Department of Environment and Science

Nerang National Park

Incorporates: Nerang National Park, Nerang Conservation Park and Nerang State Forest

Draft Resource Information

2023

Not Government Policy

Queensland Government

Prepared by: **Queensland Parks & Wildlife Service (QPWS), Department of Environment and Science**

May 2023

Front cover photo: Golden swamp wallaby in Nerang National Park © Friends of Nerang National Park 2021.

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

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

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Public consultation on planning documents

Good planning is an important part of effective park management: it helps us understand where we are now, where we want to be, and how we are going to get there. It is the first step in the Values-Based Management Framework, an adaptive management cycle used by the Queensland Parks and Wildlife Service (QPWS) for setting the goals, strategic direction and priorities for park management. The cycle incorporates phases of monitoring, evaluating and reporting to inform how we are performing and where we need to adapt management to achieve our goals and good outcomes for Queensland's parks, forests and reserves.

Planning for each park is brought together and communicated through several planning documents: management plans and statements, resource information, thematic strategies and action plans. The hierarchy and purpose of these documents are shown in Figures 1 and 2.

For the Nerang Area, the following planning documents are available:

- draft management plan
- draft resource information document
- draft visitor strategy.

An invitation to comment

Organisations and members of the public are encouraged to have a say on the management of the Nerang Area: you are invited to review the management plan and resource information document and put forward a submission.

Written submissions on the draft management plan can be made via the Queensland Government's **Get Involved** website www.getinvolved.qld.gov.au.

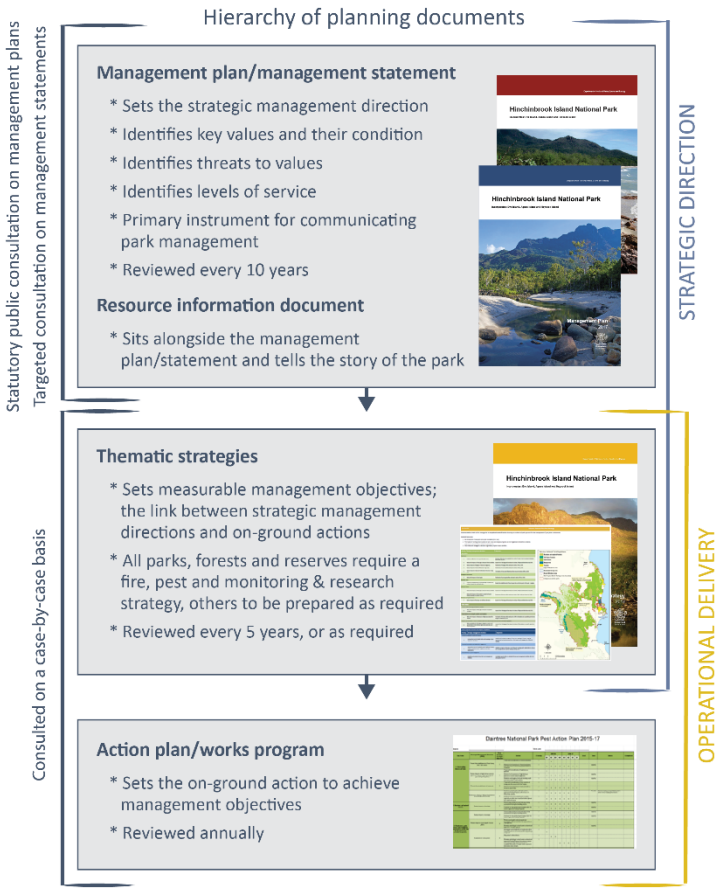


Figure 1. Hierarchy of planning documents and their purpose

The Minister will consider all submissions when finalising the management plan.
For further information on the draft management plan or the planning process, please visit the Department of Environment and Science website www.des.qld.gov.au.

Contents

1. Introduction

The QPWS management planning process aligns with the Values-Based Management Framework (VBMF), an adaptive management cycle that incorporates planning, prioritising, doing, monitoring, evaluating and reporting into all areas of our business (Figure 2). Management plans and statements set the strategic management direction, guiding the next tier of planning and the development of thematic strategies, which in turn inform and prioritise our on-ground operations.

Resource information is a compendium of park information and a supporting document for management plans and management statements. It contains background information about a park's purpose, values, resources, and legal and administrative framework.

Information about the VBMF is available on the Department of Environment and Science (DES) website at www.des.qld.gov.au.

