Queensland Parks
and Wildlife Service
Department of Environment
and Resource Management

Epping Forest National Park (Scientific)

Management Plan
2011

Tomorrow's Queensland: strong, green, smart, healthy and fair

Toward Q Tomorrow's Queensland

Queensland Government

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*.

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

Note that implementing some management strategies might need to be phased in according to resource availability.

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Front cover photograph: Epping Forest National Park (Scientific). Photo: DERM.

Top right photograph: Gidgee *Acacia cambagei*. Photo: J. Thompson, Queensland Herbarium, DERM.

Centre right photograph: Northern hairy-nosed wombat, *Lasiorhinus krefftii*. Photo: DERM.

Bottom right photograph: Wombat burrow. Photo: DERM.

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Vision statement

Epping Forest National Park (Scientific) will serve as a habitat of state, national and international conservation significance as the primary population of the northern hairy-nosed wombat *Lasiorhinus krefftii* in the north brigalow belt.

The northern hairy-nosed wombat is well protected and the associated habitats continue to receive protection as necessary to maintain viable populations. The management requirements for long-term conservation are well understood.

Contents

1. Management intent

Epping Forest National Park (Scientific) will be managed to ensure that:

- the northern hairy-nosed wombat's range and abundance continue to increase on the park
- wombat population growth can withstand removal of animals for establishing new populations off the park, without adversely affecting the population on the park
- research on the ecology and behaviour of the northern hairy-nosed wombat, according to the recovery plan, is supported
- infrastructure for park management and research purposes is maintained
- the park is kept free from disturbance by cattle
- dingoes are excluded from the area inside the predator-proof fence
- buffel grass does not directly impact on native species through competition and indirectly through changed fire regimes
- the park suffers minimal impact from pest invasion
- the fire management strategy is implemented to maintain, protect and/or alter the habitat of the northern hairy-nosed wombat to increase its abundance and distribution. This will include close cooperation with neighbouring properties and may involve local arrangements regarding boundary management
- significant fire sensitive ecosystems, such as gidgee *Acacia cambagei*, are protected.

2. Basis for management

The Department of Environment and Resource Management (DERM) is responsible for the day-to-day management of Epping Forest National Park (Scientific) in accordance with the *Nature Conservation Act 1992* and regulations. Section 16 of the Nature Conservation Act specifies the management principles for national parks (scientific). Under section 62 of the Nature Conservation (Protected Areas Management) Regulation 2006, a person must not enter or remain in a national park (scientific) unless that person holds a permit to enter that park.

Endangered and of concern regional ecosystems are described under the DERM biodiversity status and endangered and vulnerable species are listed under the Nature Conservation (Wildlife) Regulation 2006. DERM has a responsibility under the *Land Protection (Pest and Stock Route Management) Act 2002* to control declared pests on protected areas.

The park is managed primarily to conserve one of Australia's most endangered mammals, the northern hairy-nosed wombat *Lasiorhinus krefftii* and its habitat. The northern hairy-nosed wombat is listed as endangered under the state Nature Conservation Act and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The park supports the only naturally wild population of this species. This population has a special status on the International Union for Conservation of Nature (IUCN) Red List. The northern hairy-nosed wombat is listed as critically endangered because the area where it occurs is less than 100 km^2, all individuals are known from a single location and the quality of its habitat is declining due largely to invasive exotic species (Taggart, D., Martin, R. & Horsup, A. 2008).

Since the original park gazettal in 1971, research has been directed at determining the best management practices for conserving the wombat. Research will continue to focus on the northern hairy-nosed wombat's ecology and behaviour. The long-term objective is to increase the species' range and abundance, both inside the park and its former range. Habitat manipulation in the park will be conducted according to the northern hairy-nosed wombat recovery plan.

Research will continue to provide the information necessary to advise and direct management actions and the use of management tools. Accommodation will continue to be provided for staff, visiting researchers and volunteers. The park will be managed to retain its biological values by minimising the impacts of pests.

3. Location and regional context

Epping Forest National Park (Scientific) covers 2750 ha, which includes 2500 ha within a predator-proof fence, and is located 110 km north-west of Clermont in the Isaac region. The park's property description is Lot 3 on Plan 169 in the Parish of Epping Forest (see Appendix A, Map1).

The park was acquired from two neighbouring cattle properties and gazetted as Epping Forest National Park in 1971. It was re-gazetted in 1994 as Epping Forest National Park (Scientific) under the Nature Conservation Act. The park is in the Brigalow Belt North biogeographical region.

The park's main purpose is to conserve the endangered northern hairy-nosed wombat and its habitat. Fossil records indicate that the northern hairy-nosed wombat was once quite widespread in Victoria, New South Wales and Queensland. However, as the fossils have only been found in deep alluvial sands, its occurrence must have been patchy. The northern hairy-nosed wombat was probably the least common of the three wombat species at the time of European settlement, and even then may have been in decline. The reasons for this rarity are unknown, although the effects of competition with introduced grazing animals, particularly in association with drought and high populations, have been implicated in the species very rapid decline over the last 200 years.

The park is also managed as a significant example of brigalow belt plants and animals, which have been significantly diminished as a result of extensive land clearing in the Brigalow Belt North biogeographical region.

Other protected area estates close to this park include Narrien Range, Cudmore, Nairana and Mazeppa national parks. Blair Athol State Forest is situated close to Clermont and is a popular area for gold fossickers. Theresa Creek Dam, which is 22 km west of Clermont on Peakvale Road, is a great picnic and recreation spot and provides the water for Clermont and Blair Athol Coal Mine. The dam is stocked with fish and the local fish stocking group run a fishing competition every year.

4. Protecting and presenting the park's values

4.1 Landscape

Epping Forest National Park (Scientific) is in the Drummond Basin and is characterised by post-Tertiary alluvial sediments, laid down by the Belyando River and its tributaries. On the park, soil texture variations range from coarse sands to heavy clays, depending on their position in relation to the ancient watercourse of Fox Creek.

The park is described as a flat, level or very gently inclined clay pan that was extensively bisected by Fox Creek, now an ephemeral stream bordering the park's east. A large former watercourse, now filled with deep alluvial siliceous sands, runs throughout the park from north to south. On both sides of the former streambed, a number of smaller old channels, levees and back swamps further bisect the old alluvial clay pan, which remains continuous in the eastern half of the park.

Desired outcomes 2021	Actions and guidelines
To ensure this landscape remains intact, stabilise and revegetate eroded areas, where appropriate. The park's value in protecting suitable remnant habitat for the northern hairy-nosed wombat will be presented and promoted off-site.	A1. Restore and expand favourable wombat habitat through natural regeneration or habitat manipulation.

4.2 Native plants and animals

4.2.1 Native plants

Deep alluvial sand deposits along an ancient watercourse, which was formerly part of Fox Creek, support an association of Clarkson's bloodwood *Corymbia clarksoniana* and Moreton Bay ash *Corymbia tessellaris*, with a fringing band of Reid River box *Eucalyptus brownii*. The northern hairy-nosed wombat population is confined to a 600 ha area of this vegetation type. The areas adjacent to the ancient watercourse are dominated by brigalow *Acacia harpophylla* and gidgee *Acacia cambagei* scrubs on heavy, grey, non-cracking clay soils. These two regional ecosystems are classified as endangered under the DERM biodiversity status (Appendix C).

White spear grasses *Aristida* spp., bottle-washer grasses *Enneapogon* spp. and golden beardgrass *Chrysopogon fallax* are the dominant native grasses in wombat feeding areas, although more than 20 native grass species are present in the park (Woolnough 1998). Research and monitoring is undertaken on grass communities in the park. Buffel grass *Pennisetum ciliare*, an introduced pasture grass and significant environmental pest, is the dominant species in the feeding areas. Grass around wombat burrows is being slashed, which is designed to create space for native grasses, reduce rank grass and produce green pick for wombats.

