

Freshwater National Park Management Statement 2013

Park size:	156.1ha
Bioregion:	South Eastern Queensland
QPWS region:	South East
Local government estate/area:	Moreton Bay
State electorate:	Petrie

Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Nature Conservation Act 1992</i>

Plans and agreements

✓	China–Australia Migratory Bird Agreement
✓	Japan–Australia Migratory Bird Agreement

Thematic strategies

✓	Level 2 Pest Management Strategy
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Vision

Freshwater National Park will be managed to conserve the representative ecosystems of open sclerophyll woodlands and heath that was once common in the area. The park is a thriving remnant that provides a refuge for many species, including birds and animals of conservation significance. People visit Freshwater National Park for low key opportunities in a natural and undeveloped setting, including bird watching and bush walking.

Conservation purpose

Freshwater National Park was gazetted in 1973 in recognition of the high conservation value and is an area of statewide biodiversity significance. The park is recognised as core koala habitat and provides a refuge for a diverse number of native plants and animals.

A new section was added to the park in 2009 for its high conservation values and the linking of Freshwater National Park to the 'Saltwater Creek' wildlife corridor, which is critical for wildlife movement including koalas and is of high biodiversity value.

Protecting and presenting the park's values

Landscape

The park is surrounded by urban and industrial development, and the Bruce Highway and Deception Bay Road (due to be upgraded to four lanes)—a major arterial road for the area. The large volume of traffic using these roads will continue to have an impact on the native wildlife population.

Little Burpengary Creek runs through the northern corner of the park, which runs into Burpengary Creek and forms part of the larger Deception Bay catchment. Two distinctive creeks drain the catchment—Little Burpengary Creek (1,600ha) and Burpengary Creek (6,360ha). The upper sections of this catchment start in the D'Aguilar Range.

The Saltwater Creek corridor forms part of the Hays Inlet catchment. It is a narrow wildlife and riparian corridor which links Freshwater National Park, Moreton Bay Regional Council reserves and the North Lakes Environmental Park to Hays Inlet.

A parcel of land adjacent to the park that is owned by the Department of Communities, Child Safety and Disability Services has high conservation values.

Regional ecosystems

Freshwater National Park supports melaleuca forest and open grassy woodland, dominated by scribbly gums *Eucalyptus racemosa* and grass trees *Xanthorrhoea*. These two regional ecosystems are classified as 12.3.5 of concern *Melaleuca quinquenervia* open forest to woodland on Cainozoic alluvial plains in coastal areas; and 12.5.3 endangered *E. tindaliae*, *E. racemosa* open forest on remnant tertiary surfaces on deep red soils (Table 1).

Native plants and animals

Freshwater National Park provides habitat for a high diversity of native animals and plants, with 29 species of birds recorded, some of which are listed under international agreements and species of conservation significance including the koala *Phascolarctos cinereus* (tables 2 and 3).

The park provides important habitat for many common species of native wildlife including a population of eastern grey kangaroos *Macropus giganteus* that require large areas of intact habitat for survival.

The hollows in the scribbly gums throughout the park provide breeding habitat for many species of lorikeets *Trichoglossus haematodus*, Australian fairy wrens *Malurus melanocephalus* and yellow-faced honeyeaters *Caligavis chrysops* and provides vital stepping-stone habitat for migratory species such as fan-tailed cuckoos *Cacomantis flabelliformis*, rainbow bee-eaters *Merops ornatus* and grey fantails *Rhipidura fuliginosa*. Birds of prey include the square tailed kite *Lophoictinia isura* and wedge-tailed eagles *Aquila audax*.

The invertebrate species are rich, with many species of dragonflies and damselflies including the large dragonfly *Hemianax papuensis*, *Rhyothemis graphiptera* and the deep red *Diplacodes bipunctata*.

Patches of the wallum grevillea *Grevillea leiophylla* are common in the ground strata as well as small flowering herbs such as murdannia *Murdannia graminea*, fringed lily *Thysanotus tuberosus* and yellow-eye *Xyris complanata*.

The impacts and threats to the plants and animals located in the park include stray domestic dogs, dumping of rubbish, illegal vehicle activity, wildfire, horse riding and the collection of fire wood.

Aboriginal culture

Little is known about the Aboriginal history in the area. The Gubbi Gubbi people had a registered native title claim over Freshwater National Park (QC 99/035) which has passed. The area that is now national park would have provided the local people with plant and animal food resources and other items of their material culture.

Shared-history culture

Little is documented about the cultural history of the park. The park contains cultural remnants related to prior use of the land, including fences for cattle grazing and a small dam.

Tourism and visitor opportunities

The recreation uses of Freshwater National Park include nature appreciation, bush walking and bird watching. Because of the location and small size of the park, the management focus is to provide a natural and undeveloped setting. Rather than enhance visitor and recreation opportunities, any additional infrastructure would most probably attract vandalism and undesirable behaviour.

Education and science

Local school groups use the park for broader environmental education programs. University students conduct research programs on a wide range of topics including habitat utilisation by native wildlife.

Partnerships

In 2009, in principle support and agreement was reached between Queensland Parks and Wildlife Service (QPWS) and the Murrijabree Indigenous group to run a trainee program focusing on protected area and land management in the Deception Bay area. Projects completed to date included plain wire boundary fencing, the installation of vehicle access gates, rubbish and waste removal, weed control and management signs.

Volunteers have been involved in a Clean Up Australia Day, removing old truck tyres and collecting roadside rubbish.