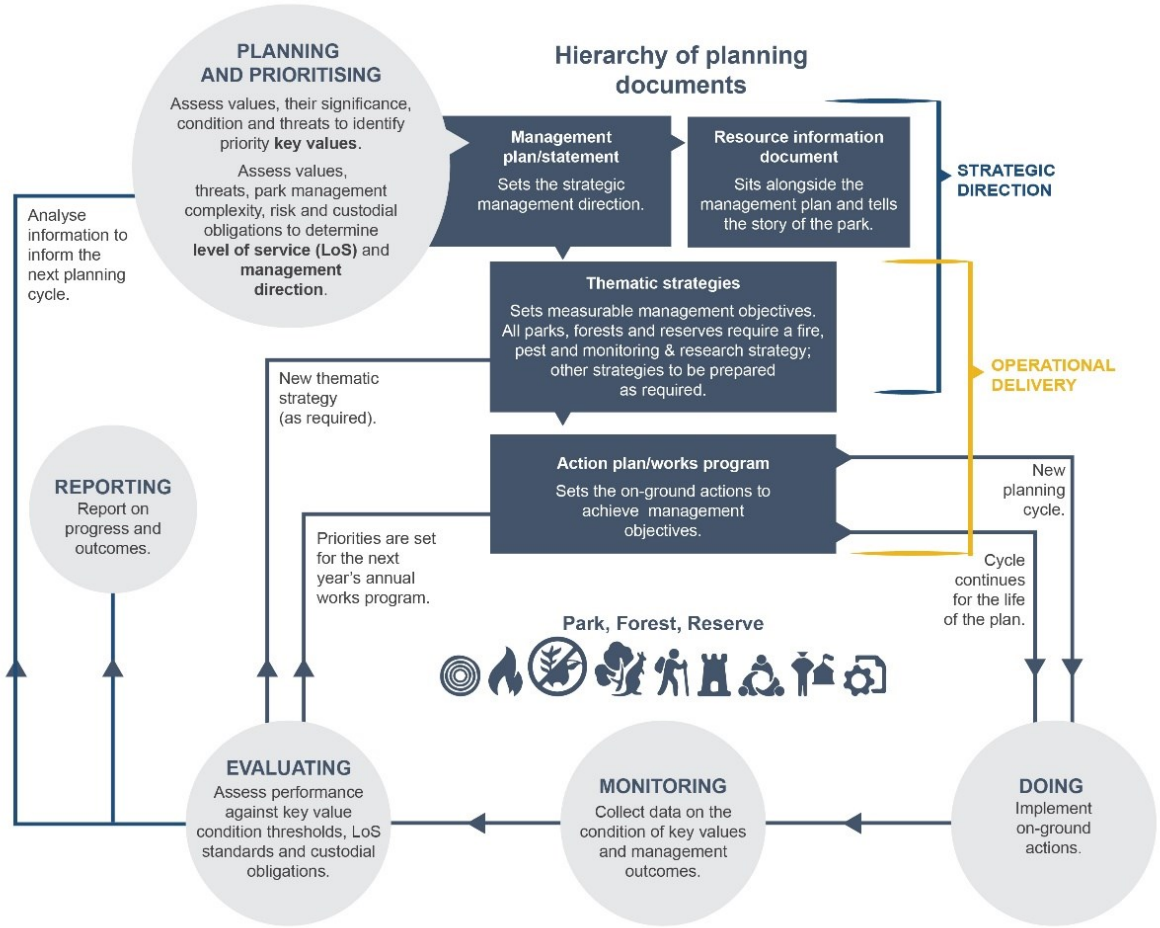


Figure 2. Phases of the VBMF cycle for planning and the hierarchy of planning documents

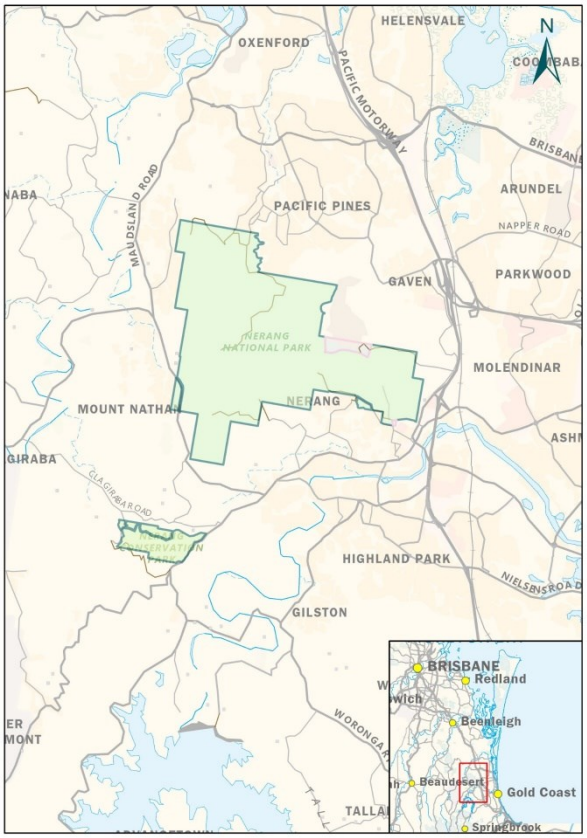
2. Nerang National Park

Nerang National Park and Nerang Conservation Park are valued for the conservation of biodiversity, community engagement in park management and sustainable recreation. The parks have a high level of biodiversity and ecosystems of conservation significance. Nerang National Park is the largest (1,659 ha) remnant of bushland in the Gold Coast lowlands. Together with Nerang Conservation Park (113 ha), it provides important local green space, habitat refuge and catchment protection for the headwaters of several streams, including Coombabah Creek (part of a nationally significant wetland), in a highly urbanised area.

Nerang National Park is part of the designated Koala Priority Area and contains a large area of core koala *Phascolarctos cinereus* habitat, making it critical refuge for the last remaining populations of koalas on the Gold Coast.