Desired outcomes 2021	Actions and guidelines
Research, monitoring and habitat manipulation of the vegetation improves the abundance and distribution of the northern hairy-nosed wombat. The park is maintained as a rich mosaic of vegetation communities representative of the brigalow belt. Information on vegetation communities and plant species on the park continues to increase. Detailed information on the status and location of plants of conservation significance are available to assist managers. Plant species and regional ecosystems of significance are protected.	A2. Continue to manipulate wombat habitat according to the recovery plan. A3. Use pest plant control to maintain vegetation communities close to their natural condition. A4. Implement fire regimes appropriate to the maintenance of the vegetation communities and exclude fire from fire-sensitive communities. A5. Incorporate new information about threatened plants into park action plans or strategies. A6. Monitor known vegetation communities and record responses to management actions and natural disasters. A7. Conduct detailed plant surveys to obtain a greater understanding of the flora on the park, in particular threatened and other species of conservation and management significance. A8. Continue to record sightings of native plants into Wildnet and other departmental databases.

4.2.2 Native animals

Epping Forest National Park (Scientific) contains one of the only known northern hairy-nosed wombat populations in Queensland. In 2007, the wombat population was estimated at 138. The management of the northern hairy-nosed wombat will be carried out in conjunction with the Recovery Plan for the Northern Hairy-nosed Wombat *Lasiorhinus krefftii* 2004–2008 (and subsequent editions).

The recovery plan has been prepared in partnership between the Commonwealth Government and DERM. The plan details the ecological requirements of the wombat and the actions needed for the conservation of the species both on Epping Forest National Park (Scientific) and off the park estate. It contains a range of initiatives aimed at restoring healthy populations of wombats in the wild, including captive breeding, translocation and community extension and education programs. It seeks to improve abundance and distribution of the species inside and outside the park.

The northern hairy-nosed wombat is listed as endangered under the Nature Conservation Act and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. This population has a critically endangered status on the International Union for Conservation of Nature (IUCN) Red List as the area where it occurs is less than 100 km^2, all individuals are known from a single location, and the quality of its habitat is declining due largely to invasive pest plants (Taggart, D., Martin, R. & Horsup, A. 2008).

The park also supports a number of other native animals, including 10 frog, 43 reptile, 25 mammal and 127 bird species. There are three vulnerable species recorded in the park—squatter pigeon (southern subspecies) *Geophaps scripta scripta*, yakka skink *Egernia rugosa* and ornamental snake *Denisonia maculata* (see Appendix C).

Exclusion yards have been installed on the park because eastern grey kangaroos and swamp wallabies compete with the wombats for food following good rains, when populations are high, and during prolonged droughts, when there is a lack of food.

Desired outcomes 2021	Actions and guidelines
The northern hairy-nosed wombat population increases over the next 10 years. Populations of threatened native animal species identified on the park, and their habitat, are increased.	A9. Manage the park in close association with the recovery plan for the northern hairy-nosed wombat. A10. Maintain macropod exclusion yards to their current state. A11. Monitor the eastern grey kangaroo and swamp wallaby populations and determine appropriate management actions if numbers increase significantly.

Desired outcomes 2021	Actions and guidelines
Population growth of wombats can accommodate the removal of animals, for the translocation of at least two more colonies, to be established at geographically distinct and viable locations. Eastern grey kangaroo Macropus giganteus and swamp wallaby Wallabia bicolor populations are at a level that has minimal impact on the northern hairy-nosed wombat population. Genetic diversity in translocated populations is maintained.	A12. Consider other native animal species when implementing management and recovery programs. A13. Translocate wombats to established and secure 'annex' locations where viability of both the origin and new population are assured. A14. Ensure translocated populations preserve sufficient genetic diversity.

4.3 Indigenous culture

No Indigenous cultural heritage sites have been identified on the park. Epping Forest National Park (Scientific) is included in an area subject to Native Title claims (Wangan and Jagalingou people QC04/6, QC05/4). This plan does not affect this claim.

Desired outcomes 2021	Actions and guidelines
Cultural sites are managed in cooperation with Traditional Owners affiliated with the area. Traditional Owners are involved in park management.	A15. Undertake a survey of the park for cultural sites and artefacts. A16. Liaise with Traditional Owners regarding management of cultural sites. A17. Encourage Traditional Owner involvement in planning and management activities.

4.4 Shared-history culture

No shared-history cultural values have been identified on the park.

Since the 1850s, the post-settlement activities of pastoralism, mining, timber extraction and intensive crop production have helped to shape the landscape surrounding Epping Forest National Park (Scientific). Ludwig Leichhardt explored the region in 1845 and was the first European to do so. He recorded a landscape of 'undulating country of varied character … extending in fine downs and plains covered with belts of thick brigalow scrub, with occasional ridges of open silver-leafed ironbark forest'.

4.5 Education and science

Epping Forest National Park (Scientific) provides specific opportunities for scientific research and monitoring programs. Research has been undertaken by DERM staff and individuals from various institutions in the fields of ecology, zoology and genetics, mostly relating to the northern hairy-nosed wombat. This valuable information assists in informing park management decisions. Research programs conducted on the park by external bodies require a permit to take, use, keep or interfere with a cultural or natural resource for scientific purposes.

A volunteer caretaker program was established in 2001 to assist in ongoing monitoring activities, which include activity indices to monitor pest animal activity, pest plant monitoring, vegetation surveys and fauna surveys. The results of these and other external studies will improve the body of knowledge used to guide park management at a local level. However, the research may also have application to other areas both on and off the park at regional, state and national levels and should be communicated as such.

Ongoing research is critical to identify the factors constraining the northern hairy-nosed wombat's recovery on the park and to guide strategies to increase the population. The DERM website includes information on the northern hairy-nosed wombat translocation project to St George, which occurred in 2009.

Desired outcomes 2021	Actions and guidelines
Existing research findings are collated and interpreted to provide specific management recommendations. Research and monitoring provides direction for park and species management, and creates and strengthens networks and partnerships to share knowledge and skills in species and habitat management.	A18. Continue to collate and communicate information from previous research projects to guide park management decisions and future research on park. A19. Maintain and contribute to DERM's information systems as the basis for recording and storing data relating to the monitoring of native plant and animal populations, pest and fire management activities. A20. Build networks and actively encourage researchers and staff from universities, museums and the herbarium to undertake research into specific areas identified from gaps in existing information. A21. Ensure access to research results is a condition of permit approvals. Key areas for further research include: • identifying and monitoring the variables regulating the northern hairy-nosed wombat's density and distribution on the park • determining the distribution of the northern hairy-nosed wombat across the park and abundance and population trends • monitoring the population and genetic structure of the northern hairy-nosed wombat's population • monitoring the populations of other macropod species and their interactions with the northern hairy-nosed wombat • managing buffel grass, including controlled cattle grazing trials.

4.6 Partnerships

The second site for the translocation of the northern hairy-nosed wombat is freehold land (Lot 8 on Plan COG13) and the owners have entered into a nature refuge agreement to formally secure the land for use by the wombats.

Mining company, Xstrata, has provided $3 million for the re-introduction project over a three-year period as part of their community partnerships program.

Epping Forest National Park (Scientific) was created with the aim of assisting the recovery of the northern hairy-nosed wombat. The recovery process is constantly evolving as new information emerges and research programs are refined. Therefore, an adaptive management approach is essential for Epping Forest National Park (Scientific), to ensure management strategies reflect the best available information as it comes to hand. This would be best facilitated through a partnership approach to management, which incorporates all the available experts in the field of northern hairy-nosed wombat conservation, research and management.