Park management would be enhanced by co-managing the neighbouring uncleared block of conservation significance in regards to fire management and other management issues with the council. A partnership with SEQ Catchments would also enhance management and funding opportunities for the Saltwater Creek corridor.

Other key issues and responses

Pest management

The park is managed under a level 2 pest management strategy. Pest plants of significance include groundsel *Baccharis halimifolia*, lantana *Lantana camara*, exotic pine species *Pinus* sp. and exotic grasses including whiskey grass *Andropogon virginicus*. These grasses will spread into the body of the park if left untreated and represent a serious threat to native grass species through competition. They also represent a serious fire hazard as they accumulate large amounts of biomass which generates hotter fires and higher flame heights when burnt.

Pest plants often first appear at park entrances and boundaries. Early intervention and coordinated management with local governments and neighbours will help to stop weeds from spreading into the park.

Fire management

There is currently no fire management strategy for the park. A protection zone is located along the northern boundary to help mitigate the potential fire hazard to adjoining acreage properties from fuel accumulation and provide safe access for fire-fighters in an emergency. Strategic fire lines are located throughout the park to support a fuel reduction program which promotes an overall mosaic pattern providing a diversity of habitat.

The eucalypt-based communities of Freshwater National Park require periodic fire to maintain structural and species diversity and to mitigate against the possibility of catastrophic wildfire. Summer burning for low intensity fire should be conducted at times of high soil moisture content. Appropriate fire management in adjoining vegetation types will also help protect the melaleuca forest vegetation from wildfire.

A priority is given to protecting the many hollow scribbly gum habitat trees from fire and before starting a prescribed burn QPWS crews rake around the base of the trees at risk of catching alight to protect them from burning down.

Small birds, such as wrens, finches and honeyeaters, and small mammals benefit from having a high degree of structural diversity in a mixture of grassy and shrubby understorey.

Appropriate fire management can be used to help control pest plants such as lantana at the landscape level. Future fire management should aim to assess the effect of planned burning on emerging pest plants.

References

Department of Environment and Resource Management 2009, *Decline of the Koala Coast Koala Population: Population status in 2008*, Department of Environment and Resource Management, Brisbane.

Management directions

Desired outcomes	Actions and guidelines
<p>Native plants and animals</p> <p>Biodiversity values are understood and protected.</p> <p>Koala habitat maintained in good condition.</p>	<p>A1. Protect Saltwater Creek corridor for wildlife movement and distribution.</p> <p>A2. Provide input into planning of future road development including the impacts on animal movement.</p> <p>A3. Continue to conduct regular wildlife surveys in the park and the Saltwater Creek corridor.</p> <p>A4. Record observations of species of conservation significance to help inform fire and pest management programs.</p>
<p>Tourism and visitor opportunities</p> <p>Visitors enjoy a range of settings and opportunities for safe and sustainable outdoor recreation.</p>	<p>A5. Continue to maintain the existing trail network in good condition, including:</p> <ul style="list-style-type: none"> • slashing of protection zone • slashing of fire trails as required.
<p>Partnerships</p> <p>Partnerships produce good outcomes for park management.</p>	<p>A6. Maintain a relationship with the council to co-manage the neighbouring uncleared block of conservation significance in regards to fire management and other management issues.</p> <p>A7. Work with SEQ Catchments to enhance management and funding opportunities for the Saltwater Creek corridor.</p> <p>A8. Support volunteer groups and friends of parks to promote the area in the local community.</p>
<p>Pest management</p> <p>The impact of pest plants and animals on conservation values is minimised.</p>	<p>A9. Continue to review and implement the level 2 pest management strategy with an emphasis on:</p> <ul style="list-style-type: none"> • reducing the spread of exotic grasses • coordinating pest plant and fire management. <p>A10. Keep horse and dog activity out of park by maintaining fences and signs.</p>
<p>Fire management</p> <p>Fire management will be managed in accordance with the fire management strategy.</p>	<p>A11. Develop a level 2 fire management strategy.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
12.3.5	<i>Melaleuca quinquenervia</i> open-forest to woodland. Understorey depends upon duration of water logging; sedges and ferns, especially <i>Blechnum indicum</i> , in wetter microhabitats and grasses and shrubs in drier microhabitats.	Of concern
12.5.3	<i>Eucalyptus tindaliae</i> and/or <i>E. racemosa</i> subsp. <i>racemosa</i> open-forest with <i>Corymbia intermedia</i> , <i>E. siderophloia</i> +/- <i>E. resinifera</i> , <i>E. pilularis</i> , <i>E. microcorys</i> , <i>Angophora leiocarpa</i> .	Endangered

Table 2: Species of conservation significance

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Animals				
<i>Ephippiorhynchus</i>	black-necked stork	Near threatened	-	Low
<i>Lophoictinia isura</i>	square-tailed kite	Near threatened	-	Low
<i>Phascolarctos cinereus</i>	koala (southeast Queensland bioregion)	Vulnerable	-	High
Plants				
<i>Phaius australis</i>	swamp orchid	Endangered	Endangered	Critical
<i>Phaius bernaysii</i>	yellow swamp orchid	Endangered	Endangered	Critical

Table 3: Bird species listed in international agreements

Scientific name	Common name	Bonn	JAMBA	CAMBA	ROKAMBA
<i>Merops ornatus</i>	rainbow bee-eater	-	✓	-	-
<i>Ardea ibis</i>	cattle egret	-	-	✓	-
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	-	✓	-

Bonn – Bonn Convention

JAMBA – Japan–Australia Migratory Bird Agreement

CAMBA – China–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement