Management plan

South East Queensland Biogeographic Region

Buckleys Hole Conservation Park

QUEENSLAND GOVERNMENT

QUEENSLAND NATIONAL PARKS AND WILDLIFE SERVICE

Department of Environment

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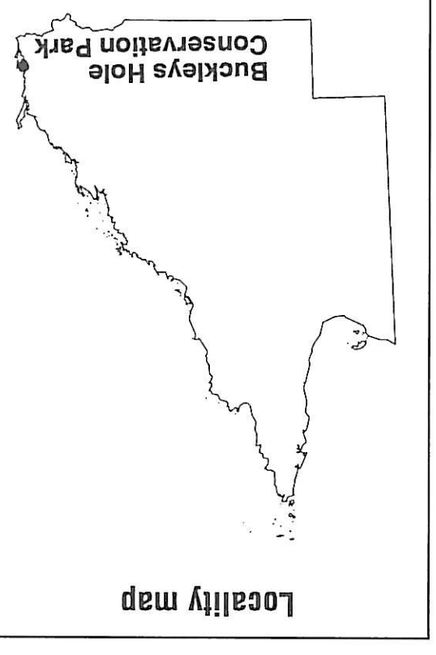

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Summary

This management plan provides the framework and guidelines on how Buckleys Hole 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 May 1998 and, in accordance with s125 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 Department of Environment's Southeastern Regional Centre in Brisbane on (07) 3224 5641 during business hours.

This management plan was prepared by Department of Environment staff. Thanks are due to those groups and individuals who made submissions in response to the draft plan.

1. Management directions and purposes

1.1 Management directions

Buckleys Hole Conservation Park is dedicated under the *Nature Conservation Act 1992* and must be managed under section 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.

Buckleys Hole Conservation Park will be managed as a place of significance for migratory birds and to provide for environmentally sensitive recreation opportunities such as birdwatching and bushwalking.

The park will also 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 is recognised and that their populations and habitats are conserved through appropriate management.

1.2 Purposes

The major purposes of management will be to ensure that:

- the lagoon and its surrounds are maintained to ensure continued use by water birds;
- the vegetation communities and dune system are protected;
- threatened fauna is monitored and their requirements are included in management programs;
- nature-based recreational and educational day use opportunities are provided; and
- Aboriginal groups and the local community are aware of park management issues and provided with opportunities to be involved in management of the park.

2. Basis for management

2.1 Bioregional Context

Buckleys Hole Conservation Park conserves 87.7ha of coastal forest and wetlands on the south-western extremity of Bribie Island, adjacent to Pumicestone Passage and Moreton Bay. It was initially gazetted as an environmental park in 1991 and subsequently dedicated as conservation park in 1994. Bribie Island is the northern most island within Moreton Bay and is low-lying with a maximum elevation of 10m. Pumicestone Passage and the adjacent terrestrial ecosystems are of national and international significance for species of wader birds, providing a staging area during migration and important roosting and feeding sites.

2.2 Values of Buckleys Hole Conservation Park

Geology and landform

The conservation park is made up of beach sand ridges and swales which date back 6000 years to the Holocene Period. This dune system contrasts with the rest of Bribie Island and provides a valuable record of the recent geological development of the area.

Plants and animals

The park protects a range of ecosystems including wetlands, *Melaleuca quinquenervia* woodland and open forest, with areas of eucalypt open forest. Small areas of *Callitris columellaris* open forest and *Casuarina equisetifolia* open forest also occur within the park. Although small in size, Buckleys Hole Conservation Park contributes to the conservation of these vegetation community types, which are under threat throughout coastal south-eastern Queensland.

Pumicestone Passage and Buckleys Hole Conservation Park are included in the Moreton Bay Ramsar site which recognises their international importance as wetland areas. Buckleys Hole has a great diversity of bird life recorded, including 23 migratory bird species covered under the JAMBA and CAMBA agreements. Migratory species such as the Mongolian plover *Charadrius mongolus*, white-winged tern *Sterna leucoptera*, bar-tailed godwit *Limosa limosa*, whimbrel *Numenius phaeopus* and greenshank *Tringa nebularia* are regular visitors. Many resident and vagrant bird species have also been observed. The diversity of bird life found in the park results from the existence of a number of different habitats, including freshwater wetlands, tidal beaches, woodlands and open forests, occurring in a compact area.

Six species of birds that are listed as rare or threatened under the *Nature Conservation Act 1992* are known from the park. These are the black-necked stork *Ephippiorhynchus asiaticus*, little tern *Sterna albifrons*, eastern curlew *Numenius madagascariensis*, grey goshawk *Accipiter novaehollandiae*, chestnut teal *Anas castanea* and beach thick-knee *Esacus magnirostris*.

Two species of vulnerable frog, the wallum froglet *Crinia tinnula* and the wallum sedge-frog *Litoria olongburensis*, also occur in the park.

Cultural heritage

Two shell middens of Aboriginal origin occur in the park. One of the middens contains bones of birds and turtles as well as shell material. These middens are evidence of a culture that gathered marine and estuarine food resources. In 1799 the explorer Matthew Flinders described the Aboriginal people of Bribie Island as being well organised, with well made fishing nets and established dwellings. Flinders landed on Bribie Island at what is now known as South Point on 16 July 1799. This was the first documented European landing in southern Queensland. South Point lies off the south-western corner of Buckleys Hole Conservation Park and is where a skirmish between Flinders and some Aborigines took place. Despite this, Flinders' party spent several days exploring Pumicestone Passage and made friendly contact with the Bribie Island Aborigines on several occasions.

Recreation and scenic

Buckleys Hole Conservation Park shares a common boundary with Moreton Bay Marine Park and provides a natural coastal setting overlooking Pumicestone Passage. The freshwater lagoon and the various vegetation types provide a range of landscapes which appeal to beach users, park visitors and local residents. The park provides an opportunity to watch a diversity of birdlife through a bird hide which has been constructed overlooking the lagoon. Bushwalking on the tracks which lead to the beach through the open forests is another popular recreational pursuit.

Scientific and educational

The cultural heritage sites have educational value as a means of encouraging community awareness and understanding of Aboriginal heritage. The park is readily accessible to school and tertiary groups for wetland studies and has scientific potential as a reference site for monitoring migratory waders.

Current situation	Desired outcomes	Proposed policies, guidelines and actions
Native plants The vegetation in the park consists primarily of eucalypt open forest on the dune ridges, with *Melaleuca quinquenervia* communities in the swales. Freshwater sedgelands, casuarinas and Bribie Island pine *Callitris columellaris* also occur. The various forest types are at risk from overly frequent fires, weed invasion and uncontrolled private vehicle access. No individual plant species of conservation interest is known to occur in the park.	The biological diversity and integrity of the natural vegetation communities are conserved.	Undertake a vegetation survey to determine the distribution and condition of the various vegetation types in the park. Develop a vegetation rehabilitation plan which will determine the risks from inappropriate fire, weeds and visitor impacts on each of the identified vegetation communities in the park and recommend appropriate remedial strategies. Seek community support for, and participation in, an active rehabilitation program.
Native animals Buckleys Hole is an important habitat with respect to international agreements on the conservation of migratory birds, and must be protected. Migratory birds are vulnerable to disturbance, particularly from uncontrolled dogs. The park provides habitat for numerous species of resident birds, frogs, mammals and reptiles.	The diversity of habitats for both resident and migratory fauna species is maintained.	Establish a monitoring program for native animals and implement any necessary management actions to ensure the continued suitability of their habitats within the park. Compile a fauna database for the park, from historical and contemporary records. Encourage community involvement in wildlife monitoring programs. Enforce the control of dogs within the conservation park and investigate the need for local government restrictions on dogs on the adjacent beaches to be extended beyond the current limits.
Catchment management Buckleys Hole was previously a shallow lagoon which flushed into Moreton Bay periodically after heavy rains. Over 30 years ago the site was deepened and flushing was restricted by blocking the inlet with a sand wall to address sandfly and mosquito problems. During periods of heavy rain the sand wall may break, allowing inundation of the freshwater lagoon and altering the feeding grounds for birds.	The quality and quantity of water within the freshwater lagoon are maintained in good condition.	Investigate the hydrology of the lagoon and the dynamics of the adjacent beach dunes in conjunction with the Beach Protection Authority to determine the appropriate management of the lagoon and dune system. Develop a program of water quality monitoring in conjunction with local government and catchment management groups Encourage neighbouring landholders from areas which drain into the lagoon to adopt catchment management practises which reduce nutrient and sediment inputs.
Introduced plants and animals A recent survey of the park identified 46 species of weeds. These were scattered throughout the park, with major infestations along Red Beach Road, around the lagoon and on the dunes near South Point. Four weed species — groundsel, prickly pear, annual ragweed and milkweed — are declared plants which must be controlled. Many of the remaining species are environmental weeds which threaten the existing structure and regeneration of the native plant species. Feral cats, foxes and pigs are present on the park and represent a probable threat to native wildlife.	Declared plants are controlled in accordance with the *Rural Lands Protection Act*. The impact of environmental weeds on the natural values of the park is minimised. The diversity and viability of native wildlife is not adversely affected by feral animals.	Implement a weed control program with priority given to declared plants and serious environmental weeds. Initial control work on environmental weeds should focus on reducing the further spread of the weeds using environmentally sensitive techniques and revegetating disturbed areas with native species. Regular control work is also required to keep access tracks open and reduce the fire hazard around infrastructure such as the bird hide. Seek support for and participation in, the weed control program from local interest groups and neighbours. Investigate the impact of feral animals on native animals and if necessary implement a co-ordinated control program in conjunction with the Department of Natural Resources.
Fire management The park and surrounding areas were burnt by an intense fire in October 1994 and most of the park was burnt again in 1997. Arson has been responsible for frequent fires in the past. These fires have altered the vegetation communities creating a general lack of diversity in the mid and understorey where blady grass and black wattle dominate. The draft fire management plan for Bribie Island's protected areas recommends a fire free period for the conservation park of 8–10 years.	The existing diversity of vegetation communities and fauna habitats is maintained. Human life and property, both within the park and in adjacent residential areas are protected from fire originating from within the park.	Revise the draft fire management plan in consultation with local government and the Queensland Fire and Rescue Authority to include fuel reduction zones, mosaic burning, wildfire suppression strategies and the ecological requirements of fire sensitive species and ecosystems.
Cultural heritage Two shell middens are protected within the park. The conservation park is closely associated with the landing of Matthew Flinders in 1799 and the first documented contact between Aborigines and Europeans in southern Queensland.	Sites of cultural heritage significance are protected and the historical significance of Flinders' landing at South Point is recognised.	Initiate a monitoring program to ensure that the shell middens are being adequately protected. Liaise with the local Aboriginal community and historical society regarding the management of cultural heritage values within the conservation park.
Recreation and tourism The conservation park is a popular recreational venue for both residents and visitors to Bribie Island. Improved maintenance of facilities and access tracks will enhance the appeal of the park. The boundaries of the park are not readily identifiable to visitors. Camping opportunities are adequately provided for elsewhere on Bribie Island.	The park will be a safe and enjoyable place for people to visit. Nature-based recreational opportunities are provided on a day use basis.	Clearly define and regularly maintain the pedestrian access points into the park. Redesign the Red Beach Road carpark and day use area and prevent vehicular access beyond the carpark, except for that required for commercial fishing purposes. Replace dune fencing at Red Beach and delineate pedestrian access across the dune system. Install boundary signs to indicate the extent of the park and give it a clearer public identity. Camping will not be permitted.
Education and interpretation The park is currently used by local schools for environmental education programs. The natural and cultural values of the park provide a broad range of educational and interpretive opportunities.	The protection of natural and cultural values will be improved through greater public appreciation of the area.	Encourage nature-based educational use of the park. Identify appropriate cultural educational opportunities in consultation with traditional Aboriginal custodians. Develop a public contact plan, including interpretive signs at access points and the bird hide.
Plan implementation and monitoring A trusteeship agreement for the management of Buckleys Hole Conservation Park is in the process of being developed by Caboolture Shire Council and the Department of Environment. This agreement will form the basis for directing the implementation of the management plan.	Effective implementation of the management plan.	Day-to-day management of infrastructure, introduced plants and animals and visitor use will be the responsibility of Caboolture Shire Council. The monitoring of natural and cultural resources, fire planning and approval of proposed facilities and interpretive material will be the responsibility of the Department of Environment. Joint responsibility will be taken for the protection of natural and cultural resources and the implementation of the fire management program.