Fostering and maintaining open, positive and respectful relationships with neighbours and local communities is an important priority for DERM. Cooperation with 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 management, pest control and boundary maintenance.

In areas of significant conservation value, DERM should continue to encourage nature refuge agreements with neighbouring landholders, sharing the benefits of funding assistance and protecting habitat for wildlife, in particular northern hairy-nosed wombats.

Desired outcomes 2021	Actions and guidelines
An adaptive approach to management of Epping Forest National Park (Scientific) and the northern hairy-nosed wombat is guided by the recovery plan, supported by ongoing research and monitoring. Good working relations with neighbouring landholders, natural resource management groups, other government agencies, local rural fire brigade and fire wardens, and research organisations are maintained.	A22. Continue to help protect the future of the northern hairy-nosed wombat by supporting the translocation project. A23. Consider issues and problems faced by neighbouring landholders in the management of the park and establish or maintain cooperative management arrangements with adjacent landholders. A24. Continue to inform the community about the habitat requirements for the conservation of the northern hairy-nosed wombat. A25. Work cooperatively with the rural fire brigade and assist with adjacent planned burning activities or wildfires where requested.

5. Other key issues and responses

5.1 Pest management

DERM has a responsibility under the Land Protection (Pest and Stock Route Management) Act to control declared pests on protected areas.

At Epping Forest National Park (Scientific), the major pest plants are declared class two pest plants—parthenium *Parthenium hysterophorus*, rubber vine *Cryptostegia grandiflora*, velvety tree pear *Opuntia tomentosa* and parkinsonia *Parkinsonia aculeata.* Buffel grass *Pennisetum ciliare* and Noogoora burr *Xanthium occidentale* are not declared pest plants. However, buffel grass is considered to be a serious concern to the park due to competition with native grasses and susceptibility to fire.

Pest animals found in the park include class two declared pests (feral pigs, dingoes, foxes and rabbits) and non-declared pests (house mouse, cats and cane toads). Dingoes do not occur inside the predator-proof fence.

The current pest plant control program focuses on parthenium, rubber vine and parkinsonia. Buffel grass has invaded the grassed areas of the park and has become a significant part of the hairy-nosed wombat's diet. It poses a very significant fire risk to endangered fire sensitive regional ecosystems.

Desired outcomes 2021	Actions and guidelines
Pest species are actively managed and their distribution is monitored.	A26. Control buffel grass surrounding existing northern hairy-nosed wombat burrows. A27. Undertake pest management control programs in conjunction with the recovery plan. A28. Actively control parthenium. A29. Actively control rubber vine and parkinsonia along Fox Creek. A30. Continue to eradicate any new infestations of pests as soon as practicable and continue to monitor numbers. A31. Service and maintain the predator-proof fence and cattle fence to a high standard to ensure it continues to remain as an effective protection for wombats. A32. Investigate the use of controlled cattle grazing trials on the park (outside the wombat habitat) to determine its value in reducing or minimising the impact of buffel grass, in particular around the northern hairy-nosed wombat habitat.

5.2 Fire management

The park has an approved level two fire strategy and a set of wildfire response procedures.

The primary objectives of fire management on Epping Forest National Park (Scientific) are to:

- meet the dietary needs of the northern hairy-nosed wombat, especially by increasing the native perennial grass composition
- maintain the current distribution of the vegetation communities present
- create a mosaic burning pattern within the park to minimise the risk of losing habitat by uniform, widespread burning
- protect the brigalow and gidgee communities from fire as they are fire sensitive
- maintain the wombats' ability to acquire what they need for survival, reproduction and evolution.

A major wildfire has the potential to eliminate small isolated populations, such as the northern hairy-nosed wombat population at Epping Forest. Wildfire could temporarily remove the wombats' food supply, which includes *Aristida* spp., *Enneapogon* spp., *Pennisetum ciliare* and *Fimbristylis dichotoma*, and force other changes in habitat (Horsup, A. 2004).

