

Management plan



Hinchinbrook Island National Park

Townsville/Whitsunday Marine Park planning area

October 1999



QUEENSLAND
PARKS AND
WILDLIFE
SERVICE

Summary

This management plan provides the framework and guidelines on how Hinchinbrook Island National 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 September 1999 and, in accordance with 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 Planning Officer, Northern Region, Queensland Parks and Wildlife Service, PO Box 5391, TOWNSVILLE MAIL CENTRE, QLD, 4810, or telephone (07) 4722 5250 during business hours.

This management plan was prepared by Queensland Parks and Wildlife Service staff. Thanks are due to groups and individuals who made submissions in response to the draft plan. This plan was coordinated by Dr P Lavarack (QPWS).

Cover photograph: Ramsay Beach, the inset is a view of Hinchinbrook Channel.

For information on protected area management plans, the QPWS and EPA visit our web site www.env.qld.gov.au

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I Introduction

Hinchinbrook Island provides a unique opportunity to conserve natural communities between sea level and 1000 metres in the wet tropics region of north Queensland, in something very close to their natural condition. Because Hinchinbrook is an island, modern civilisation's effects have largely bypassed it, a condition not found on the adjacent coast. However, because of its proximity to large population centres, it is accessible and in this lies its second value: providing wilderness and semi-wilderness recreational experiences. The coastline and associated communities in the Wet Tropical Rainforests biogeographic region are subject to increasing development pressures. Hinchinbrook Island represents by far the longest stretch of natural coastline in the area, and remains in a largely natural condition, with few traces of early European use remaining.

Hinchinbrook Island and its adjacent waters are part of the Great Barrier Reef World Heritage Area. This places an obligation on the Queensland Parks and Wildlife Service (QPWS) to manage the area with World Heritage values to the forefront.

Hinchinbrook Island National Park covers the entire island, an area of 39 900 hectares. The largely mountainous island features a long chain of high peaks, culminating in Mt Bowen with an elevation of 1142 metres. Extensive mangrove areas occur in many locations, the largest being on the west coast and in Missionary Bay. One of the features which makes this national park unusual and significant is the large mangrove area included in the park. Apart from obvious biological significance, inclusion of these mangroves provides important opportunities for management of a complete series of ecosystems from sea level to mountain peaks. A survey of all the tropical lowlands from Ingham to Cooktown (Stanton and Godwin 1989) indicated that Hinchinbrook Island National Park and Hinchinbrook Channel National Park (now part of Lumholtz National Park) are of outstanding importance.

Hinchinbrook Island is also an area of cultural and spiritual significance to the descendants of the original inhabitants. Several tangible reminders of their lifestyle remain, in the form of middens, stone fishtraps and perhaps paintings. The history of the Aboriginal people of the island is a sad one, with the population being almost wiped out by conflict with early European settlers, and indirect means such as introduction of diseases.

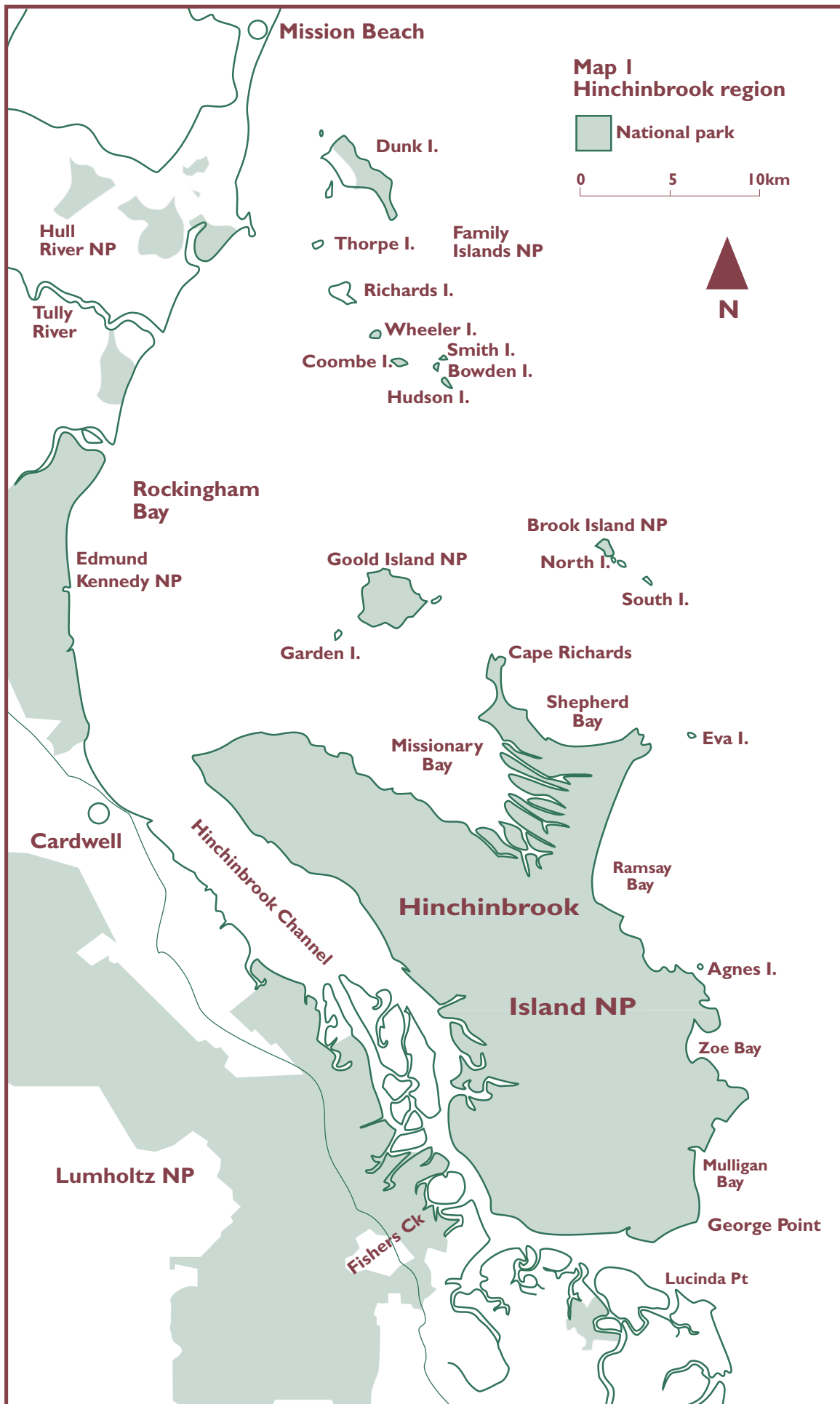
In common with many other areas in north Queensland, Hinchinbrook Island is under increasing visitor pressure with use at, or approaching, critical levels at many popular sites. Decisions have to be made between limiting use, or 'hardening' areas (concentrating impact into a particular area by way of defined camping grounds or pathways). Hinchinbrook Island has had almost no logging, no roads, virtually no agricultural or grazing industries and no urban development: its scenic and biological attractions are intact. This can be said of few — if any — areas on the adjacent mainland.

The large Port Hinchinbrook Resort currently under construction will have an impact on the adjacent Hinchinbrook Island National Park. This plan regards Hinchinbrook Island's values as fragile and rare. It considers that permitting more visitors than limits specified here would compromise the very reason for the area's popularity, and have an unacceptable impact on its natural values.

Management plans for Brook Islands National Park, Goold Island National Park, and Family Islands National Park are being developed concurrently, as are plans under the *Marine Parks Act 1982*, the *Great Barrier Reef Marine Park Act 1975* (Commonwealth legislation) and the *Coastal Protection and Management Act 1995*. These plans and guidelines seek to establish a framework for managing the islands and waters of a stretch of coastline between Lucinda and Mission Beach and should be read in conjunction with this management plan.

The purpose of management plans is to set clear directions for the management of national parks. To do this, detailed management actions are proposed where necessary.

Once approved, final plans are given effect under the *Nature Conservation Act 1992*. Under section 125, plans must be reviewed within 10 years.



