide sustainable, self-reliant recreation opportunities such as bushwalking
- promote co-operative management relationships with neighbours, stakeholders and the local community.

2. Basis for management

Mount Aberdeen 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 Science (DES) is responsible for the day-to-day management of Mount Aberdeen National Park. The park will be managed according to relevant DES policies and responsibilities under State and Commonwealth legislation, including the control of 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

Mount Aberdeen National Park is about 40 km south-west of Bowen, near the Collinsville Road (Appendix A Map 1). It lies in the Bogie River Hills subregion of the Brigalow Belt North Bioregion. The Mount Aberdeen section of the park is 1840 ha in area and was dedicated in 1952, while the Highlanders Bonnet section is 1370 ha in area and was dedicated in 1967. The Aberdeen Nature Refuge (1151 ha) was gazetted in 2002 and follows the lower slopes of Mount Aberdeen. It links the two national park sections and also connects to the 1253 ha Mount Pleasant Nature Refuge to the south. The 181 ha Homehaven Nature Refuge was gazetted in 2004 and adjoins the park's eastern boundary.

The two nearest national parks in the region are Cape Upstart National Park about 32 km to the north, and Dryander National Park located about 60 km to the east. Both parks are on the coast and offer vegetation communities and recreation opportunities that differ from Mount Aberdeen.

4. Protecting and presenting the park's values

4.1 Landscape

4.1.1 Geology, landform and scenic amenity

Mount Aberdeen National Park is an undulating hilly area with duplex and shallow stony soils, its geology comprises of volcanic granite and granite diorite. The park contains two peaks, separated by grazing land that crosses the top of the catchments of the Elliot River. The highest points of the Mount Aberdeen section range from 100 m to a summit of 901 m, the second highest peak in the area. The Highlanders Bonnet section ranges from 160 m to 624 m. Aberdeen Nature Refuge is located on private land and links the two peaks.

Mount Aberdeen National Park has a visual mosaic of textures and colours unrivalled in the area. There are a variety of forest types and the exposed granite faces each have their own distinguishing colours affected by light and shadows. Set against the contrasting bright cloud cap and blue sky backdrop, it is a spectacular scene, whether viewed from the Collinsville–Bowen Road or as part of the horizon viewed from the township south of Bowen. The summit of Mount Aberdeen offers self-sufficient climbers, who are able to navigate to the top, scenic views across the landscape.

Desired outcomes 2021	Actions and guidelines	
The landscapes, geological and scenic values of Mount Aberdeen National Park are protected.	A1. Prohibit any non-essential infrastructure that would detract from the natural landscape setting in areas of the park.	

4.2 Native plants and animals

The vegetation communities of Mount Aberdeen National Park are dominated by narrow-leaved ironbark *Eucalyptus drepanophylla* woodlands. Hoop pine *Araucaria cunninghamii* communities on the slopes are excellent examples of their type in the bioregion, and semi-evergreen vine thicket found in sheltered areas is of high significance for displaying distinct variation in species composition. The moist communities around the summit of Mount Aberdeen have highly diverse vegetation and significant numbers of endemic invertebrates, with affinities to both the Wet Tropics and Central Queensland Coast bioregions.

Snow grass and cloud forest communities found on the summit of Mount Aberdeen are disjunct outliers of special value. This location is the only known occurrence of these communities in the Brigalow Belt North Bioregion and the most northerly known location of snow grass in Australia. They support species previously believed to be endemic to the Wet Tropics and Central Mackay Coast bioregions, to the north of Elliot National Park and to the south of Eungella National Park. It is thought that these areas originally had environments and ecosystems similar to Mount Aberdeen, but these have retreated with climate change. However, the snow grass and cloud forest on the summit of Mount Aberdeen were preserved by the unique climatic environments at high altitude, making them relic ecosystems of scientific value. Further research is required to better understand the values of, and threats to, these communities.

As the Mount Aberdeen section of the park has important natural and scientific values, DES is considering changing its tenure to national park (scientific). This would protect the area's scientific values by preventing general public access and allow controlled scientific study and monitoring.

The vegetation communities are part of seven regional ecosystems mapped for the park. Ecosystems mapped on park as *Eucalyptus crebra* have since been identified to be *Eucalyptus drepanophylla*. Three regional ecosystems have of concern biodiversity status (Appendix A Map 2).

Eucalyptus raveretiana (vulnerable) is the only threatened plant species under the Nature Conservation Act recorded on the park. Other species of conservation significance include *Cryptocarya macdonaldii* and *Backhousia* sp.aff. *B. angustifolia*, which are at, or near, the edge of their northern distribution limit.

The park is an important wildlife refuge and wildlife corridor. The park's wildlife includes 35 bird, eight mammal, 11 amphibian and 15 reptile species. Given there has been limited survey work, many other species are expected to occur, including species of conservation significance. Most wildlife species recorded have come from incidental observations, and a more comprehensive survey effort on Mount Aberdeen National Park could reveal other plants and animals of conservation significance known to occur in similar habitats in the area around the park. Significant wildlife species recorded on the park include the common death adder *Acanthophis antarcticus*, which is near threatened under the Nature Conservation Act, the northern quoll *Dasyurus hallucatus*, which is endangered under the *Environment Protection and Biodiversity Conservation Act 1999*, and the Mount Elliot grey ant, which is at its southern limit.

The Queensland Museum has conducted an invertebrate and reptile survey in the park. Discussions with DES staff indicate that the high-altitude environment of the park supports significant invertebrate species, including land snails. The park apparently contains invertebrates unique to the area, and provides a range extension for some species that were thought to only occur in similar habitat elsewhere in the area.

The Queensland Herbarium completed a limited vegetation and regional ecosystem survey and assessment of the Mount Aberdeen section of the park. Further surveys and improved records are needed to provide a more complete species list for the park and to better inform park planning and management.

Processes that threaten the plants and animals of Mount Aberdeen National Park include inappropriate fire regimes, pest plant and animals, and climate change. Section 5 outlines management actions to address these issues.

Desired outcomes 2021	Actions and guidelines
Knowledge and understanding of vegetation communities and significant plant and animal species continues to increase and informs future park	A2. Maintain staff training to identify vegetation types, regional ecosystems and species of conservation significance. Identification skills will facilitate mapping updates and adaptive management responses when changes in the extent of species or ecosystems are detected.
management decisions.	A3. Where possible, conduct plant and animal surveys, emphasising threatened species, to establish comprehensive species lists for the park and better understand its native plants and wildlife.
	A4. Work with the Queensland Herbarium to review and update the regional ecosystem mapping.
	A5. Liaise with the Queensland Museum to determine the significance of the park for invertebrate species and to identify any management actions required to protect significant species.
	A6. Encourage tertiary institutions or other organisations to research the ecology and management requirements of the snow grass and cloud forest communities, and plant and animal species of conservation significance.
	A7. Continue to record sightings of native plants and animals into WildNet and other department databases.
The diversity and integrity of native plant species and communities on the park are protected and maintained.	A8. Subject to available resources, establish programs to monitor the distribution, abundance and condition of significant vegetation communities and species of conservation significance, and assess long-term changes in
Plant and animal communities and species of conservation significance are protected and appropriately managed.	the distribution of native plant communities. Use these programs to determine whether current management regimes are maintaining plant community diversity.
Protect the scientific and conservation values of the snow grass and cloud forest communities on the summit of the Mount Aberdeen section of the park.	A9. Encourage programs to monitor the effects of climate change on snow grass and cloud forest communities, and develop management response strategies where needed to conserve them.

4.3 Indigenous culture

No Indigenous cultural heritage places have been identified on the park, but Mount Aberdeen is a prominent natural landmark and has significance for Indigenous people. Caves and waterholes in the lowlands of the park are likely to have been used by Indigenous people. Since no cultural heritage surveys have been conducted to locate specific sites of cultural significance on the park, it is possible that such sites could exist.

The park is in an area subject to a native title claim (Application Name: Birri People; Tribunal file number: QC98/12; Federal Court file number: QUD6244/98). This plan does not affect the claim. Other Indigenous groups have communicated a connection to the park, including Giru-dala from Bowen and Gudjuda from Townsville.

Desired outcomes 2021	Actions and guidelines
The integrity of Indigenous cultural connections with the park are preserved and respected, and the park is cooperatively managed with Traditional Owners.	A10. Conduct a cultural heritage survey of the park with Traditional Owners and assess the significance of any identified features and sites.
	A11. Encourage Traditional Owner involvement in planning and management activities for the park.
	A12. In consultation with Traditional Owners, protect any identified Aboriginal cultural heritage places from damage (such as by wildfire or vehicles).

4.4 Shared-history culture

Mount Aberdeen National Park was listed on the Register of the National Estate by the Australian Heritage Commission in 1980 for its significant natural values as described in section 4.2. No significant items of shared cultural value have been identified on the park.

4.5 Tourism and visitor opportunities

Mount Aberdeen National Park is only suitable for self-reliant, low-impact nature-based activities, such as bushwalking. There are no recreation facilities, mostly due to lack of water in the park for most of the year, which deters visitors. The steep and arduous climb to the summit of Mount Aberdeen requires navigational skills, but offers those who are adequately skilled and equipped a wonderful experience of high-quality scenic and natural values.

There is gazetted access but no constructed roads or tracks to Mount Aberdeen National Park. It is possible for visitors to enter the park on foot through the privately owned Mount Aberdeen Station, with the permission of the station manager.

For all the reasons above, the park has very few visitors and there is no demand to increase its recreation potential. Tourism and outdoor recreation opportunities are available approximately 15-minutes' drive from the park at the privately run Bogie River Bush House.

Desired outcomes 2021	Actions and guidelines
Self-reliant, nature-based recreation opportunities are available that do not impact on the natural and scientific values of the park.	A13. Ensure that park visitors are aware of the need to be totally self-reliant and aware of safety risks and hazards in the park.
	A14. Ensure the park is not promoted for tourism.
	A15. Open fires prohibited.

4.6 Education and science

The vegetation communities and biodiversity in the Mount Aberdeen section of the park are of special scientific interest—in particular, the cloud forest and snow grass communities, which are disjunct outliers containing species associated with rainforest communities in the Wet Tropics and Central Queensland Coast bioregions. Full understanding of their conservation values and ecological functioning at this location is not complete, due to limited research undertaken into these communities. The park provides an excellent opportunity for scientific research and for improving knowledge of their values, conservation and management needs.

DES is considering converting the tenure of this section of the park to national park (scientific), to help further controlled scientific study and monitoring, while protecting the area's scientific and conservation values.

The remote and rugged nature of the park, along with the lack of public access, has resulted in limited educational use.

Desired outcomes 2021	Actions and guidelines
The park is used for scientific research, which contributes to improved park management.	A16. Encourage collaborative arrangements with educational and research organisations (such as universities and the Queensland Museum) as well as scientific research on the park that targets priority communities, species and information gaps, and that will contribute to improved park management.
	A17. Investigate converting the tenure of the Mount Aberdeen section of the park from national park to national park (scientific) and, if appropriate, proceed with the tenure transfer process.

4.7 Partnerships

Fostering and maintaining open, positive and respectful relationships with neighbours and local communities is an important priority for DES staff. Several properties share a common boundary with Mount Aberdeen National Park. Co-operation with these landholders is 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 maintaining boundaries.

Desired outcomes 2021	Actions and guidelines
Good working relations with park neighbours	A18. Involve neighbours in park management activities, including fire, pest plant and animal management.

5. Other key issues and responses

5.1 Pest management

Pest plants and animals in the park and on adjoining lands are of concern because they have, or potentially have, detrimental effects on ecological values. DES has a responsibility under the *Land Protection (Pest and Stock Route Management) Act 2002* to control declared pests on protected areas.

Pest plant species that occur on the park include rubber vine *Cryptostegia grandiflora* (a Class 2 declared pest plant) and lantana *Lantana camara* (a Class 3 pest plant). Belly-ache bush *Jatropha gossypiifolia*, luceana *Leucaena leucocephala*, prickly acacia *Acacia nilotica* and Chinese apple *Ziziphus mauritiana* are other pest plants that occur on neighbouring properties and have the potential to spread into the park.

Pest animals recorded on the park include pigs *Sus scrofa*, cats *Felis catus*, cattle *Bos sp.* and rabbits *Oryctolagus cuniculus*, and feral dogs *Canis familiaris* are likely to occur. Pigs are presumed to only enter the park during the wet season and, to date, disturbance from pigs is negligible. Granite outcrops and the general topography restrict cattle from neighbouring properties from accessing most areas of the park. However, cattle encroach on the Mount Aberdeen section from grazing on the lowlands to the north, and onto the Highlanders Bonnet section from the west. Fencing in the northern Mount Aberdeen section was completed in April 2009.

The park does not have a specific pest management strategy.

Desired outcomes 2021	Actions and guidelines
Pests posing a threat to the park's natural values are controlled and, where possible, eradicated.	A19. Implement the Level Two Pest Management Strategy is developed under the QPWS pest management system by 2011. The pest management strategy is to include but not be limited to—
	 Monitoring the impacts of invasive species as a result of climate change and, where necessary, include actions in pest management programs to minimise identified impacts.
	A20. Survey the park boundary and, where required, fence where cattle encroachment is an issue and where the topography allows.

5.2 Fire management

Fire is a very important ecological management tool and has played a major role in shaping the Australian landscape. Mount Aberdeen National Park has large areas of vegetation (such as semi-evergreen vine thicket) that are fire sensitive, and other communities including eucalypts that are sustained by fire.

Fire management on the park is extremely difficult, as its topography and lack of access make it almost impossible to construct fire lines in most places. Co-operative fire management with neighbouring stations, in particular Mount Aberdeen Station, is vitally important to control fires before they enter the park.

Careful fire planning and management is required to exclude fire from fire-sensitive areas, while maintaining fire regimes that will help maintain the structure and function of fire-dependent ecosystems such as the park's eucalypt communities. This is particularly important for the eucalypt and semi-evergreen vine thicket communities, both of which grow slowly on the granite country in the park.

Wildfires threaten the natural values of the Mount Aberdeen section, in particular the highly significant snow grass and cloud forest communities near the summit, which could totally be destroyed by fire. Excluding wildfires from higher areas of Mount Aberdeen is one of the most critical park management issues.

Wildfires are the largest threat to conservation values in the Highlanders Bonnet section of the park, as they adversely affect the structure and integrity of native vegetation communities and promote cattle encroachment. Fire lines were established in Highlanders Bonnet in 2009 to help manage fires and help prevent wildfires, particularly wildfires originating from Queensland Rail easements or adjoining properties.

The park has a wildfire response plan, but no fire management strategy.

Desired outcomes 2021	Actions and guidelines
Human life, property, cultural values and the biological diversity and integrity of the park's plant and animal communities are protected through responsible management of fire.	 A21. Develop a fire management strategy for the Mount Aberdeen and Highlander's Bonnet sections of the park, and adjacent nature refuges, by 2012. The fire management strategy is to include but not be limited to— Maintain the fire regimes for eucalypt communities at a seven-to-ten-year cycle to allow suitable fire resistance to develop.
	Exclude fire from snow grass and cloud forest communities.
	 Exclude fire from semi-evergreen vine thicket and prevent impacts on the edge of this community.
	 Monitor the response of the plant and animal communities to fire, particularly the snow grass and cloud forest area on the Mount Aberdeen section of the park.
	A22. Encourage research into fire behaviour and the fire requirements of fire- sensitive and fire-dependent species and communities for which there is a lack of knowledge. Incorporate relevant research results into fire management programs.

5.3 Access

There are no constructed roads or tracks on the gazetted easements to access Mount Aberdeen National Park. DES currently negotiates with adjacent neighbours to traverse their properties to access the park and undertake management activities. DES is currently investigating if formed access to the park can be developed for management purposes only, but Mount Aberdeen Station and a railway line are major access constraints.

Desired outcomes 2021	Actions and guidelines
Reliable access arrangements are in place for DES staff to access the park.	A23. Investigate establishing agreements with park neighbours to retain DES access to the park.
	A24. Retain gazetted access for management purposes.

5.4 Climate change

The likely effects of climate change that could potentially impact on the natural values of Mount Aberdeen National Park include lower and more varied rainfall, higher temperatures, drought and consequential changes in fire regimes, such as increased fire frequency and intensity (Australian National University 2009). Climate change is also expected to promote the spread of pest plants and change the structure and composition of native vegetation. Pest plant species currently restricted to lowlands can be expected to move into higher altitude areas (McFadyen 2007).

The condition of the vegetation and habitat in, and between, reserves is important to build resilience to climate change (Mansergh and Cheal 2007). A high level of natural connectivity improves the chances of species surviving by supporting large populations and a range of microhabitats (Mackey et al 2008). Fragmented and degraded habitats present significant barriers to species that may need to move to new habitats and safer places (Taylor and Figgis 2007).

Significant vegetation communities in the park that could be potentially threatened by climate change include the hoop pine *Araucaria cunninghamii* community; and snow grass and cloud forest communities on the summit of Mount Aberdeen, which are preserved by a special wet, high altitude microclimate. There may be other plant and animal species in the park also susceptible to impacts of climate change.

Desired outcomes 2021	Actions and guidelines
Potential impacts from climate change, particularly on snow grass and cloud forest communities and species of conservation significance, are understood.	A25. Encourage research that identifies the native plant and animal species and ecosystems potentially at risk from climate change (in particular snow grass, cloud forest and hoop pine communities).
Suitable habitats are linked to help native species move through the landscape and adapt to climate change impacts.	A26. Promote the linking of important habitats for climate change-affected species by establishing and maintaining corridors, connections and/or 'habitat stepping stones'.

6. References

Australian National University 2009, *Implications of climate change for Australia's World Heritage properties: A preliminary assessment*. (A report to the Department of Climate Change and the Department of the Environment, Water, Heritage and the Arts by the Fenner School of Environment and Society, the Australian National University).

Mackey, B. G. Watson, J. Hope, G. and Gilmore, S. 2008, 'Climate change, biodiversity conservation, and the role of protected areas: An Australian perspective' in *Protected Areas: Buffering nature against climate change*. (Proceedings of a WWF and IUCN World Commission on Protected Areas symposium, 18–19 June 2007, Canberra). WWF Australia, Sydney (eds Taylor, M. and Figgis, P.), pp 11–18.

Mansergh, I. and Cheal, D. 2007, 'Protected area planning and management for eastern Australian temperate forests and woodland ecosystems under climate change – a landscape approach', in *Protected Areas: Buffering nature against climate change*. (Proceedings of a WWF and IUCN World Commission on Protected Areas symposium, 18–19 June 2007, Canberra). WWF Australia, Sydney (eds Taylor, M. and Figgis, P.), pp. 58–72.

McFadyen, R. 2007, *Invasive Plants and Climate Change, Briefing Note*, Co-operative Research Centre for Australian Weed Management. Adelaide.

Taylor, M. and Figgis, P. (eds) 2007, *Protected Areas: Buffering nature against climate change*. (Proceedings of a WWF and IUCN World Commission on Protected Areas symposium, 18–19 June 2007, Canberra). WWF Australia, Sydney.

7. Hyperlinks

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

DES website <www.des.qld.gov.au>

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

Landscape Classification System for Visitor Management <www.des.gld.gov.au>

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

Nature Conservation (Wildlife) Regulation 2006 www.legislation.gld.gov.au

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

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

Regional Ecosystem Description Database www.des.qld.gov.au

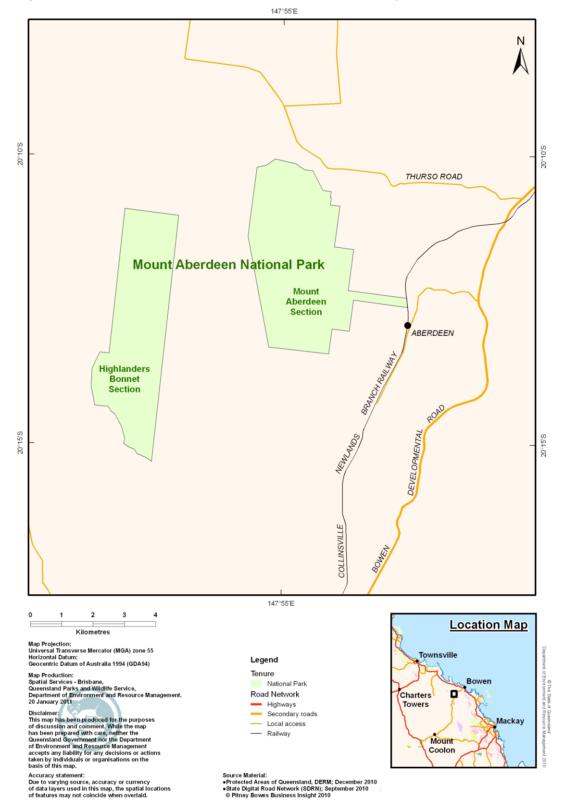
8. Appendixes

Appendix A - Maps

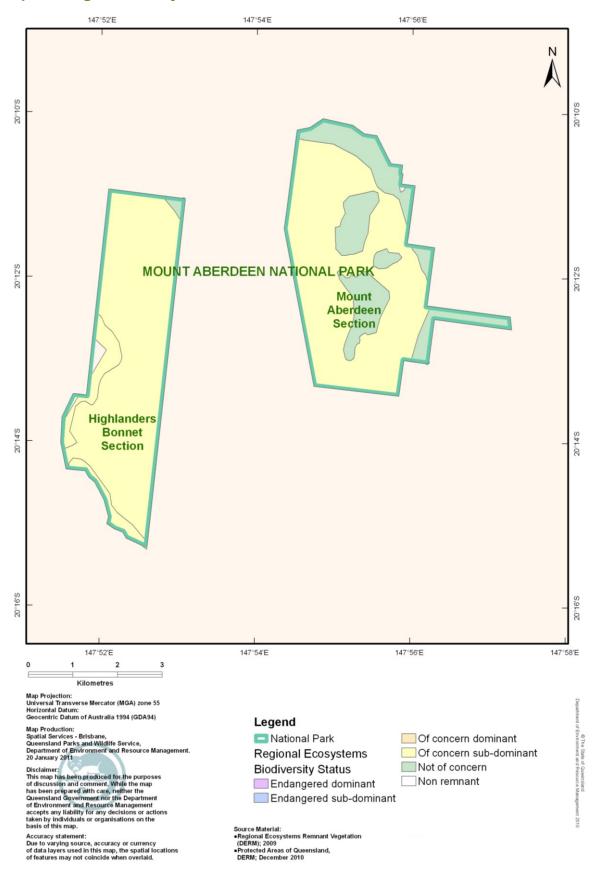
Appendix B – Definitions

Appendix A - Maps

Map 1 - Mount Aberdeen National Park location map



Map 2 - Regional ecosystems in Mount Aberdeen National Park



Appendix B - Definitions

Acronyms

DES Department of Environment and Science

QPWS Queensland Parks and Wildlife Service

Biodiversity status (regional ecosystems)

The biodiversity status is based on an assessment of the condition of remnant vegetation in addition to the preclearing and remnant extent of a regional ecosystem. The current biodiversity status of regional ecosystems is available via the Regional Ecosystem Description Database on DES'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 in 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 (species)

Near threatened species are those species listed as near threatened under schedule 5 of Queensland's Nature Conservation (Wildlife) Regulation 2006.

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 DES's Regional Ecosystem Description Database.

Species of conservation significance

Species of conservation significance refers to those species that are threatened (that is, endangered or vulnerable species), and may also refer to other species that are subject to 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*.