Its proximity to surrounding townships presents a valuable opportunity to display the intrinsic values of these natural areas to the broader community and encourage a respect for, and a desire to conserve, the area in its natural state.

The national park and conservation park were gazetted in 2007 to 2009 following the South East Queensland Forests Agreement transfer of Nerang and Clagiraba state forests.



Bioregion	Southeast Queensland		
Area	1659 ha (Nerang National Park), 113 ha (Nerang Conservation Park)		
Local government area	Gold Coast City Council (2020)	**State electorate**	Gaven
Management obligations	*Aboriginal Cultural Heritage Act 2003* *Bonn Convention* *China–Australia Migratory Bird Agreement (CAMBA)* *Environment Protection and Biodiversity Act 1999 (Cwlth)* *Japan–Australia Migratory Bird Agreement (JAMBA)* *Native Title Act 1993 (Cwlth)* *Nature Conservation Act 1992* *Republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)*		

2.1 Yugambeh (Kombumerri) People

The Nerang Area is part of the traditional lands and waters of Kombumerri People, which is a part of the broader area of the Yugambeh speaking people.
Despite the atrocities which were faced by the traditional custodians of the area during and after non-Indigenous settlement, they hold an unbroken and ongoing connection to the Nerang Area.
The suburb and national park name is derived from the Ngarahngwal word *Neering*, meaning shovelnose shark/ray. The Kombumerri People are strongly connected to *jagun* (country) and have always been 'saltwater people'. The Nerang River is recognised as a highly significant feature of the landscape due to the connection Kombumerri People hold with it, and it is recognised as bringing life to the whole area. The Kombumerri People occupied camps along the banks of the river, used the many food and medicinal resources that the river provided with flora and fauna species, and also utilised the river as a transport passage to the saltwater. The banks of the Nerang River are the location of the last known occupied camp for Kombumerri People. Coombabah Creek played a similar role in the landscape, with the headwaters now situated within the national park. The protection of this area as the 'heart and lungs' of the ecosystem, due to the way it breathes and pumps life into the surrounding landscape, is of the utmost importance. The Coombabah area is an important location for the Kombumerri People today as it holds many stories of ancestors within it. This includes the naming of Coombabah, which is believed to be derived from the Yugambeh word *gumbo* (phonetically pronounced 'kambo'), which refers to the bivalve molluscs, teredo or cobra, that burrow into timber along estuarine areas and were regarded as a delicacy in southern Queensland (King & Crosby 2004).

2.2 Ecosystems and biodiversity

2.2.1 Regional ecosystems

Nerang National Park is characterised by ridgelines of dry sclerophyll forest separated by dry gullies and a central wetter gully of rainforest. Dry sclerophyll forest is also linked with an emerging rainforest understorey on the fringing slopes. A central ridge line runs east-west across the Clagiraba region, incorporating Nerang Conservation Park, and apart from a small band of dry sclerophyll with melaleuca extending along Clagiraba Creek on the western boundary, the area is dominated by dry sclerophyll forest. Rapid urban development within close proximity of the national park and conservation park areas is increasing pressure on native ecosystems. In turn, threats including inappropriate visitor behaviour, vandalism, arson, weed dumping and fire management must be appropriately monitored and managed.

Vegetation across the national and conservation parks falls within 11 regional ecosystem (RE) categories. REs are predominantly made up of open eucalypt forest, woodlands, lowland rainforest, riparian bands, tall open forest and patches of intermediate open forest.

2.2.1 Lowland rainforest

A small area of notophyll vine forest with hoop pine *Araucaria cunninghamii* occurs on metamorphic rock in the centre of Nerang National Park. This regional ecosystem is listed as critically endangered as part of the *Environment Protection and Biodiversity Conservation Act 1999* Lowland Rainforest of Subtropical Australia listing. The ecosystem, though small in size, retains a high species diversity and was previously protected as a 'scientific area' under the *Forestry Act 1959*. Plant species such as *Citrus australasica, Cupaniopsis newmanii, Meiogyne stenopetala* and *Myrsine howittiana* are recorded as significant within the region. Exclusion from fire in the area is critical for the ongoing regeneration of the rainforest canopy species. This area of vegetation provides important services to buffer and protect the river systems of the Coombabah Lake wetland, which is also listed as a key value for Nerang.

2.2.2 Open eucalypt forest and woodlands

Open eucalypt forest is the most prevalent regional ecosystem across Nerang National Park and Nerang Conservation Park. The ecosystem is characterised by its array of *Eucalyptus* species, which comprise predominantly forest red gum *Eucalyptus tereticornis*, grey gum *Eucalyptus propinqua*, ironbarks *Eucalyptus crebra* and *Eucalyptus siderophlia*, stringybarks (e.g. *Eucalyptus tindaliae)* and tallowwood *Eucalyptus microcorys*, encompassing REs 12.11.3, 12.11.5 and 12.11.18. These REs are listed as of no current concern. Ecosystem vegetation communities are set on landforms that are flat to undulating, with a metamorphic, sedimentary or

igneous geological nature. A small patch of *Eucalyptus grandis* tall open forest (RE 12.3.2) can be found in the south-west corner of the park and is a regional ecosystem of concern. This ecosystem comprises predominantly *Eucalyptus grandis* and *Lophostemon confertus*, with a wet sclerophyll understorey component.