Map 2 Hinchinbrook Island and adjacent waters

 Hinchinbrook Island
National Park



2 Management directions and purposes

2.1 Directions

Hinchinbrook Island is part of the Great Barrier Reef World Heritage Area, and it will be a major direction of this plan to ensure international obligations are fulfilled. (See section 3.4.) Hinchinbrook Island National Park will be managed to preserve its exceptional natural, cultural and scenic values. Over most of the island, only self-reliant, nature-based and ecologically sustainable recreation will predominate, and the natural environment will be conserved and remain largely undisturbed. The most notable exception will be the small resort complex under lease at the northern end of the island.

Visitors to the national park will be able to experience recreation opportunities ranging from resort-style activities to a wilderness experience. Except for the resort, all visitor activity and services will be designed to have minimal impact on the natural environment. A very large part of the park will be managed for its remote and natural values. This plan recommends strongly against any further resort development outside the resort lease. Emphasis will be put on helping visitors appreciate and learn about the area's environment.

Hinchinbrook Island National Park has a history of worthwhile scientific research. This plan proposes such research continues. Public utilities within park boundaries will continue with as little as possible effect on the natural environment, but no new facility will be approved unless it is shown it is essential to public safety and there is no alternative.

In managing Hinchinbrook Island, opportunities will be provided for Aboriginal people in particular and the community in general to be involved in, and consulted about, decisions concerning the national park's future.

2.2 Purposes

The purposes of management will be to ensure:

Conservation

- species of conservation significance, vegetation communities and animal habitats are protected from impacts associated with increasing human use;
- a fire plan is developed to maintain the mix of vegetation types;
- identified rare or threatened species, such as the beach stone-curlew, are studied, and any necessary conservation measures identified and started;
- visitor use is monitored and controlled to protect sensitive communities or species; and
- natural communities are protected from the effects of introduced species.

Recreation and tourism

- the northern part of the island and The Haven are managed for moderately heavy use to cater for day visitors and campers at Macushla, The Haven and resort guests at Cape Richards;
- the remainder of the island is treated largely as an area which has wilderness qualities, with only a limited number of moderate-use visitor nodes such as Zoe Bay, Ramsay Bay boardwalk area, Nina Bay, Mulligan Falls and Little Ramsay Bay;
- wilderness values are protected and visitor numbers managed to ensure minimal impact with few visitor facilities provided; and
- the effectiveness of limits to visitor numbers are monitored and adjustments made from time to time.

Education and research:

- relevant scientific research and educational visits are encouraged where they are compatible with major management purposes for the national park.

Native title and cultural heritage:

- cultural resources such as stone fishtraps are preserved and, with the support of traditional custodians, explained to the public (liaison and involvement with Aboriginal groups and individuals will be an important part of conservation, management, presentation and interpretation of cultural values);
- Hinchinbrook Island's cultural and spiritual values are not damaged or destroyed; and
- relevant Aboriginal groups have an input into decisions affecting their particular interests.

3 Basis for management

3.1 Regional context

Hinchinbrook Island National Park lies in Cardwell Shire. It is close to the coast, and separated by the narrow Hinchinbrook Channel from the busy regional towns of Cardwell, Ingham and Lucinda. It is situated halfway between the major cities of Cairns and Townsville. The close proximity of these towns and cities provides a large number of potential visitors, both locals and tourists.

Several other national parks are located in the vicinity: the large Lumholtz National Park across the Channel, and the smaller Edmund Kennedy National Park to the north of Cardwell. Several other smaller nearby islands are national parks: Goold Island, Brook Islands and the Family Islands to the north, and Orpheus Island to the south.

3.2 Planning area

This plan covers Hinchinbrook Island National Park; no other areas are considered. As a national park, the area is under QPWS control. In areas where coastline or a stream is shown as the boundary, the mean high water mark is the boundary, but several large mangrove areas have been included in the national park. Estuaries are included where both banks are in the national park.

The surrounding waters are part of the Central Section of the Great Barrier Reef Marine Park, but are not included in this plan. The national park is part of the Great Barrier Reef World Heritage Area and is adjacent to the Wet Tropics World Heritage Area.

3.3 Planning process

QPWS has developed this management plan.

The management plan's purpose is to propose clear directions for management of Hinchinbrook Island National Park. To do this, detailed management actions are set out where necessary.

In accord with s115 of the *Nature Conservation Act 1992*, advertisements giving notice of the publication of the draft plan were published in August 1996, inviting public comment. Fifty-eight submissions were received from a variety of individuals and interest groups. These submissions were used in preparing this plan.

3.4 Management obligations

The area's values have been recognised in the declaration of the Hinchinbrook Island National Park, the surrounding Townsville/Whitsunday State Marine Park, and Great Barrier Reef Marine Park.

Hinchinbrook Island National Park is managed under provisions of the *Nature Conservation Act 1992*. Section 17 of this Act defines the management principles for national parks. Accordingly, Hinchinbrook Island National Park is managed:

- (i) to provide, to the greatest possible extent, for permanent preservation of the area's natural condition and protection of its cultural resources and values;
- (ii) to present the area's cultural and natural resources and their values; and
- (iii) to ensure the only use of the area is nature-based and ecologically sustainable.

The principle in (i) above, is regarded as the cardinal principle of management.

Aboriginal cultural heritage sites and places are protected under provisions of the *Cultural Record*

(*Landscapes Queensland and Queensland Estate*) Act 1987. Sites and places of cultural heritage significance, which are not significant solely through association with Aboriginal tradition, are protected under provisions of the *Queensland Heritage Act 1992*. Protection of all cultural heritage places in national parks is also a function of the *Nature Conservation Act 1992*.

Hinchinbrook Island lies within the Great Barrier Reef Region which was inscribed on the World Heritage List in 1981. Listing obliges managers to 'protect, conserve, present, rehabilitate and transmit to future generations the Great Barrier Reef World Heritage Area, within the meaning of the World Heritage Convention'.

QPWS is also obliged to allow established public utilities and infrastructure, such as navigation markers, to be operated and maintained and to avoid obstruction of rights of way.

A special lease (SL41350) covers about eight hectares in the Cape Richards area. Hinchinbrook Island Resort has been developed on this lease which runs for a term of 75 years from 1978. The development and certain aspects of the operation of this lease are dictated by lease conditions which require QPWS approval for any construction. An agreement also exists for the resort to build and operate a sewage treatment works outside the lease area.

3.5 Native title obligations

There were no formal native title claims over Hinchinbrook Island National Park at the time of writing this plan, however native title may exist.

The Commonwealth *Native Title Act 1993* provides for the recognition and protection of native title. The plan does not intend to affect, diminish or extinguish any native title rights.

3.6 Values

World heritage values

Although Hinchinbrook Island is only part of the Great Barrier Reef World Heritage Area, it meets the four criteria of outstanding universal value as set out in the World Heritage Convention:

- an example of a major stage of the earth's evolutionary history;
- an outstanding example of geological processes, biological evolution and peoples' interaction with their natural environment;
- a place with unique, rare and superlative natural phenomena; and
- a place which provides habitats for rare and endangered species of plants and animals.

These values will be described in more detail below.

Geology and landform

Hinchinbrook Island is dominated by the mountainous backbone which features peaks such as Mt Bowen (1142m), Mt Diamantina (955m), Mt Straloch (922m), Mt Pitt (722m), Mt Burnett (655m) and Mt Barra Castle (579m). These mountains comprise two distinct types of rocks: the main mass centred on Mt Bowen consists of granite; the mass projecting north-west and including Mt Pitt and Mt Burnett consists of silicic volcanics. This granite of the main mountain mass has given rise to spectacular, often jagged peaks as it weathers.

The island is separated from the mainland by narrow Hinchinbrook Channel, which represents the flooded valley of Herbert River.

Most of the island is mountainous with steep slopes and only a narrow coastal plain, no more than a few metres, or totally lacking, in some places. Near George Point, there is an extensive deposit of sand about 3km long and 2km wide. At the north-eastern extremity of the island, a peninsula juts to the north consisting of four separate rocky outcrops joined by sand dunes. Generally, these dunes are low-lying but reach heights of up to 60 metres near the northern end of Ramsay Bay. The sheltered side of these dunes supports an extensive mangrove and salt flat area on colluvial and alluvial deposits with numerous deep channels. Another extensive mangrove area is present between Gayundah and Deluge Inlets and numerous smaller occurrences are scattered around the coast.