Desired outcomes 2021	Actions and guidelines
Planned burning is in accordance with an approved level two fire strategy. Minimise the risk of wildfires that enter or exit the park. Coordinate fire management with neighbours.	A33. Maintain and implement a fire management plan composed of a fire management strategy, a planned burn program and a wildfire response procedure in conjunction with the recovery plan. A34. Undertake hazard reduction burns as required. A35. Investigate whether fire can be used to minimise the dominance of buffel grass. A36. Continue to use fire as part of integrated pest control program to manage species, including rubber vine, parkinsonia and parthenium. A37. Help neighbours maintain fire lines around the boundary. A38. Assist and participate in cooperative protection burns. A39. Liaise regularly with neighbours and local fire brigades regarding DERM fire management practices. A40. Maintain and protect infrastructure on the park.

5.3 Park access

Epping Forest National Park (Scientific) was gazetted for scientific purposes and, accordingly, public access to the park is restricted to authorised personnel only. The park is further divided into a network of service roads and firebreaks to allow for fire and other general park management operations. Most firebreaks are maintained as passable to service vehicles year round, in accordance with the QPWS road classification system, with more intensive maintenance (flat blading) preceding planned burns and the wildfire season.

Desired outcomes 2021	Actions and guidelines
Park roads are maintained to classified standards (the QPWS road classification system) as appropriate for the park.	A41. Restrict use of internal roads in wet weather to avoid unnecessary deterioration.
Permitted access and use is consistent with the management principles for national parks (scientific) under the Nature Conservation Act.	A42. Permits to enter are obtained from DERM prior to entry to the park.

5.4 Park infrastructure

Regular maintenance and/or replacement of DERM assets in Epping Forest National Park (Scientific), such as staff and volunteer accommodation, workshops, tools and vehicles, is essential for visitor and park staff safety.

Desired outcomes 2021	Actions and guidelines
The development, maintenance and replacement of operational assets is done efficiently and as required to meet the needs of park management and to allow staff to devote sufficient time and resources to manage the park's natural and cultural resources.	A43. Use the strategic asset management system to identify existing and required assets, their condition, life cycle costs, maintenance and replacement needs. A44. Maintain current level of infrastructure to facilitate DERM staff, researchers and volunteers to continue implementing the recovery plan.
Assets become more energy-efficient.	A45. Develop energy-efficient measures to reduce greenhouse gas emissions.

5.5 Climate change

There is evidence that climate change is already affecting the environment, species and ecosystems in many ways, and that the impacts are going to get more severe as climate change continues (Dunlop, M. & Brown, P.R. 2008). In this region, the average temperature has not only risen but accelerated over the past decade (1998–2007), and the annual rainfall has declined by 13 per cent in the same period (Office of Climate Change, 2009). The northern hairy-nosed wombat and other species of conservation significance on Epping Forest National Park (Scientific) are at risk from the effects of climate change.

Desired outcomes 2021	Actions and guidelines
Fire sensitive species and communities are not adversely impacted by hotter, drier conditions resulting from climate change. Suitable habitats are available and linked to assist northern hairy-nosed wombats move through the landscape and adapt to climate change impacts.	A46. Protect fire sensitive species and communities through the development and implementation of appropriate fire management strategies. See A13.

6. References

Department of Environment and Resource Management 2010, *Burdekin Natural Resource Management Region Back on Track Actions for Biodiversity,* Department of Environment and Resource Management, Brisbane.

Dunlop, M., & Brown, P.R. 2008. Implications of climate change for Australia's National Reserve System: A preliminary assessment. Report to the Department of Climate Change, February 2008. Department of Climate Change, Canberra, Australia.

Horsup, A. 2004. Recovery plan for the northern hairy-nosed wombat *Lasiorhinus krefftii* 2004–2008. Report to the Department of Environment and Heritage, Canberra. Environmental Protection Agency/Queensland Parks and Wildlife Service, Brisbane.

Office of Climate Change (2009) Climate change in the Central Queensland Region, viewed 8 March 2010 <www.climatechange.qld.gov.au>

Sattler, P. and Williams, R. (eds) 1999, *The conservation status of Queensland's bioregional ecosystems*. Environmental Protection Agency, Queensland Government, Brisbane.

Taggart, D., Martin, R. & Horsup, A. 2008. *Lasiorhinus krefftii*. In: IUCN 2009. IUCN Red List of Threatened Species. Version 2009.1. <www.iucnredlist.org>. Downloaded on 30 September 2009.

Woolnough, A.P. 1998. *The feeding ecology of the northern hairy-nosed wombat,* Lasiorhinus krefftii *(Marsupialia: Vombatidae)*. Ph.D. thesis. James Cook University of North Queensland, Townsville.

7. Hyperlinks

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

Department of Environment and Resource Management website <www.derm.qld.gov.au>

Land Protection (Pest and Stock Route Management) Act 2002 <www.legislation.qld.gov.au>

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

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

Northern hairy-nosed wombat information pages <www.derm.qld.gov.au>

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

8. Appendixes

Appendix A – Maps

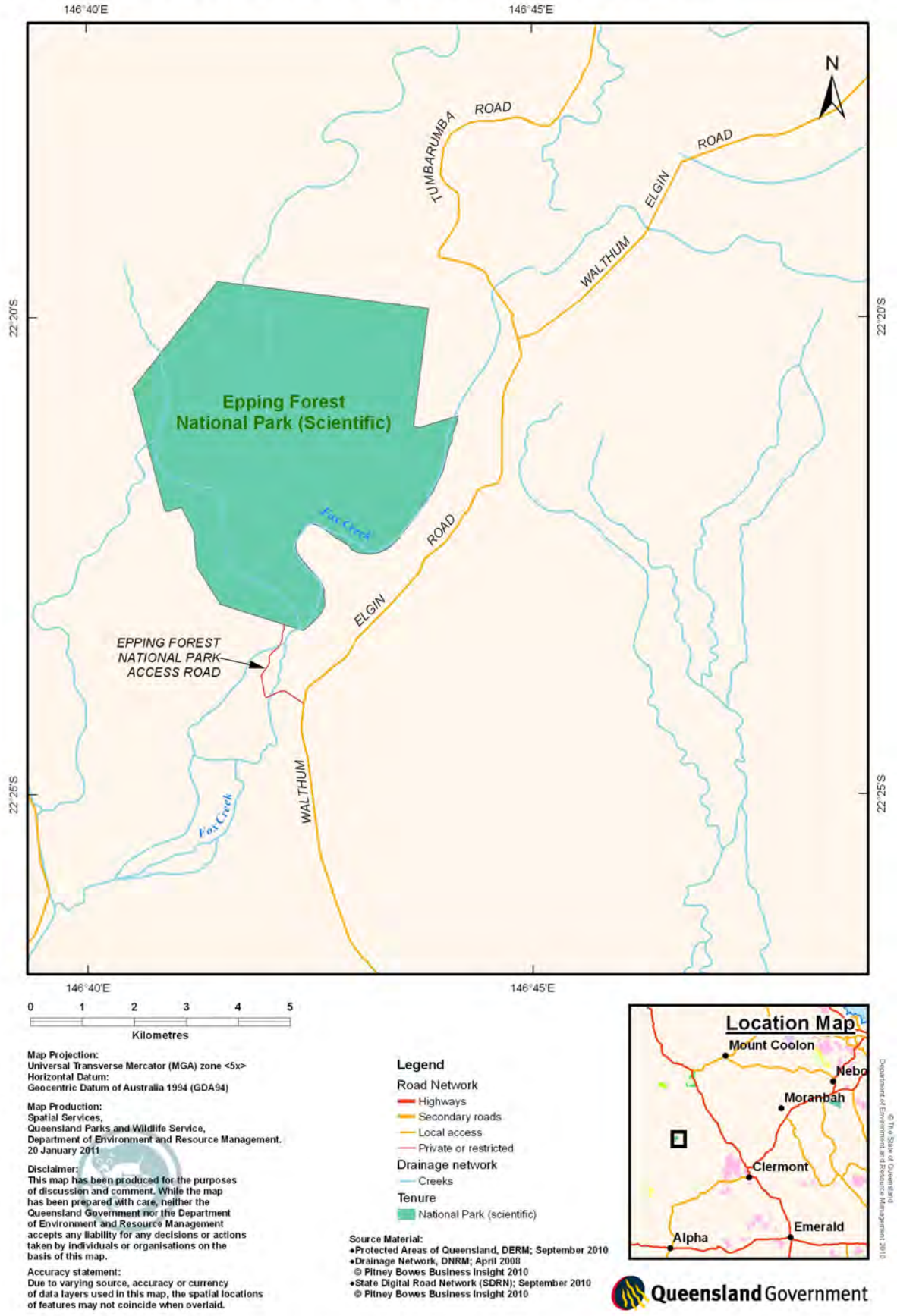
Appendix B – Definitions

Appendix C – Animals and plants of conservation significance

Appendix D – Regional ecosystems of conservation significance

Appendix A – Maps

Map 1 Location



Appendix B – Definitions

Back on Track priority species

Back on Track priority species are those that have been ranked under DERM's Back on Track species prioritisation framework as either 'critical' or 'high'. Actions for Biodiversity documents have been produced that identify actions to address major threats to priority species for Queensland NRM regions. For more information see http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/back_on_track_species_prioritisation_framework/

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 given on the Regional Ecosystem Description Database. See hyperlink – biodiversity status for further information, including the specific criteria used to assess the biodiversity status.

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*.

Management principles for national park (scientific)

These are specified in Section 16 of the *Nature Conservation Act 1992*:

(1) A national park (scientific) is to be managed to—

(a) protect the area's exceptional scientific values and, in particular—

(i) to ensure that the processes of nature continue unaffected in the area

(ii) to protect the area's biological diversity to the greatest possible extent

(b) allow controlled scientific study and monitoring of the area's natural resources.

(2) However, if threatened wildlife is a significant natural resource for the area, management of the area may include—

(a) manipulation of the wildlife's habitat

(b) the control of threatening processes relating to the wildlife, including threatening processes caused by other wildlife.

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 the Regional Ecosystem Description Database.

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 – Animals and plants of conservation significance

Table 1: Vulnerable, endangered or near threatened native animals and plants for Epping Forest National Park (Scientific).

Scientific name	Common name	Status under the *Nature Conservation Act 1992*	Status under the *Environment Protection and Biodiversity Conservation Act 1999*	DERM Back on Track species prioritisation framework rank
Geophaps scripta scripta	squatter pigeon (southern subspecies)	Vulnerable	Vulnerable	Medium
Lasiorhinus krefftii	northern hairy-nosed wombat	Endangered	Endangered	Critical
Egernia rugosa	yakka skink	Vulnerable	Vulnerable	Medium
Denisonia maculata	ornamental snake	Vulnerable	Vulnerable	Medium

Appendix D – Regional ecosystems of conservation significance

Table 1: Of concern or endangered regional ecosystem for Epping Forest National Park (Scientific).

Regional ecosystem number	Regional ecosystem name	DERM biodiversity status
11.3.1	*Acacia harpophylla* and/or *Casuarina cristata* open forest on alluvial plains	Endangered
11.3.2	*Eucalyptus populnea* woodland on alluvial plains	Of concern
11.3.3	*Eucalyptus coolabah* woodland on alluvial plains	Of concern
11.3.5	*Acacia cambagei* woodland on alluvial plains	Of concern
11.3.7	*Corymbia* spp. woodland on alluvial plains	Of concern
11.4.6	*Acacia cambagei* woodland on Cainozoic clay plains	Endangered