2.2.3 Coastal fringing forests and woodlands

Open woodlands of *Melaleuca quinquenervia*, *Eucalyptus tereticornis* and *Lophostemon suaveolens* can be found on coastal alluvial plains (RE 12.3.6), along with fringing woodlands of *Eucalyptus tereticornis*, *Melaleuca viminalis* and *Casuarina cunninghamiana* (RE 12.3.7).). RE 12.3.6 is listed as of no current concern, but 12.3.7 is listed as of concern.

A further RE of concern is *Corymbia intermedia* open forest occurring in narrow riparian bands in both Nerang National Park and Nerang Conservation Park (RE 12.3.11). Predominant species include *Eucalyptus tereticornis* and *Eucalyptus siderophloia,* with *Corymbia tessellaris, Lophostemon suaveolens* and *Melaleuca quinquenervia*, making up a low tree layer.

2.2.4 Nationally significant wetland

Nerang National Park and Nerang Conservation Park protect the headwaters of several streams, including Coombabah and Saltwater creeks. These creeks make up the upper watershed of Coombabah Lake wetland, which is the most southerly lake and coastal swampland in the bioregion. The wetland is an estuarine system comprising Coombabah Lake and Coombabah Creek. The site is of international significance under the Ramsar Convention (part of the Moreton Bay Ramsar site). It is also a declared Fish Habitat Area and a marine national park zone under the *Marine Parks (Moreton Bay) Zoning Plan 2019*. The catchment area for the lake is quite small. The lake is fed by Coombabah Creek from the south-west, meandering 15 km from its headwaters in Nerang National Park (Department of Environment and Science 2021). Threats involve clearing of native tree species, which alters wetland hydrology and has flow on effects for ecosystem health. Therefore, the protection of riparian vegetation and adjacent woodland environments is paramount to the maintenance of the nationally significant wetland complex.

2.3 Species

Both Nerang National Park and Nerang Conservation Park provide habitat for a diverse array of flora and fauna species.

2.3.1 Native fauna

Nerang National Park supports an array of threatened species, including the powerful owl *Ninox strenua*, the greater glider *Petauroides volans* and the grey-headed flying-fox *Pteropus poliocephalus.* Nerang National Park is also recognised as a stronghold for the vulnerable glossy black cockatoo *Calyptorhynchus lathami*, which feeds on the seeds of *Allocasuarina* trees. Another vulnerable species that utilises habitat in the park is the koala *Phascolarctos cinereus*.

It is also expected that, given the persistence of natural stands of the Richmond birdwing vine *Pararistolochia praevenosa* in riparian areas such as Mooyumbin Creek, the park may also support a local population of the Richmond birdwing butterfly *Ornithoptera richmondia*. This species is listed as vulnerable under the *Nature Conservation Act 1992.*

Both the national park and conservation park areas support a high diversity of native bird species, and are especially important as habitat for migratory and nomadic species including cuckoos, monarchs and fantails.

Nerang National Park is a significant species habitat refuge area for the Gold Coast, particularly for the greater glider (southern and central) *Petauroides volans* and the koala *Phascolarctos cinereus*. Nerang National Park is part of the designated Koala Priority Area and contains a large amount of core koala habitat, making it critical refuge for the last remaining populations of koalas on the Gold Coast.

The greater glider (southern and central) and the combined koala populations of New South Wales, Queensland and the Australian Capital Territory were recently listed as endangered under Queensland's *Nature Conservation Act 1992* and the Commonwealth's *Environment Protection and Biodiversity Act 1999*.

The main factors considered to make the greater glider (southern and central) eligible for listing in the endangered category was overall rate of decline observed as a result of the threats being faced by the species. The main threats of concern are loss of habitat and habitat fragmentation. It has been identified that the overall rate of population decline now exceeds 50 per cent over a 21-year (three generation) period, including population reduction and habitat destruction following the 2019–20

bushfires (Department of Climate Change, Energy, the Environment and Water, 2022). Population decline was also the primary consideration for the koala, whereby the loss was estimated at 53 per cent for Queensland populations.

Large contiguous areas of eucalypt forest (particularly those containing mature hollow-bearing trees for the greater glider) in surrounding areas of extensively cleared habitat are important for the continued survival of these species.

2.3.2 Native flora

Nerang National Park also hosts a complexity of flora species. Vulnerable species, including the macadamia nut *Macadamia integrifolia* and brush cassia *Cassia marksiana*, and two near threatened species, Richmond birdwing vine *Pararistolochia praevenosa* and long-leaved tuckeroo *Cupaniopsis newmanii*, also occur in the park. The Boonah cordyline *Cordyline congesta* has also been found in the park and has a limited distribution in south-east Queensland. Species of *Allocasuarina* are also critically important as a feeding tree that supports populations of the glossy black cockatoo.

2.4 Geophysical features

2.4.1 Terrestrial

Nerang National Park is located to the west of the Gold Coast, north-west of the suburb of Nerang, between Nerang-Murwillumbah Road and Beaudesert-Nerang Road.

The topography of Nerang National Park is steep and rugged, with deep gullies and narrow wetlands at lower elevations. Soil types are listed as red, yellow and brown dermosols and kandosols in open eucalypt areas, as well as areas of coastal alluvial plains with more sandy loam type soils. Therefore, due to the high frequency of trail use and the variety of recreational activity occurring on the same trails (e.g. horseriding, walking and mountain biking), some trails can be subject to higher rates of deterioration. The use of illegally built trails for mountain biking activity is a key concern as these trails can receive frequent and intensive activity. Consequently, erosion can occur at a rapid rate, especially on poorly aligned or drained steep sections of track – posing not only a threat to natural values, but a hazard to recreational users and requiring regular maintenance.

2.5 Recreational opportunities

Nerang National Park provides a range of recreational activities for tourists and visitors to engage with, including mountain biking, bush walking and horseriding. Rapid urban development in surrounding areas of the park over the past 10 years has led to changes in the type and intensity of recreational activities. For example, activities associated with rural living such as horseriding have decreased and are increasingly being replaced by recreation activities such as mountain biking. No day-use or camping areas are present within the park.

2.5.1 Mountain biking

Nerang National Park has become well-known among the mountain biking community as a popular area for recreational biking activity. The park is now recognised as a regionally significant mountain biking area with three trails of international standard constructed for the 2018 Gold Coast Commonwealth Games. Over 140,000 visitors are able to experience 20 approved trails (34 km) in the Nerang Mountain Bike Hub in the south-eastern corner of the park, with continually increasing popularity. Due to increasing demands for mountain biking, unauthorised track encroachment into the forest is a problem, with riders seeking more challenging experiences. Unmanaged recreational mountain biking activities are a threat to key values, with recent illegally built trails threatening many areas of significance. Consequently, mountain biking in the park will continue to be monitored and managed with an increase in outdoor recreation expected within the next 20 years. QPWS will be developing a code of conduct for cycling in QPWS managed areas, which will include mountain biking as a subset.

2.5.2 Shared trails

Nerang National Park boasts an array of shared trails for visitors to experience. Trails are shared among walkers, horseriders and mountain bikers. Horseriders, however, are not permitted on designated mountain bike trails and must adhere to a code of conduct to limit their impact on the park's natural values. Trails vary in difficulty, catering for a wide variety of skill levels, with one track utilised for endurance practice for the Kokoda Challenge.

2.6 Ecotourism

2.6.1 Tourism and visitor opportunities

Nerang National Park is managed as a nature-based recreation area, with numerous tracks and trails providing opportunities for bushwalking, trail running, cycling and horseriding.

Several events are held within the national park, including the annual Kokoda Challenge, which supports large numbers of people to appreciate the scenic and natural values of the park. The Commonwealth Games mountain bike trails have also facilitated national and international level mountain bike events in the park, including the National Schools Championships, Pan Pacific Masters Games, a stage of the Shimano World Enduro Series, as well as regular Gold Coast Mountain Bike Club events.

Several other organisations also engage with the national park, utilising the shared trails predominantly for bushwalking, horseriding and trail running club activities. Community organisations also undertake conservation focused work in the park, including volunteer weed removal and the support of environmental values and wildlife.

Authorities have been granted for apiary, mountain biking, running and research-oriented activities in the park. Permit conditions are set based on the nature of the proposed activity.

2.7 Historic cultural heritage

2.7.1 Park history

Nerang National Park is highly regarded by the community for its aesthetic and amenity value as a backdrop to suburban development. The national park once included a 3.7 ha rifle range dating from c 1901 to 1975. The site was owned by the Department of Defence, with the Commonwealth holding a permissive occupancy over the range from federation. The site was closed on 30 July 1970 due to safety hazards, with the area being handed over to Forestry in the 1980s by the Albert Shire Council for a section of SF 571 to be used for recreational purposes.

Although records show that targets were once mounted on timber frames behind a 2 metre high retaining wall on a 20 metre earth mound, the site is set in a gully which is now dominated by dense vegetation, thus little evidence of the site continues to exist. Remnant corrugated iron sheeting, timber retaining walls, abutments and sliding frames may be present among this vegetation, but few items have been documented.

2.8 Partnerships

2.8.1 Conservation groups

Several conservation groups are dedicated to the promotion, protection and enhancement of Nerang National Park. Groups meet regularly and engage in activities including general park maintenance, weeding, rehabilitation or revegetation. Friends of Nerang National Park, Nerang Community Association, Wildlife Preservation Society of Queensland and Gecko Environmental Council are some examples of conservation groups involved with the national park. Other stakeholder groups include Healthy Land and Water, Watergum, Birdlife Australia, Wildcare Australia and the Australian Conservation Foundation.

2.8.2 Local recreation groups

As a popular and regionally significant mountain biking destination, Nerang National Park has a number of recreational groups that engage with the park. The main groups are the Gold Coast Mountain Bike Club and Nerang Trail Care Alliance. Other groups include Save Nerang Forest Trails, Nerang Pony Club, Gold Coast Bush Walkers Club, Bushwalking Queensland and Trail Runners Association of Queensland.

2.9 Scientific research

2.9.1 Research opportunities

Nerang National Park is an excellent location to host research opportunities, partnering with universities, professional organisations and academics, with fauna surveys having previously been conducted within the park by university students. Other participating organisations include the Queensland Plant Pathology Herbarium, Entomological Society of Queensland, Royal Botanic Gardens Sydney and BirdLife Australia.

Research results and recommendations are to be collated and added to the DES WildNet database. Systems need to be developed to ensure research results are made available, where applicable, and to encourage research on topics that are relevant to park management. Both areas provide excellent opportunities for learning and research in all aspects of park management, including nature conservation and recreation management.

2.10 Fire

2.10.1 Nerang area fire

Many of the communities that occur within the park complex (except for the lowland rainforest) have some dependency on fire for their continued existence, and exhibit adaptations for survival in a fire-prone environment. Prescribed burns stimulate seed dispersal, aid germination and retain structural and floristic diversity within the communities. They also assist in the formation of tree hollows that provide important habitat features for native animals.

A fire strategy has been developed for Nerang National Park. This strategy details the management of fire across key values and highlights the challenges and logistics of conducting prescribed burns in a highly urban environment. Fire prevention and management between the urban development and natural areas will be undertaken cooperatively with the Queensland Fire and Rescue Service (urban and rural brigades).

Maintaining the network of fire trails in the parks is a priority for protecting life and property and achieving good conservation outcomes. The strategy includes a mix of conservation, bushfire mitigation and protection zones, with the aim of creating a mosaic of burning in the open forests and protecting riparian vegetation and vine forests from fire. For example, the *Allocasuarina* trees that are the food source of the vulnerable glossy black cockatoo also need special fire management to survive. The planned burning season is generally from April through to the end of August, typically with temperatures in the high teens and low 20s; these are often accompanied by days of low humidity and westerly winds.

The usual bushfire season in south-east Queensland is at its worst over spring, but can extend well into summer during drought years with the failure of early spring and summer rains. The rainfall aggregate in the six months leading up to the fire season peak during November is critical in gauging the likely severity of a fire. Nerang National Park experiences occasional bushfires as a result of its close proximity to urbanised areas. Most bushfires are the result of either escaped neighbour burns, with only a few the result of malicious intent or a consequence of stolen car fires.

2.11 Pests

2.11.1 Pest plants

Urban and peri-urban landscapes bordering the national park have increased the level of disturbance in these areas. Dumping of household and garden rubbish along the outskirts of the national park is detrimental to habitat values as it has allowed numerous pest plant species to establish in the park. This has promoted substantial infestations of cat's claw creeper *Dolichandra unguis-cati*, particularly within Mooyumbin Creek and its tributaries, which threatens the riparian vegetation condition and values, including confirmed threatened species.

Lantana *Lantana camara,* fishbone fern *Nephrolepis cordifolia* and devil's fig *Solanum torvum* pose the greatest threat to lowland rainforest and wetland areas, including the nationally significant Coombabah Lake wetland, due to their thick woody nature and establishment within riparian corridors.

It was noted in a recent ecological survey that the vegetation within the centre of the national park is of highest value, with limited weeds and reduced disturbance. This includes a large patch of well-developed rainforest and woodland communities with little signs of disturbance or pest plant invasion (Determination of Ecological Values Nerang National Park, BAAM 2021). It is a priority management objective to limit access and disturbance to these areas to prevent weed introduction or other impacts to ecosystem health and integrity.

Other species present in sections of the park include cocos palm *Syagrus romanzoffiana,* umbrella tree *Schefflera actinophylla,* cobbler's pegs *Bidens pilosa,* small-leaved privet *Ligustrum sinense*, ochna *Ochna serrulata*, camphor laurel *Cinnamomum camphora*, silver-leaved desmodium *Desmodium uncinatum,* Singapore daisy *Sphagneticola trilobata* and asparagus fern *Asparagus aethiopicus 'Sprengeri'*.

2.11.2 Pest animals

A number of introduced pest animals are present within Nerang National Park, including cats *Felis catus*, hares *Lepus europaeus* and

European foxes *Vulpes vulpes*. Feral deer species, including the feral rusa deer *Cervus timorensis*, feral red deer *Cervus elaphus* and the feral fallow deer *Dama dama*, are of concern due to their prevalence and impact on the national park. Predominantly found in the south-west corner of the park, deer threaten biodiversity by grazing on native flora, compacting soil and introducing and spreading disease to native fauna and neighbouring livestock. Within the national park, deer pose significant threat to flora such as *Allocasuarina* and eucalyptus species, which are important to the conservation status of the vulnerable glossy black cockatoo *Calyptorhynchus lathami* and koala *Phascolarctos cinereus*. Deer also pose a hazard to mountain bikers within the park. Foxes *Vulpes vulpes* are also a problem across Gold Coast protected areas because they prey on native fauna and neighbouring livestock.

Appendices

Appendix 1. Legal, policy and management commitments

Gazettal details

The national park and conservation park were gazetted in 2007 to 2009 following the South East Queensland Forests Agreement transfer of Nerang and Clagiraba state forests.

Applicable Acts and statutory powers

- *Aboriginal Cultural Heritage Act 2003*
- *Bonn Convention*
- *China–Australia Migratory Bird Agreement (CAMBA)*
- *Environment Protection and Biodiversity Act 1999 (Cwlth)*
- *Japan–Australia Migratory Bird Agreement (JAMBA)*
- *Native Title Act 1993 (Cwlth)*
- *Nature Conservation Act 1992*
- *Republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)*

Recovery plans and guides

- National Recovery Plan for the Koala *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory)
- Southeast Queensland Koala Conservation Strategy 2020–2025
- National Recovery Plan for the Grey-headed Flying-fox *Pteropus poliocephalus*
- Conservation Advice for *Petauroides volans* (greater glider – southern and central)
- Conservation Advice for *Hirundapus caudacutus* (white throated needletail)

Appendix 2. Regional ecosystems of significance

Regional ecosystem	Description	Biodiversity status
12.11.18	*Eucalyptus moluccana* woodland on metamorphics +/- interbedded volcanics	Least concern
12.11.3	*Eucalyptus siderophloia*, *E. propinqua* +/- *E. microcorys*, *Lophostemon confertus*, *Corymbia intermedia*, *E. acmenoides* open forest on metamorphics +/- interbedded volcanics	Least concern
12.11.5	*Corymbia citriodora* subsp. *variegata* woodland to open forest +/- *Eucalyptus siderophloia*/*E. crebra*, *E. carnea*, *E. acmenoides*, *E. propinqua* on metamorphics +/- interbedded volcanics	Least concern
12.11.10	Notophyll vine forest +/- *Araucaria cunninghamii* on metamorphics +/- interbedded volcanics	Least concern
12.11.24	*Eucalyptus carnea*, *E. tindaliae*, *Corymbia intermedia* +/- *E. siderophloia* or *E. crebra* woodland on metamorphics +/- interbedded volcanics	Least concern
12.11.25	*Corymbia henryi* and/or *Eucalyptus fibrosa* subsp. *fibrosa* +/- *E. crebra*, *E. carnea*, *E. tindaliae* woodland on metamorphics +/- interbedded volcanics	Of concern
12.3.11	*Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast	Of concern
12.3.6	*Melaleuca quinquenervia* +/- *Eucalyptus tereticornis*, *Lophostemon suaveolens*, *Corymbia intermedia* open forest on coastal alluvial plains	Least concern
12.3.7	*Eucalyptus tereticornis*, *Casuarina cunninghamiana* subsp. *cunninghamiana* +/- *Melaleuca* spp. fringing woodland	Least concern
12.3.2	*Eucalyptus grandis* tall open forest on alluvial plains	Of concern

Appendix 3. Species of conservation significance

Scientific name	Common name
Petauroides armillatus	central greater glider
Phascolarctos cinereus	koala
Ninox strenua	powerful owl
Calyptorhynchus lathami	glossy black-cockatoo
Calyptorhynchus lathami lathami	glossy black-cockatoo (eastern)
Hirundapus caudacutus	white-throated needletail
Marsdenia coronata	slender milkvine
Leichhardtia longiloba	
Pararistolochia praevenosa	
Picris conyzoides	
Allocasuarina littoralis and *A. torulosa*	
Cyperus semifertilis	
Macadamia integrifolia	macadamia nut
Macadamia tetraphylla	
Randia moorei	spiny gardenia
Zieria collina	
Cupaniopsis newmanii	long-leaved tuckeroo
Symplocos harroldii	hairy hazelwood
Cassia marksiana	brush cassia

Appendix 4. Species listed in international agreements

Scientific name	Common name	CMS	JAMBA	ROKAMBA	CAMBA
Hirundapus caudacutus	white-throated needletail		✓	✓	✓
Monarcha melanopsis	black-faced monarch	✓			
Rhipidura rufifrons	rufous fantail	✓			
Symposiachrus trivirgatus	spectacled monarch	✓			

Appendix 5. Pests

Scientific name	Common name	*Biosecurity Act 2014* status[1]
Sus scrofa	pig	Restricted, Category 3, 4, 6
Lepus europaeus	European brown hare	Invasive
Felis catus	cat	Restricted, Category 3, 4, 6
Canis familiaris	dog	Restricted, Category 3, 4, 6
Vulpes vulpes	red fox	Restricted, Category 3, 4, 5, 6
Mus musculus	house mouse	Invasive
Rattus rattus	black rat	Invasive
Passer domesticus	house sparrow	Invasive
Lonchura punctulata	nutmeg mannikin	Invasive
Acridotheres tristis	common myna	Invasive
Sturnus vulgaris	common starling	Invasive
Columba livia	rock dove	Invasive
Streptopelia chinensis	spotted dove	Invasive
Anas platyrhynchos	northern mallard	Invasive
Hemidactylus frenatus	house gecko	Invasive
Rhinella marina	cane toad	Invasive
Gambusia holbrooki	mosquitofish	Invasive
Danaus plexippus	monarch	Invasive
Cervus elaphus	feral red deer	Restricted, Category 3, 4, 6
Rusa timorensis	feral rusa deer	Restricted, Category 3, 4, 6
Pieris rapae	cabbage white	Invasive
Hygrophila costata		Restricted, Category 3
Hypoestes phyllostachya		Invasive
Echinodorus cordifolius		Invasive
Sagittaria platyphylla	sagittaria	Restricted, Category 3
Alternanthera brasiliana		Invasive
Schinus terebinthifolius	broad-leaved pepper tree	Restricted, Category 3
Colocasia esculenta	taro	Invasive
Syagrus romanzoffiana	Queen palm	Invasive
Aristolochia elegans	Dutchman's pipe	Restricted, Category 3
Asparagus aethiopicus 'Sprengeri'	basket asparagus fern	Restricted, Category 3
Asparagus africanus	ornamental asparagus	Restricted, Category 3

[1] Status refers to the declaration of matter as prohibited, restricted or invasive under the *Biosecurity Act 2014.* There are 7 categories of restricted matter. Restricted matter categories relate to the reporting and action requirements –

Category 1 and 2: invasive matter must be reported within 24 hours to Biosecurity Queensland
Category 3: the invasive matter must not be distributed either by sale or gift, or released into the environment
Category 4: the invasive matter must not be moved.
Category 5: the invasive matter must not be possessed or kept.
Category 6: the invasive matter must not be fed.
Category 7: the invasive matter must be killed and disposed of by burying the whole carcass in the ground above the high tide water mark or placing it in a waste disposal receptacle.

Scientific name	Common name	*Biosecurity Act 2014* status[2]
Asparagus plumosus	feathered asparagus fern	Restricted, Category 3
Ageratina adenophora	crofton weed	Invasive
Baccharis halimifolia	groundsel bush	Restricted, Category 3
Bidens pilosa		Invasive
Crassocephalum crepidioides	thickhead	Invasive
Emilia sonchifolia var. javanica		Invasive
Galinsoga parviflora	yellow weed	Invasive
Gymnocoronis spilanthoides	senegal tea	Restricted, Category 3
Heterotheca grandiflora	telegraph weed	Restricted, Category 3
Sphagneticola trilobata	Singapore daisy	Restricted, Category 3
Impatiens walleriana	balsam	Invasive
Anredera cordifolia	Madeira vine	Restricted, Category 3
Dolichandra unguis-cati	cat's claw creeper	Restricted, Category 3
Pyrostegia venusta		Invasive
Tecoma stans var. stans		Restricted, Category 3
Brassica x juncea	Indian mustard	Invasive
Biancaea decapetala		Invasive
Senna pendula var. glabrata	Easter cassia	Invasive
Gloriosa superba	glory lily	Invasive
Ipomoea cairica		Invasive
Ipomoea indica	blue morning-glory	Invasive
Ipomoea purpurea	common morning glory	Invasive
Bryophyllum delagoense	mother of millions	Restricted, Category 3
Bryophyllum x houghtonii	mother of millions hybrid	Restricted, Category 3
Cyperus x turbatus		Invasive
Acalypha australis		Invasive
Euphorbia hirta		Invasive
Euphorbia hyssopifolia		Invasive
Euphorbia maculata		Invasive
Euphorbia ophthalmica		Invasive
Euphorbia peplus	petty spurge	Invasive
Euphorbia prostrata		Invasive
Ricinus communis	castor oil bush	Invasive
Crotalaria pallida var. obovata		Invasive

[2] Status refers to the declaration of matter as prohibited, restricted or invasive under the *Biosecurity Act 2014.* There are 7 categories of restricted matter. Restricted matter categories relate to the reporting and action requirements –

Category 1 and 2: invasive matter must be reported within 24 hours to Biosecurity Queensland
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Desmodium uncinatum		Invasive
Indigofera circinella		Invasive
Lotononis bainesii	lotononis	Invasive
Macroptilium lathyroides		Invasive
Macrotyloma axillare var. axillare		Invasive
Tephrosia grandiflora		Invasive
Vigna luteola	dalrymple vigna	Invasive
Plectranthus verticillatus		Invasive
Cinnamomum camphora	camphor laurel	Restricted, Category 3
Cuphea hyssopifolia		Invasive
Hibiscus rosasinensis		Invasive
Sida cordifolia		Invasive
Leucaena leucocephala		Invasive
Ardisia crenata		Invasive

Scientific name	Common name	*Biosecurity Act 2014 status*
Lysimachia arvensis		Invasive
Eugenia uniflora	Brazilian cherry tree	Invasive
Ochna serrulata	ochna	Invasive
Ligustrum lucidum	large-leaved privet	Restricted, Category 3
Ligustrum sinense	small-leaved privet	Restricted, Category 3
Oenothera affinis	long-flowered evening primrose	Invasive
Passiflora suberosa subsp. litoralis		Invasive
Rivina humilis		Invasive
Phyllanthus tenellus		Invasive
Bacopa lanigera		Invasive
Megathyrsus maximus var. pubiglumis		Invasive
Melinis minutiflora	molasses grass	Invasive
Paspalum notatum	bahia grass	Invasive
Paspalum vaginatum	saltwater couch	Invasive
Setaria palmifolia	palm grass	Invasive
Sporobolus africanus	Parramatta grass	Invasive
Sporobolus natalensis		Restricted, Category 3
Rubus anglocandicans	blackberry	Restricted, Category 3
Murraya paniculata 'Exotica'		Invasive
Koelreuteria elegans subsp. formosana		Invasive
Solanum capsicoides	devil's apple	Invasive
Solanum chrysotrichum		Invasive
Solanum mauritianum	wild tobacco	Invasive
Solanum torvum	devil's fig	Invasive
Duranta erecta	duranta	Invasive

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