Plants and plant communities

Hinchinbrook Island lies in the Wet Tropical Rainforests biogeographic region. It is subject to year-round hot and humid conditions with high rainfall, although short spells of cooler dry weather occur in winter. These factors, along with generally poor, shallow soils, determine vegetation patterns. The flora remains poorly known, despite recent mapping work by Cumming (1995). Thirty plant communities have been identified, some of which are restricted in their range. About 700 species have been recorded, but this is likely to be only a part of the flora actually present.

While areas of rainforest occur at low and high altitudes, most of the mountainous part of the island is covered with open forests and low heaths on shallow soil. The mangroves which line Missionary Bay and Hinchinbrook Channel represent one of the largest mangrove areas on the Australian continent and include a diversity of types and some 31 species of mangrove. Some small, but significant areas of *Melaleuca viridiflora* woodland occur on the north coast. Vegetation types such as this have assumed conservation importance as similar types on the mainland face increased rates of clearing. This is true of most of Hinchinbrook Island's plant communities, particularly lowland types, which may well be restricted to Hinchinbrook Island in years to come. A survey of all the tropical lowlands from Ingham to Cooktown (Stanton and Godwin 1989) indicated that Hinchinbrook Island National Park and Hinchinbrook Channel are of outstanding importance because of the diversity of rare communities.

About 14 species of rare and threatened plants have been recorded on the island, although it is highly likely that others exist awaiting discovery. One species of *Comesperma* - *C. praexcelsum* - is known only from Hinchinbrook Island. Other species such as *Banksia plagiocarpa* and *Drosera adela* are restricted to the island and adjacent mainland.

Native animals and habitats

As mainland habitats are cleared or fragmented, Hinchinbrook Island is becoming increasingly important as a refuge for animal species of the coastal lowlands. The topography from mangroves to mountain top provides a wide range of habitats. While formal fauna surveys are yet to be carried out, 19 mammals, 32 reptiles and about 150 bird species have been recorded in the park. It is likely these lists will increase significantly — particularly the reptiles.

Significant species recorded include the cassowary, pied imperial-pigeon, beach stone-curlew, estuarine crocodile, dugong, Irrawaddy dolphin.

Cultural values

Hinchinbrook Island is known to be a place of significance to Aboriginal people, although the nature and extent of this significance has not been fully explored. The island has a significant array of sites relating to past use by Aboriginal people. Some are highly significant, for example the stone fishtraps developed and used by the Bandjin people at Scraggy Point (The Haven). These fishtraps are an important example of these structures on the Australian coast. Several middens and at least one rock shelter with potentially important cultural material have also been located.

Little information is available about the chronology of the area's occupation, with the exception of one site at The Haven excavated by Campbell (1982) with a date of around 1200 years BP. The destruction of the indigenous population of the island at a very early stage of European contact is well documented and is an important aspect in the understanding of north Queensland history.

Culturally and spiritually significant to the original Bandjin people, Hinchinbrook Island has similar values for their descendants. Early accounts suggest a large population of predominantly coastal Aboriginal people existed before the arrival of Europeans in 1864. By 1900, the Hinchinbrook Island people and their culture had been almost destroyed (Thorsborne and Thorsborne, 1988). For this reason, the island has had little traditional use in nearly a century. However, a continuing use of marine resources such as fish, turtles and dugong has occurred in waters adjacent to the island.

There are few sites of non-Aboriginal cultural or historical significance on the island, with the exception of the wreck of an American B24 Liberator bomber which crashed on Mt Straloch's slopes in 1942. The wreckage is an important relic of World War II. Some relics have been removed from the site. The old coconut plantation at The Haven is one of the few plantations remaining from the early part of the century and has some historical value for this reason.

Scenic

Hinchinbrook Island represents the longest stretch of undeveloped coastline between Ingham and Cooktown. Central to the landscape values are the distinctive and spectacular, rugged skyline of Hinchinbrook Island, and the calm waters and twisting, mangrove-fringed waterways of the Channel which can be seen from several local vantage points. The Hinchinbrook Channel represents a unique passage landscape. There are only four major passage systems in Queensland (and Australia), each occurring in a different climate zone and representative of different environments: Pumicestone Passage, Sandy Strait, The Narrows and Hinchinbrook Channel (Bucher and Saenger, 1989).

The spectacular view of the island and Channel is an integral part of the experience of travellers on the Bruce Highway, as it sets the scene for north-bound tourists, forming a natural introduction to the landscapes of the Wet Tropics.

Recreation and tourism

Hinchinbrook Island offers the visitor spectacular scenery, unspoilt sandy beaches, clear freshwater streams and a range of interesting habitats. These conditions provide the setting for a diversity of recreational experiences in uncrowded conditions with reasonable access from Cardwell and Lucinda. Visits to the island by private and commercial boats are now well established, with several locations being used for day trips. Camping at designated areas with a low level of facilities, and bush camping with no, or very few, facilities, are both popular. Bushwalking on the Thorsborne Trail is now popular with Australian and international visitors and the trail is heavily booked for most of the cooler months of the year.

A small resort holds a lease on the park at Cape Richards. The resort offers luxurious but low-key accommodation, with an emphasis on nature-based activities. Resort guests use the national park.

Recreational fishing is a long-established use of the waterways within the national park, predating the park's declaration by some 60 years. The park offers quiet, peaceful surroundings for fishing.

Hinchinbrook Island has significant economic value to the tourism industry in Cardwell and the Ingham - Lucinda areas.

Research and scientific values

Hinchinbrook Island has been a popular site for research. In the forefront is some 20 years of mangrove research at Missionary Bay, by the Australian Institute of Marine Science. This has provided a database on the size, diversity, ecology and history of mangrove communities. Other research projects on the island have been carried out by James Cook University, the Queensland Naturalists' Club, and many others.

Unfortunately this research, with the notable exceptions mentioned above, has often not provided data useful for the park's management. Some of the research proposals could equally well be carried out on the adjacent mainland.

Education and interpretation

Hinchinbrook Island provides opportunities to educate visitors about natural values of the Wet Tropics and Great Barrier Reef regions. Such opportunities are no longer readily available on much of the mainland. As most visitors arrive by commercial tourist vessel or stay at the resort, large numbers can be easily contacted and provided with oral and written interpretive information.

4 Management strategies

Background information

To meet the management directions and purposes, two approaches have been followed. Firstly, a zoning plan has been developed which establishes, on a geographic basis, which management and recreational activities are appropriate. Secondly, a series of desired outcomes has been identified for each management issue. A number of guidelines and actions necessary to achieve these desired outcomes is then developed.

Management strategies seek to ensure that the island's natural, cultural and wilderness values remain intact. Consistent with this, reasonable visitor use will be permitted, providing the impacts are within acceptable limits and the wilderness character of most of the island is maintained.

4.1 Zoning plan

Hinchinbrook Island National Park has been divided into zones to provide broad guidelines for use and management of the area, and minimise existing and potential conflicts between activities. The zones are based on existing obligations, identified natural and cultural values, current and potential recreational use, and the desired management outcomes. (See tables 1 and 2 and map 3.) The zoning plan is not a statutory part of the management plan — it represents guidelines for decision-making on future development and use applications.

Map 3 Hinchinbrook Island zoning

- Remote - Natural Zone
- Natural - Recreation Zone
- Recreation zone
- Resort lease

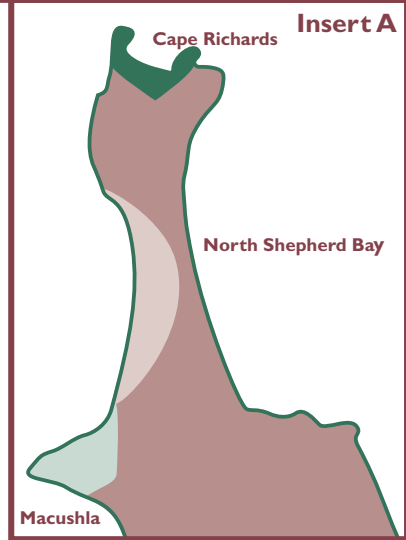


Table 1 Zoning plan

<p>Recreation Zone This zone includes existing developed areas such as Macushla and The Haven, where recreation use such as bushwalking, camping and day trips is established. Such sites have a history of use and this draft plan will maintain this level of use, allowing for small increases in some areas. In this zone, moderate levels of activities such as camping in developed campgrounds or walking on tracks and trails will be allowed. Group sizes will vary from small to moderately large.</p>	
<p>Desired setting</p>	<p>Visitors in the Recreation Zone will have opportunities for nature-based recreation activities, in a setting where natural elements predominate. On the beach, in camping areas, and on walking tracks, contact among visitors will be likely with some commercial groups present.</p>
<p>Purposes of management</p>	<ul style="list-style-type: none"> * <i>To maintain a recreational setting where visitors can experience nature-based activities in an environment dominated by natural elements, but modified to accommodate visitors in some developed areas.</i> * <i>To minimise effects of visitor facilities and visitors on natural values.</i> * <i>To provide opportunities for education and interpretation of the area's natural values and promote responsible use of the area.</i>
<p>Guidelines for management</p>	
<p>Conservation</p>	<ul style="list-style-type: none"> • Maintenance of conservation values will be the major priority in this zone, but some modification of the natural environment for visitor use in identified areas will occur.
<p>Visitor use and recreation</p>	<ul style="list-style-type: none"> • Opportunities will be provided for a range of nature-based recreation activities. • Use in some areas might be restricted to allow for rehabilitation or risks to public safety. • Limited, commercially-operated recreational and tourist activities will be appropriate in designated areas of this zone. • Interpretation will be given a high priority in this zone.
<p>Facilities</p>	<ul style="list-style-type: none"> • Recreational facilities such as toilets, picnic tables, shelter sheds, water, walking tracks, developed camping grounds and signs will be provided where appropriate.
<p>Management activities</p>	<ul style="list-style-type: none"> • Management presence will be frequent. • Prescribed burns will generally not be undertaken, other than where needed for protection of public safety or facilities. • Control of introduced plants and animals will be undertaken where practicable. • Rehabilitation works will be undertaken where required. • Research will be restricted to work which cannot be undertaken elsewhere, is of benefit to the management of the national park or of conservation in general and does not compromise natural, cultural or recreational values. • Any development shown to be essential for public safety and for which there is no other alternative might be approved subject to the Act.

Natural-Recreation Zone

The Natural-Recreation Zone includes those parts of the national park in which recreational use is at moderate levels and is catered for by means of trails and informal camping grounds. As well as inland areas such as the Thorsborne Trail, this zone will include mangrove areas within national park boundaries, particularly those mangrove areas used for recreational activities.

In some areas, access by commercial operators will be available, but just for small groups. Visitors will be provided only with simple unobtrusive facilities such as tracks, trails and — in a few selected localities — toilets and picnic tables. Generally group size will be small.

Desired setting	The Natural-Recreation Zone will provide visitors with opportunities for self-reliant recreational activities in small groups, in surroundings which are largely unmodified and predominantly natural, but with low-key facilities such as walking trails and simple signs.
Purposes of management	<ul style="list-style-type: none">* <i>To ensure human impact is managed within designated areas and protection of nature is the predominant use over the remainder of the zone.</i>* <i>To maintain recreational settings where visitors can experience nature-based activities in a natural environment, with minimal evidence of previous use and little contact with other users.</i>
Guidelines for management	
Conservation	<ul style="list-style-type: none">• Maintenance of conservation values will be the major priority in this zone.• Habitats will be managed (fire management, weed control) to ensure natural values are maintained.• Control of introduced plants and animals will be undertaken where practicable.
Visitor use and recreation	<ul style="list-style-type: none">• Opportunities will be provided for recreation activities, in a remote setting.• Use in many areas will have to be restricted to reduce impact on fragile communities and preserve the remote experience.• Areas where unacceptable environmental impacts or risks to public safety exist will be closed as required.• Limited commercially-operated recreational and tourist activities are appropriate in designated areas of this zone. Such operations will be characterised by small group sizes.• On-site interpretation will be limited to information necessary to prevent environmental degradation and maintain public safety.
Facilities	<ul style="list-style-type: none">• Visitor facilities will be restricted to low-key recreational facilities provided at specific sites in the form of walking tracks and trails, informal camping areas and signs. Toilets will be provided where monitoring has revealed a potential health problem. Other structures will not be provided in this zone.
Management activities	<ul style="list-style-type: none">• Management presence will be occasional.• Prescribed burns will be undertaken where natural communities are reliant on fire and pre-European fire regimes are now not operating.• Rehabilitation works will be undertaken where required.• Research will be restricted to work which cannot be undertaken elsewhere, is of benefit to management of the national park or of conservation in general.• Any development shown to be essential for public safety and for which there is no other alternative might be approved subject to the Act. This would include transmission towers and radio antennae.

<p>Remote-Natural Zone</p> <p>The Remote-Natural Zone includes steep and rugged landscapes with dense vegetation, inaccessible rocky shores and fringing mangroves. Due to difficulty of access, much of the island is rarely visited and consequently shows little evidence of human use. These natural barriers have limited and concentrated use to a few sites, and future management of this zone will take advantage of, and emphasise, this characteristic. Group sizes will be small.</p>	
<p>Desired setting</p>	<p>The Remote-Natural Zone will offer limited opportunities for self-reliant, nature-based recreational activities, in a completely natural environment with only a few localised indications of past use, and no facilities.</p>
<p>Purposes of management</p>	<ul style="list-style-type: none"> * <i>To maintain an area of national park where protection of nature from significant human disturbance predominates.</i> * <i>To maintain recreational settings where visitors can experience nature-based, self-reliant activities in a natural environment, with little or no evidence of previous use and little contact with other users.</i> * <i>To ensure current levels of impact are not increased and, given this constraint, opportunities are available for wilderness-oriented activities with no visitor services and minimal recreational use.</i>
<p>Guidelines for management</p>	
<p>Conservation</p>	<ul style="list-style-type: none"> • Maintenance of conservation values will be the over-riding priority in this Zone. • If necessary, habitats will be managed (fire management, weed control) to ensure natural values are maintained.
<p>Visitor use and recreation</p>	<ul style="list-style-type: none"> • Opportunities will be provided for self-reliant recreation of a wilderness character, with a high degree of isolation and solitude. • Use in many areas will be restricted to reduce impact on fragile communities and preserve the wilderness amenity. • Areas where impacts are developing, or a risk to public safety exists will be closed as required. • Commercial activities will not be permitted in this zone. • Recreational and interpretive services will not be provided in this zone. • Some parts of the zone which include mountainous backbone of the island will be declared a restricted access area; all use will be subject to a permit.
<p>Facilities</p>	<ul style="list-style-type: none"> • No facilities will be provided. This includes trails.
<p>Management activities</p>	<ul style="list-style-type: none"> • Prescribed fires will be used to maintain the existing mixture of vegetation types and assist in public safety. • Regular monitoring will be undertaken to determine the impacts of use. • Most visitor management will be carried out off-site by means of information sheets, videos, and briefing sessions.

<p>Resort lease A special lease exists at Cape Richard. Any new developments on the resort lease must be approved by QPWS. The resort has always been run as a small, ecologically-orientated resort, catering for guests staying several days. Adjacent to this special lease are an esplanade and road reserve which are not part of the national park.</p>	
<p>Desired setting</p>	<p>Visitors to the resort lease will have opportunities for nature-based recreational activities associated with a small island resort. Opportunities for activities requiring relatively large amounts of space, or not directly nature-based — such as a golf course — will not be available.</p>
<p>Purposes of management</p>	<ul style="list-style-type: none"> * <i>To maintain a recreational setting where visitors can experience nature-based activities in an environment dominated by natural elements, but modified to accommodate the visitor and provide the level of comfort consistent with a resort.</i> * <i>To provide information which advises visitors of the area's national and marine park status and its natural and cultural values, and promotes responsible use of the area.</i> * <i>To ensure the resort remains an unobtrusive part of the landscape and that resort numbers and activities do not pose a threat to the national park's natural values.</i>
<p>Guidelines for management</p>	
<p>Conservation</p>	<ul style="list-style-type: none"> • Conservation values will be managed in accordance with relevant legislation and consistent with lease conditions. • While preservation of plants and animals is important, the highest priority will be ensuring that the resort development blends with the landscape and is unobtrusive when viewed from the sea. • Impacts from the resort should be confined to the resort lease. (The sewage treatment plant is acknowledged as being outside the lease. This situation will be formalised but must not be seen as a precedent for any other off-lease development.) • Lease conditions preventing introduction of non-native plants and animals will be enforced.
<p>Visitor use and recreation</p>	<ul style="list-style-type: none"> • Use of the resort zone is the resort management's responsibility, subject to lease conditions, provisions of this plan, and any other agreements with QPWS, such as environmental management agreements and environmental monitoring programs.
<p>Facilities</p>	<ul style="list-style-type: none"> • QPWS will not provide any facilities other than appropriate signs.
<p>Management activities</p>	<ul style="list-style-type: none"> • Management of the zone is the resort management's responsibility, subject to QPWS guidelines and lease conditions. • QPWS will carry out inspection of the resort when required, to ensure compliance with lease conditions and any other agreements. • Where appropriate, QPWS might help the resort in activities such as interpretation, planning of revegetation or landscaping.

