

Scenic and aesthetic

Bullock Creek Conservation Park contributes to the scenic amenity of Pumicestone Passage, by providing a naturally vegetated buffer between the townships of Toorbul Point and Donnybrook.

Scientific and educational

The Wader Study Group of the Queensland Ornithological Society Inc. conducts population monitoring of shorebirds throughout Moreton Bay on a monthly basis. One of their monitoring sites is located on the Donnybrook claypan within Bullock Creek Conservation Park. As such, the conservation park provides a stable platform for gathering data on migratory bird populations and their habitat uses. The data is needed for the effective protection of these species.

Recreation and tourism

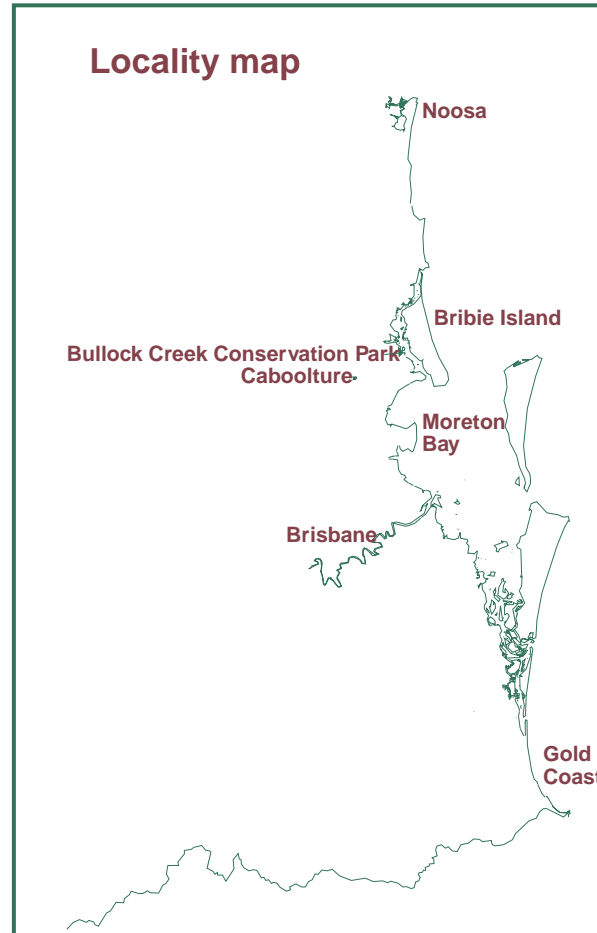
The park is not suited to on-site recreation because of its critical importance as a wader roost site. As a roost site, the conservation park helps to provide for the long-term survival of migratory waders, which are a potential feature of eco-tourism elsewhere in Pumicestone Passage and Moreton Bay.

Summary

This management plan provides the framework and guidelines on how Bullock Creek Conservation Park will be managed. It sets out the considerations, outcomes and strategies that are proposed to form the basis on which day-to-day management decisions are made.

This plan was prepared in July 1999 and, in accordance with s 125 of the *Nature Conservation Act 1992*, will be reviewed not later than 10 years after its approval. For further information on this plan or the planning process, please contact the Queensland Parks and Wildlife Service Southern Regional Centre in Moggill, Brisbane, on (07) 3202 0200 during business hours.

This management plan was prepared by Queensland Parks and Wildlife Service staff. Thanks are due to those groups and individuals who made submissions in response to the draft plan.



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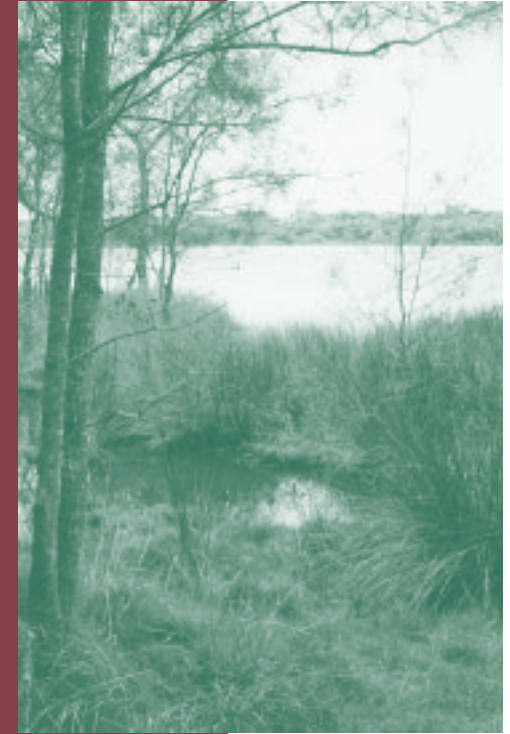
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Bullock Creek Conservation Park

Management plan



South East Queensland Biogeographic Region
November 1999



QUEENSLAND
PARKS AND
WILDLIFE
SERVICE

I. Management directions and purposes

I.1 Management directions

Bullock Creek Conservation Park lies on the western side of Pumicestone Passage. It will be managed in conjunction with Moreton Bay Marine Park, primarily as a roosting site for migratory wading birds. The park will be managed in accordance with the Ramsar Convention on Wetlands of International Importance, the Japan Australia Migratory Bird Agreement (JAMBA), the China Australia Migratory Bird Agreement (CAMBA) and the Bonn Convention for the Protection of Migratory Birds and their Environments. The *Nature Conservation (Wildlife) Regulation 1994* requires that the special cultural significance of the wildlife listed in the above agreements be recognised and their populations and habitats conserved through appropriate management.

Park management will also be directed towards the protection of habitats for other native animals and the maintenance of the natural condition of vegetation communities. No developed or recreational facilities will be provided.

I.2 Purposes

The major purposes of management will be to ensure that:

- the saltmarsh area of the conservation park is recognised as an important high tide roost site for wading birds and protected from disturbance;
- roosting wading birds are protected from disturbance by human activity, and feral and roaming domestic animals; and
- scientific study and monitoring are orientated towards developing management programs to meet international obligations for conserving migratory wading birds and their habitats.

2. Basis for management

Bullock Creek Conservation Park is dedicated under the *Nature Conservation Act 1992* and must be managed under s 20 of the Act to:

- conserve and present the area's cultural and natural resources and their values;
- provide for the permanent conservation of the area's natural condition to the greatest possible extent; and
- ensure that any commercial use of the area's natural resources, including fishing and grazing is ecologically sustainable.

2.1 Regional and management context

Bullock Creek Conservation Park protects part of the Donnybrook Wetlands. The conservation park was gazetted in 1996 and consists of 54ha of mangroves, saltmarsh, sedgelands, melaleuca wetlands and eucalypt open forest. It is located within the southern coastal lowlands environmental province of the South East Queensland biogeographic region.

The saltmarsh area of the park (known as the Donnybrook claypan) is an important roosting site for migratory wading birds, which live in Moreton Bay between September and April each year, and then fly thousands of kilometres to their breeding grounds near the Arctic circle. The tidal areas within the park are included within the Moreton Bay Marine Park and are a significant component of the Moreton Bay Ramsar site, which is recognised as a wetland of international importance.

2.2 Values of Bullock Creek Conservation Park

Geology and landform

Bullock Creek Conservation Park is located on the sedimentary deposits of an estuarine tidal delta that formed some 120 000 years ago. The conservation park is low lying throughout, with some areas of freshwater wetland and other areas subject to tidal inundation. It forms part of the network of wetland areas that line either side of Pumicestone Passage.

Plants and animals

The vegetation of Bullock Creek Conservation Park consists of three distinct communities: mangroves, saltmarsh and open forest dominated by paper-barked tea tree *Melaleuca quinquenervia*. The open forest area includes small pockets of

sedgelands and eucalypt open forest with forest red gum *Eucalyptus tereticornis*, grey ironbark *E. siderophloia* and swamp box *Lophostemon suaveolens*. A fringe of swamp she-oak *Casuarina glauca* grows along the edge of the open forest adjacent to the saltmarsh and mangrove areas. The mangrove community consists predominantly of grey mangrove *Avicennia marina subsp. australasica*. An area of small-stilted mangrove *Rhizophora stylosa* occurs immediately adjacent to the conservation park in Moreton Bay Marine Park. The saltmarsh area of the park supports marine couch *Sporobolus virginicus* and samphire *Sarcocornia quinqueflora*. Each of these vegetation communities is poorly represented within the protected area estate in south-east Queensland. Although small in size, Bullock Creek Conservation Park therefore has significance for the conservation of these communities.

The parks claypans and saltmarshes are used by wading birds as high tide roost sites. Birds found roosting include the rare eastern curlew *Numenius madagascariensis*, whimbrel *Numenius phaeopus*, greenshank *Tringa nebularia*, black-tailed godwit *Limosa limosa*, bar-tailed godwit *Limosa lapponica* and great knot *Calidris tenuirostris*. Sixteen species of migratory wader birds have been recorded roosting there. Bullock Creek Conservation Park is one of only four major wader roost sites in Pumicestone Passage. Of these, it is the least subject to disturbance from recreational activity, tidal inundation and approved future development. The park's value as a roost site is likely to increase over time, as the other sites along Pumicestone Passage experience disturbance and habitat loss.

Numerous other bird species occur within the conservation park, including the Caspian tern *Sterna caspia*, white bellied sea eagle *Haliaeetus leucogaster* and osprey *Pandion haliaetus*. These species are recognised as having conservation significance under international agreements.

The conservation park also provides habitat for local populations of the eastern grey kangaroo *Macropus giganteus*, swamp wallaby *Wallabia bicolor* and northern brown bandicoot *Isodon macrourus*. These species are listed as common in Queensland, but are locally threatened in the south-east of the state, due to ongoing habitat loss and population fragmentation.

The false water rat *Xeromys myoides*, which is listed as vulnerable under the *Nature Conservation (Wildlife) Regulation 1994*, occurs within the mangroves and adjacent sedgeland communities of the conservation park.

3 Management strategies

| Current situation | Desired outcomes | Proposed policies, guidelines and actions |
|--|---|--|
| <p>Native plants</p> <p>The mangrove, saltmarsh and <i>Melaleuca</i> open forest communities are in relatively good condition. Each is poorly represented in the protected area estate and is subject to ongoing coastal development elsewhere in south-east Queensland.</p> <p>The saltmarsh and mangrove areas are included within the Moreton Bay Marine Park and are part of the Moreton Bay Ramsar site, which is recognised as a wetland of international importance.</p> | <p>The diversity of community types and species within communities is maintained.</p> | <p>Undertake a vegetation survey and establish a photographic monitoring program to determine the distribution and condition of vegetation communities.</p> |
| <p>Native animals</p> <p>Bullock Creek Conservation Park contributes to the conservation of numerous species of native animals. Formerly freehold land, the park was purchased by the Queensland Government in 1995 for the primary purpose of protecting the wader roost site.</p> <p>The international importance of migratory species covered by the JAMBA, CAMBA and Bonn agreements, is recognised through Schedule 5 of the <i>Nature Conservation (Wildlife) Regulation 1994</i>. This requires governments to have regard for a species special cultural significance and conservation management requirements.</p> <p>The control of mosquitos for public health purposes is currently undertaken by Caboolture Shire Council on estuarine areas on the southern side of Bullock Creek. Mosquito control is not undertaken in the conservation park because its topography is not suited to mosquito breeding. Helicopters engaged in mosquito control elsewhere along Pumicestone Passage have the potential to disturb roosting wading birds on the conservation park.</p> | <p>The diversity of native animal species within the conservation park is maintained.</p> <p>Migratory wading birds have ongoing access to a safe and secure roosting site within the conservation park.</p> | <p>Continue to monitor wader bird populations through the Wader Study Group.</p> <p>Incidental fauna observations from the conservation park will be documented under the Moreton Bay Wildlife Atlas program.</p> <p>Include the conservation park as a reference site for population monitoring of the vulnerable false water-rat <i>Xeromys myoides</i>.</p> <p>Liaise with Caboolture Shire Council regarding the flight paths of helicopters used in mosquito control programs in areas adjacent to the conservation park and elsewhere in Pumicestone Passage.</p> |
| <p>Introduced plants and animals</p> <p>A severe infestation of Groundsel bush is widely distributed throughout the park's open forest area. Groundsel bush is a Declared Plant under the <i>Rural Lands Protection Act 1985</i>. It is listed in both the P3 and P4 categories, which means that its numbers and distribution must be reduced and it must be prevented from spreading.</p> <p>Several species of environmental weeds including Balsam are present as a result of garden waste dumping and seeds being washed in via storm water drains.</p> <p>Foxes, feral cats and uncontrolled domestic dogs are a potential threat to native animals in general and to the roosting wader birds in particular. Dogs are prohibited from the conservation park under s 86 of the <i>Nature Conservation Regulation 1994</i>.</p> | <p>Declared plants are controlled in accordance with the <i>Rural Lands Protection Act 1985</i>.</p> <p>The impact of environmental weeds on the natural values of the park is minimised.</p> <p>The diversity and viability of native wildlife, particularly wader birds, are not adversely affected by feral animals or uncontrolled domestic dogs.</p> | <p>Implement a weed control program with priority given to declared plants and environmental weeds. Initial control work should focus on reducing the further spread of weeds by using environmentally sensitive techniques and by preventing the further dumping of garden waste. Encourage natural regeneration of native plant species and suppression of weed species as part of the fire management program for the park.</p> <p>Investigate the impact of feral animals on native wildlife and if necessary implement a coordinated control program in conjunction with the Department of Natural Resources.</p> <p>Liaise with Caboolture Shire Council and the local community regarding the need to keep the conservation park free of domestic dogs.</p> |
| <p>Fire management</p> <p>Fires have occurred relatively frequently in the <i>Melaleuca</i> open forest area of the park. This forest type is adapted to fire, but the diversity of plant species in the understorey in the park is low, indicating that fires may have occurred too frequently in the recent past. The ecological requirements of the forest need to be balanced with the protection of adjacent properties and human life.</p> | <p>The diversity of plant species and fauna habitats within the conservation park is maintained.</p> <p>Human life and property in adjacent residential areas are protected from fire.</p> | <p>Establish fuel reduction zones along the western and northern boundaries of the conservation park.</p> <p>Develop a fire response plan in consultation with the local rural fire brigade and the Queensland Fire and Rescue Service.</p> <p>Assess the ecological requirements of fire sensitive species and ecosystems to determine an appropriate fire regime.</p> |
| <p>Recreation and tourism</p> <p>The park is not appropriate for recreation due to its critical importance as wader habitat and the fragility of its saltmarsh and mangrove areas. Roosting wader birds would be disturbed by any recreational activity on the saltmarsh or adjacent areas. Each time these birds are disturbed and fly off, they use up essential energy reserves which they have been storing for their long flight back to the Arctic to breed. Frequent disturbance is likely to reduce their survival and breeding success.</p> <p>Recreational birdwatchers need to recognise that for their long-term survival migratory wading birds need safe and secure roost sites that are free from disturbance.</p> | <p>Roosting wader birds remain free from disturbance by recreational activities.</p> | <p>Monitor the use of the park by people and the level of disturbance to the waders.</p> <p>No developed facilities or recreational infrastructure will be provided.</p> |
| <p>Education and interpretation</p> <p>Information about the importance of Bullock Creek Conservation Park and other wader roost sites in Pumicestone Passage should be provided to encourage greater public appreciation and responsible use of the area. This information should be provided off-site in order to minimise disturbance to the birds.</p> | <p>Educational and interpretive materials which support conservation outcomes are provided locally.</p> | <p>Provide local schools and environmental education centres with information on the values of Bullock Creek Conservation Park and the management strategies being used to protect them.</p> <p>Place boundary signage at approaches to the conservation park to encourage responsible use of the area.</p> |
| <p>Plan implementation and monitoring</p> <p>Bullock Creek Conservation Park is managed by Queensland Parks and Wildlife Service staff based on Bribie Island. The conservation park is managed in conjunction with Moreton Bay Marine Park and Bribie Island National Park. Implementation of this plan will need to be coordinated with the management requirements of these other areas.</p> | <p>Resources are made available for the implementation of this management plan on the basis of recognised priorities.</p> | <p>Develop an implementation schedule for the management plan.</p> <p>Conduct a review of the management plan within 10 years of its approval, as prescribed under s 125 of the <i>Nature Conservation Act 1992</i>.</p> |
| <p>Complementary management of adjoining areas</p> <p>This management plan is legally confined to the conservation park, but seeks to encourage cooperative management of adjacent areas. The Pumicestone Passage section of Moreton Bay Marine Park overlaps the intertidal areas of the park and extends along the tidal reaches of Bullock Creek. Caboolture Shire Council has some management responsibilities on these intertidal areas and on areas of vegetated esplanade adjacent to the conservation park.</p> <p>A Regional Coastal Management Plan and a Shorebird Habitat Management Plan for south-east Queensland, which are currently being prepared by the Environmental Protection Agency, will provide information and mechanisms to foster improved coordination of the management of nearby areas.</p> | <p>The management of Bullock Creek Conservation Park is coordinated with that of other natural areas along and within Pumicestone Passage in order to achieve complimentary outcomes.</p> | <p>Maintain close management coordination with Moreton Bay Marine Park.</p> <p>Implement relevant strategies from the Regional Coastal Management Plan and the Shorebird Habitat Management Plan for south-east Queensland.</p> <p>Liaise with the Caboolture Shire Council regarding complementary management of nearby areas of conservation value.</p> |