Table 2 Range of activities and facilities appropriate to the zones

Activities/facilities	Remote-Natural	Natural-Recreation	Recreation	Resort lease
Bushwalking and bush camping	A (subject to permit to enter)	A (except Freshwater Ck)	A	NA
Camping in semi-developed campgrounds	NA	NA	A	NA
Private sea kayak camping	A	A (except South Zoe Ck.)	A	NA
Commercial sea kayak camping	NA	A (except South Zoe Ck.)	NA	NA
Commercial camping	NA	NA	A (only at The Haven)	NA
Private boat-based camping	NA	A	A	NA
Commercial day trips	NA	A	A	A (if approv. by resort)
Visits by large groups (more than 30)	NA	NA	NA (except for The Haven)	A (if approv. by resort)
Campfires	NA	NA	NA	NA
Nature study	A	A	A	A
Resort-oriented activities	NA	NA	NA	A
Motorised water sports	NA	NA	NA	NA
Commercial houseboats and chartered yachts	NA	A	A	
Scientific research	A (only where no alternative)	A	A	A (where no effect on resort)
Recreational fishing in national park saltwater areas (other than where fishing is prohibited)	A	A	A	—
Mariculture	NA	NA	NA	NA
Education and interpretation	NA	A	A	A
Aircraft landing (other than emergencies)	NA	NA	NA	NA
Built infrastructure (toilets, shelter sheds, formalised campsites)	NA	A (special sites only)	A	A
Walking tracks	NA	A	A	A
Walking trails	NA	A	A	A
Signs	NA	A (low level only)	A	A
Private infrastructure or facilities	NA	NA	NA	A
Permanently moored structures, pontoons, jetties etc. (within the NP)	NA	A (special sites only)	A (special sites only)	—
Transmission towers and other public infrastructure	NA*	NA*	NA*	NA*
Buoys, channel markers, navigation aids etc.	NA	A	A	A

A = Generally acceptable. NA = Not acceptable.

NA* = Generally not acceptable (i.e. could be permitted under strict conditions, where there is no alternative for an essential structure)

A (special sites only) = Approval given only in exceptional circumstances or for existing infrastructure as at Ramsay Bay.

4.2 Natural resource management

Background information

Hinchinbrook Island National Park's primary value lies in the conservation of natural and cultural resources as described earlier. The island presents an excellent opportunity for preservation of a sample of rainforests, melaleuca forests, mangroves, various eucalypt-dominated forests, mountain heaths and coastline. In common with many areas of coastal Queensland, Hinchinbrook Island shows clear indications of a rapid change in vegetation types from open to closed forests, almost certainly related to a change in fire regimes. This change is reversing patterns of tens of thousands of years in a few decades. As well as changes to habitats, it is likely to result in the loss of biodiversity on the island.

Certain species will require a special effort to ensure their continued survival. Hinchinbrook Island provides better opportunities than most mainland sites for species such as the beach stone-curlew and estuarine crocodile.

Dugong, turtle and Irrawaddy dolphin populations in the vicinity of Hinchinbrook Island are significant. While these species occur predominantly in waters outside the national park, they have been recorded within park boundaries. Conservation of these populations must be considered in planning for motorised water sports, mariculture, adjacent coastal development, traditional hunting and other activities which might impact on these species.

The pressure for visitor use of Hinchinbrook Island is expected to increase in future. If this increase were allowed to take place, the island's natural communities would be affected. The development of Port Hinchinbrook resort and the associated marina on the adjacent mainland will be a major factor in increasing commercial and private demands on the area. The Thorsborne Trail is gaining an international reputation as a wilderness trail and will require very careful management to avoid adverse impact on the natural values.

Desired outcomes

Composition and distribution of the area's natural communities and species are maintained and species of conservation significance are protected.

Visitor awareness of the area's superb natural values is heightened.

Human impacts are minimised or managed within sustainable levels.

The effects of introduced animals are minimised.

More detailed information is available on the park's plants and animals.

4.2.1 Native plants

Background information

The sample of habitat types present is important and likely to become more so as clearing of native vegetation on the adjacent coastline increases. Lowland vegetation is of particular importance as it contains several species unique to the area of Hinchinbrook Island and the adjacent mainland. Plant communities of the island are a major food source for pied imperial-pigeons.

A reasonable database on Hinchinbrook Island's plants is available but more detailed information is required.

Guidelines and actions

- Where appropriate, fire will be used to maintain communities.
- Plant surveys will be continued and the vegetation map updated from time to time.
- Aerial photography and satellite imagery and a series of fixed control sites will be used to monitor vegetation changes.

4.2.2 Beach stone-curlews

Background information

The beach stone-curlew is a beach-nesting bird which is present on the island's beaches. It is a vulnerable species and is now much reduced on the mainland due to disturbance of nests and predation by introduced animals such as the fox, cat and pig. Surviving island populations are important and remaining habitat should be disturbed as little as possible. This will pose problems as the public can come ashore on any beach by boat in good weather and preventing these landings is virtually impossible.

Hinchinbrook Island has about 26km of beach, presumably suitable for beach stone-curlews. Of this, about one-half is lightly used by visitors, more than one-quarter is moderately used and less than one-quarter is heavily used. The only beaches which could be classed as heavily used are Orchid Beach, The Haven and Macushla.

It is unclear how the current level of visitor use on Hinchinbrook Island is affecting beach stone-curlews. Obtaining more information should be a high priority for management. Until precise information on breeding and other matters is available — and to protect beach stone-curlew populations — the following strategies will be followed to ensure areas free of heavy use are available to the birds:

Guidelines and actions

- QPWS will encourage a research project on the effect of human disturbance on beach stone-curlews.
- Visitors will not be encouraged to lightly-used areas of the northern 6km of Ramsay Bay, Thorsborne Bay, Banshee Bay, and beaches in Missionary Bay. Use of the beach near Agnes Island will not be permitted for camping between October and March.
- Visitors at South Shepherd Bay will be encouraged to use only the northern end.
- On the long beach at Mulligan Bay-Picnic Beach, moderate to heavy use should occur only at the existing picnic area and at the northern end of the beach. All other use should involve no more than walkers using the beach, preferably on the hard sand close to the water.
- If research results reveal a serious problem, visitor numbers will be limited further.

4.2.3 Crocodiles

Background information

The Hinchinbrook Channel is recognised as an important area for crocodiles which are known to breed in the estuaries of Gayundah, Paluma and Mendel Creeks, Deluge Inlet and probably Bluff Inlet. Crocodiles are also known to occur in Missionary Bay and North Zoe Creek and could breed in both areas.

The conservation plan for *Crocodylus porosus* in Queensland lists Hinchinbrook Island National Park as one of eight national parks where *C. porosus* is identified as a priority species for conservation management.

The conservation of breeding populations of crocodiles will pose problems for visitor use. Park visitors must be made aware of the presence of crocodiles and know how to behave to avoid risk of attack.

Visitor facilities will not be located in areas known to be frequented by crocodiles.

Houseboat and other charter boat users frequent estuaries along the Channel and are a group at risk of crocodile attack, as they may be inexperienced in relation to crocodiles.

Guidelines and actions

- No visitor infrastructure will be provided along the creeks between Scraggy Point and Bluff Inlet. Landing on the shores of these creeks will be discouraged or, if necessary, prohibited by the declaration of a restricted access area.
- Permits will not be issued to allow landing by commercial groups in these areas, other than at one or two designated sites in Deluge Inlet and then subject to any conditions which QPWS may impose.
- An information sheet on crocodiles will be required to be placed in each houseboat, yacht or other vessel available for hire in the Channel area.
- Existing warning signs will be maintained and new ones erected where appropriate.
- The need for speed limits in the island's estuaries will be assessed. Limits will be introduced if necessary.

4.2.4 Dugong, dolphins, and turtles

Background information

The seagrass beds of the Channel and Missionary Bay are well-known feeding areas for dugong, declared a vulnerable species. Occasionally, dugong are seen in the national park in the larger estuaries.

Turtles also are seen in the larger estuaries in the national park.

Irrawaddy and humpback dolphins are known to inhabit the Channel, and have been seen inside the park boundary. Conservation requirements for these animals are not well known, and research on their ecology and any potential threats is required.

Guidelines and actions

- Waterjet skis, water skiing and other motorised water sports will not be permitted in waterways in the national park. (See section 4.7.)
- Speed limits will be introduced on waterways in the park if necessary.

4.2.5 Introduced animals

Background information

Feral pigs occur on southern and western coastal areas of Hinchinbrook Island. They appear to be restricted by the high rugged mountains and have not become established on the east coast or the northern peninsular part of the island. Cane toads are the only other feral animal identified. At present, techniques are not available for their control.

Guidelines and actions

- Eradicate feral pigs. Eradication programs will be carried out in the George Point and Zoe Bay areas. Particular efforts will be made to keep pigs out of the area between Zoe Bay and Cape Richards.
- If any other feral animals are identified, they will be removed if feasible control measures are available.

4.2.6 Introduced plants

Background information

Hinchinbrook Island has a relatively low level of weed infestation. Lantana is a minor problem in some areas. Coconut trees have the capacity to alter the landscape of the east coast beaches, but have become an accepted part of the Nina Bay area. Garden escapees from early settlements also have the potential to spread in the park. Mangoes are present at most sites where early settlements occurred.

Guidelines and actions

- Weed outbreaks will be monitored, with particular emphasis on the area of the special lease and adjoining areas.
- Occurrence of *Rhoeo discolor* (a small succulent ornamental garden escapee) at The Haven will be assessed and action taken to contain or eradicate it.
- Coconuts will be controlled at the following sites: Nina Bay — limit the spread of the existing patch, thin out if necessary; Macushla — leave adult plants and naturally occurring seedlings; Ramsay Bay and Little Ramsay Bay — remove any adult coconuts and remove any seedlings which establish; Zoe Bay and other sites — leave adult plants, but remove seedlings which establish. Coconuts at The Haven are discussed in Appendix A 1. No coconuts will be planted on the national park.
- Removal of large mango trees will not be a priority, unless there is a particular reason to remove an individual tree.

4.3 Fire management

Background information

Some vegetation changes in lowland areas are evident where young rainforest is growing under, and eventually replacing, tall eucalypt forest. These could be due to irregular and infrequent cyclone damage followed by fire, or could be due to a decrease in fires of human origin since Aboriginal people disappeared from the island about the turn of the century. These areas now appear incapable of carrying a fire and the option to burn is gone. A possible consequence of the exclusion of fire is that large areas of open forest will disappear, along with a significant part of the island's biodiversity. As adjacent mainland lowlands are cleared, lowland island habitats become critical in preserving an array of lowland open forest species.

This plan has been formulated on the premise that changes in vegetation brought about by changes in the fire regime should be halted if possible, and a fire regime similar to that which prevailed in Aboriginal times should be introduced. This will need a plan of controlled burning, backed up by research and public information to explain reasons for actions taken.

Desired outcomes

Fire is managed to protect life and property, maintain habitats and protect cultural values.

Guidelines and actions

- The existing fire plan will be refined and further developed. It will consider fire protection and safety issues for the resort and major visitor nodes including the Thorsborne Trail, as well as the maintenance of current vegetation patterns. (See section 4.2.)
- Prescribed fires will be monitored to determine if desired results are being obtained.
- Efforts will be made to educate the public on the need to manage communities by using fire.

4.4 Landscape conservation

Background information

Hinchinbrook Island has outstanding landscape values based on the mountainous skyline and calm waterways of Hinchinbrook Channel. (See section 3.5.)

To protect these values, careful placement of facilities will be required. Of critical importance to the protection of landscape is the mountainous backdrop of Hinchinbrook Island where maintenance of natural landscapes is directly related to good ecological management. Maintenance of landscape values in the Channel area is important, and activities in the Channel such as motorised water sports and aquaculture — while outside the scope of this plan — have potential to change the nature of the Channel and island landscape.

Hinchinbrook Island Resort has been designed to have minimal visual impact and the island has no other visual intrusions.

Desired outcomes

Hinchinbrook Island's landscape is free of major intrusions.

Guidelines and actions

- Facilities such as toilets, navigation aids, signs, and other structures will be managed in accordance with zoning (see section 4.1 and table 1) and designed to have minimal impact on landscape values.
- Obtrusive facilities or developments such as floating hotels, permanently (or semi-permanently) moored vessels or pontoons, television towers, radio antennae, powerlines and cable cars will not be permitted in the national park. (See table 2.) Exceptions may be made where the development is essential to public safety and no feasible alternative exists. (See also section 4.9.)
- If any facility is approved, it must be built to minimise visual impact.
- National park facilities will be developed in accordance with the QPWS Site Planning Manual.
- Any redevelopment or extensions to the existing resort at Cape Richards will be designed in such a way that the national park's landscape values are not compromised.

4.5 Native title

Background information

There are no formal native title claims over Hinchinbrook Island National Park at the time of writing this plan, however native title may exist.

Desired outcome

Any native title rights which may exist over this national park are not adversely affected by this management plan.

Aboriginal people with a particular interest in the area are involved in decision making concerning matters in which they have an interest.

Guidelines and actions

- Consult with relevant Aboriginal people to establish principles and guidelines for cooperative management of native title, cultural heritage and other issues.
- Work programs and management activities will consider the requirements of native title legislation to ensure native title rights are not compromised.

4.6 Cultural heritage management

Background information

Cultural values are described in section 3.5. In summary, these include Aboriginal relics such as fishtraps at The Haven and less tangible cultural and spiritual values. Clearly, management of these values will need to involve representatives of relevant Aboriginal groups.

Values related to European history exist in the wartime airplane crash site and old coconut plantation at The Haven.

Desired outcomes

Places of Aboriginal and non-Aboriginal cultural heritage significance are protected from accidental or deliberate disturbance or destruction.

Such places are conserved for future generations, consistent with traditional custodians' wishes and principles established in the Burra Charter.

Aboriginal interests are recognised and reflected in the management of issues which may affect cultural heritage matters in the park.

Guidelines and actions

- Develop cultural resource management plans and programs for identified sites, in consultation with those Aboriginal people particularly concerned with the area and relevant users. Once developed, these plans will be negotiated with relevant user groups to ensure provisions of such plans are supported and potential for damage to such sites minimised.
- Interpret the island's cultural heritage in culturally sensitive ways, in accord with latest research, and in association with appropriate representative Aboriginal groups.
- Interpret cultural resources in accord with Aboriginal wishes about appropriate portrayal of their unique heritage and the latest research. Where possible, involve Aboriginal people in on-site interpretive activities.
- Reserve space in the permit system at certain locations for specialist tours which interpret Aboriginal cultural aspects of Hinchinbrook Island. These tours will be run by people approved by a representative Aboriginal group.
- Train staff to recognise sites and understand Aboriginal people's culture.
- Monitor the condition of cultural heritage places and act to address unexpected or undesirable changes.
- Ensure public use does not damage culturally significant sites, in particular fishtraps at The Haven and middens at Ramsay Bay and The Haven.
- Manage fishtraps at The Haven in accord with The Haven (Scraggy Point) Aboriginal Stone Fish Trap management plan.
- Encourage research into the island's cultural heritage.
- Maintain the coconut plantation at The Haven for its historical significance. (See Appendix A.)
- Survey the World War II bomber crash site on Mt Straloch to establish its historic value and worth as a protected relic under the Queensland Heritage Act 1992. Monitor the site to ensure it is not damaged by visitors. The area will be included in the restricted access area which is to be declared for the mountainous backbone of the island (i.e. access to private walkers by permit only).

4.7 Additions to the national park

Background information

Three small islands off Hinchinbrook Island's coast — Agnes Island, Eva Island and Haycock Island — are currently unallocated State land and not included in the park. Haycock Island was used for bombing practice during the war, but the vegetation is now in good condition. Haycock may require detailed evaluation for potential risks associated with unexploded ordnance. Eva and Agnes Islands are undisturbed and have a range of natural values. In particular, Eva Island has seabird and pied imperial-pigeons nesting. Adjacent to the special lease at Cape Richards are an esplanade and road reserve which are not part of the national park. Eva, Agnes and Haycock Islands, the esplanade and road reserve at Cape Richards could be included in the protected area, subject to the protection of any existing native title and approval of the Department of Natural Resources.

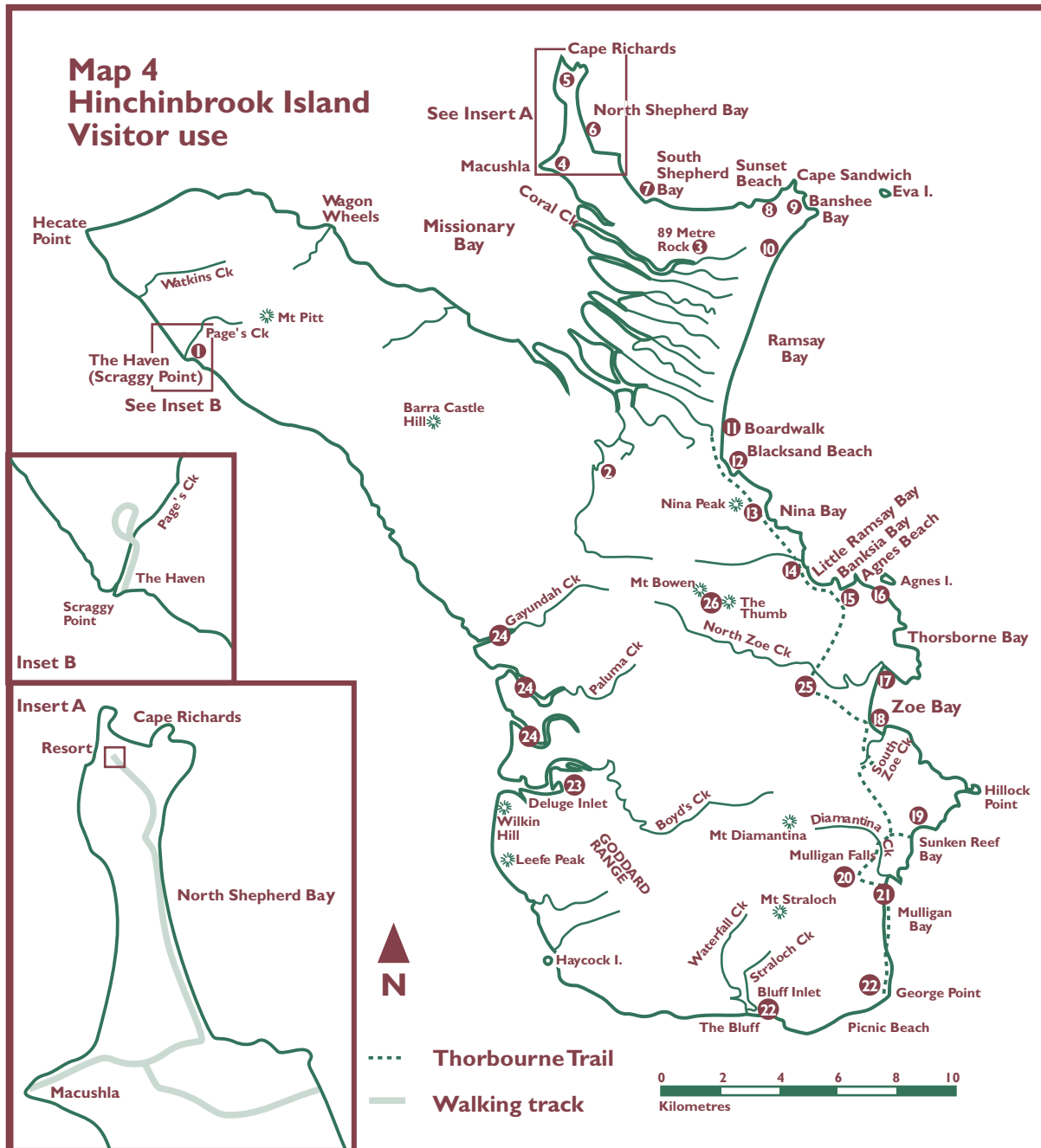
Desired outcomes

All of Hinchinbrook Island and its satellite islands are protected and managed as one unit

Guidelines and actions

- Necessary steps will be taken to add these areas to the national park.

Map 4 Hinchinbrook Island Visitor use



1	upgrade facilities (toilet, tables, signs, walking track) to deal with larger groups, assess potential for new tracks
2	no facilities
3	no facilities
4	maintain facilities (toilet, shelter shed, tables, signs, walking tracks), harden and delineate camp sites if necessary, assess potential for new tracks
5	upgrade interpretive signs, upgrade and maintain walking track
6	no facilities
7	no facilities
8	no facilities
9	no facilities
10	no facilities
11	maintain dune-ladder and monitor effectiveness, monitor need for toilet, assess need for interpretive signs
12	no facilities
13	maintain facilities (toilet, rat proof box, signs), assess need to harden and delineate campsites

14	maintain facilities (toilet, rat proof box, signs), assess need to harden and delineate campsites
15	no facilities
16	no facilities
17	no facilities
18	maintain facilities (campsites, toilet, picnic tables, signs, rat proof boxes)
19	no facilities
20	maintain facilities (campsites, toilet, signs, rat proof box)
21	no facilities at present, assess need for toilet and other facilities
22	maintain picnic and camping area, picnic tables and signs, assess feasibility of access to the trail starting near Bluff Inlet
23	no facilities
24	no facilities
25	maintain and upgrade Thorsborne Trail
26	no facilities or trails to be developed

Table 3 Summary of management limits (see Appendix A for more detail)

Locations	Com. day visitors	boat-based campers	Bushw. campers (max. group size 6)	Sea kayak campers (max. group — 16 com; 6 private)	Management considerations	Limits to use
1. The Haven	Y	Y	Y	N	A heavily used area, but care needed due to Aboriginal cultural sites.	Camping — max. stay 7 nights. Com. camping permitted. Com. day visitors — max. 50 people (larger groups permitted if accompanied by Aboriginal guide). Other limits apply. See Appendix A.
2. Fresh-water Creek	Y (very limited)	N	N	N	Low-intensity use only.	Com. day tours — max. 15 people, 4 times per month. Other limits apply.
3. 89 Metre Rock	Y	N	N	N	Low-intensity use only.	Com. day tours — max. 6 people, 4 times a month.
4. Macushla	Y	Y	Y	N	A heavily used area providing access to other sites on the island.	Private camping only — max. 30 people, max. stay 7 nights. Com. day visitors max. group size 30; max. per day — 60; max. group on walking track — 15 people.
5. Cape Richards	Y (Access to track only, unless by agreement with resort.)	N	N	N	Com. day visitors need resort approval for any activity other than access to track.	No camping. Max. com. group size on track — 15 people.
6. North Shepherd Bay	Y	N	N	N	Used frequently by visitors from Macushla and resort guests.	No camping permitted. Max. com. group size 15 people. No sea access to com. tours.

Locations	Com. day visitors	boat-based campers	Bushw. campers (max. group size 6)	Sea kayak campers (max. group — 16 com; 6 private)	Management considerations	Limits to use
7. South Shepherd Bay	Y	N	N	N	Low-intensity use only.	Com. day visitors — max. number 15 people in a group. No sea access to com. tours.
8. Sunset Beach	N	Y	Y	Y	Small area suitable for low use only.	Camping — max. group 6; for com. kayakers — 16. Limit 2 nights; no other com. camping.
9. Banshee Bay	N	Y	Y	Y	Low-intensity use only.	Camping — max. group size 6, for com. kayakers — 16. Limit 2 nights. No other com. camping.
10. North Ramsay Bay	N	N	N	N	Through walkers permitted; no camping.	No camping or com. day visits.
11. South Ramsay Bay	Y	N	N	N	Com. use limited to south end of beach and access to Thorsborne Trail.	No camping. Max. com. group size — 30 people, max. at one time — 30, max. number per week — 210. No sea access to com. tours.
12. Blacksand Beach	Y	N	N	Y	Moderate use only.	Sea kayak camping — max. stay 1 night, max. group size — 16 people. Com. day tours — max. group size 20 people; no com. tours to Nina Peak. No sea access to com. tours.

Locations	Com. day visitors	boat-based campers	Bushw. campers (max. group size 6)	Sea kayak campers (max. group — 16 com; 6 private)	Management considerations	Limits to use
13. Nina Bay	N	N	Y	N	Moderate use by bushwalkers.	Use by trail walkers only. No com. tours.
14. Little Ramsay Bay	N	N	Y	N	Moderate use by bushwalkers.	Use by trail walkers only. No com. tours.
15. Banksia Bay	N	Y	Y (max. 12 at one time)	Y	Low-intensity use only.	Private boat-based campers — max. of 2 groups of 6 people; max. stay — 3 nights; bushwalkers max. no. at one time — 6 people.
16. Agnes Beach	N	Y	Y	Y	Beach stone-curlew nesting area.	As for Banksia Bay, but no camping September 30–March 31.
17. North Zoe Creek	N	Y	Y	Y	No fresh water, low-intensity use only.	Boat-based camping, com. and private sea kayak camping permitted. No facilities.
18. South Zoe Creek.	Y	Y	Y	N	When weather conditions are good, site is heavily used.	Private boat-based campers — max. number 16 people, max. group size 6 people; com. day visits — max. group size 16 people; other limits apply. See Appendix.
19. Sunken Reef Bay	N	N	Y	Y	Low-intensity use only.	Use by Thorsborne Trail walkers and sea kayakers only.

Locations	Com. day visitors	boat-based campers	Bushw. campers (max. group size 6)	Sea kayak campers (max. group — 16 com; 6 private)	Management considerations	Limits to use
20. Mulligan Falls	Y (max. 16)	N	Y	N	Site moderately used by bushwalkers and day visitors. Careful management required due to nature of site.	Camping in defined areas only. Number limits apply — see Appendix.
21. Mulligan Bay	Y	Y	Y	Y	Low-intensity use only. No water available.	Private boat-based campers — max. number 16 people at one time.
22. George Point - Bluff Inlet	Y	Y	Y	Y	George Point subject to severe natural erosion. Bluff Inlet known crocodile habitat. New entrance to Thorsborne Trail may be developed subject to assessment.	George Point area — camping max. at one time — 16 people; day visitors — group size 30 people.
23. Deluge Inlet	Y	N	N	N	Known crocodile habitat, therefore limited shore access and no camping.	Com. day tours — max. group size 30 people; max. number of tours per week — 5. No camping.
24. Paluma, Mendel, Gayundah Inlets.	Y	N	N	N	Known crocodile habitat, therefore limited shore access and no camping.	Com. day tours — max. group size 30 people; max. number of tours per week — 5. No landings permitted and no camping.

Locations	Com. day visitors	boat-based campers	Bushw. campers (max. group size 6)	Sea kayak campers (max. group — 16 com; 6 private)	Management considerations	Limits to use
25. Thorsborne Trail	N	–	Y	–	Rough trail traverses fragile areas, very popular.	Max. group size 6 people, camping at designated sites max. stay 2 nights (except South Zoe, 3 nights).
26. The Mountains	N	–	Y	–	Fragile, remote area with no trails.	Max. group size 6 people, other limits apply. See Appendix.

4.8 Recreation, tourism, and visitor use

Background information

The area offers spectacular, unspoilt scenery and a range of interesting habitat types. (See section 3.5.)

Tourism demands on the area are likely to increase in line with other areas on the north Queensland coast. If proposed marinas near Cardwell and Lucinda eventuate, pressure from private users will increase. Such developments could also see the advent of larger capacity commercial vessels and increasing demands for use by large groups of day visitors. The unique natural attributes which attract visitors to Hinchinbrook Island are often susceptible to pressures from overuse. Maintenance of these values will pose problems for managers.

Bushwalking on the Thorsborne Trail and Hinchinbrook Island's mountains has been popular for many years. Thorsborne Trail is used to near capacity by private walkers. Detailed management guidelines are provided for these areas elsewhere in the plan. Experience with large bushwalking groups has been that clearing of campsites and other physical impacts can often occur, and in some cases, other users are disrupted.

The island is in an area where recreational and tourist use is likely to increase in the near future. This plan limits the impact of use, and conserves the island's natural and cultural resources and World Heritage values. In an island setting, controlling use by physical means is difficult, as people can land on almost any part of the coastline in favourable weather. The only feasible method of controlling use is to limit numbers allowed to use certain sites by means of a permit system, for example, camping permits along the Thorsborne Trail and commercial activity permits. As most use on Hinchinbrook Island derives from commercial operators, it is logical to set limits on their permits. Limits on private use are harder to enforce, but will be put in place when monitoring reveals they are required. This can be done by use of restricted access areas which require a permit for entry.

Number limits have been developed in light of monitoring to ensure use is ecologically sustainable. In most cases, the option of hardening has not been used because this may compromise the island's wilderness character. Visitor numbers at identified sites are set out in Table 3. Profiles and details for management of each site are set out in Appendix A.

Number limits in this plan are fixed, and cannot be changed significantly without a process of formally amending the plan. This necessarily involves public consultation. Number limits have been set as a result of observations and experiences of five years' managing the national park, using number limits similar to those in Table 3. These observations range from formal monitoring in a number of cases, to observations by experienced QPWS staff and others over time. In some cases, number limits have been revised as a result.

Desired outcomes

Diverse and well-managed nature-based recreational opportunities are available to the range of visitors to Hinchinbrook Island.

Visitors' exposure to risk is minimised.

Impact of recreational use on the natural environment is within acceptable limits.

4.8.1 Visitor access

In an island situation, access is usually possible at numerous points along the coast. Hinchinbrook Island has fewer access points than many islands due to the exposed rocky east coast, mangrove-fringed west coast, and very muddy north coast. Good anchorages are scarce on the east coast, but Hinchinbrook Channel and associated estuaries provide excellent anchorages.

Access issues at various sites are detailed in Appendix A, but some general actions and guidelines follow.

Guidelines and actions

- Access to the resort via seaplanes is acceptable. No aircraft or helicopter is to land on beaches or elsewhere on the island, other than in exceptional circumstances such as emergencies.
- Existing access at Missionary Bay mangroves to Ramsay Bay will be maintained and upgraded if necessary. Any new construction will be along similar lines to the existing boardwalk and will not involve destruction of any areas of mangroves.
- Other acceptable access points include George Point, Zoe Bay, 89 Metre Rock, Freshwater Creek, The Haven, Macushla, Deluge Inlet (limited access only), Bluff Inlet area and Mulligan Bay. A jetty or floating pontoon at the resort at Cape Richards is acceptable.
- Constructed access may be provided near Bluff Inlet subject to further environmental considerations. No constructed access will be provided in Bluff Inlet itself because estuarine crocodiles are present.
- No other access facilities will be provided or permitted.

4.8.2 Bush camping and bushwalking

Demand for walking and camping with consequent impacts is certain to continue. The *Nature Conservation Regulation 1994* requires all campers in protected areas to hold camping permits. Conditions can apply. Permits for Hinchinbrook Island are issued at QPWS offices at Cardwell, Ingham and Townsville. Intending walkers should talk to QPWS staff before leaving. Staff will ensure inexperienced walkers are aware of conditions.

Commercial bushwalking tours are considered inappropriate: the number of spaces on the trail is limited and the trail is fully booked during most of the cooler months of the year. If commercial tours were permitted, private walkers would be displaced. Commercial tours do not fit the self-reliant type of recreation described in the 'Management directions' part of this plan. (See section 2.1.) More detailed guidelines are given for the Thorsborne Trail and the Mountains in parts 25 and 26 of Appendix A.

Guidelines and actions

- Private bushwalking will be permitted in all areas of the island except on the resort lease (see table 2), but subject to restrictions on numbers. (See table 3.)
- Maximum group size will be six.
- Maximum number of nights allowed for camping at one site will be two, except where specified. (See table 3.)
- Monitoring of impact will be undertaken and numbers further limited if necessary.
- Unless specified elsewhere in this plan, only one group will be in an area at one time.
- A video outlining details of Thorsborne Trail, its appropriate use and skills required for its successful navigation, will be made available for viewing at QPWS offices and other outlets in the area. All intending bushwalkers will be made familiar with the minimal impact bushwalking code. Details of these principles will be included on all trail brochures, and in the video.
- Brochures with information on trails and availability of water will be provided. (See section 4.11.)
- No commercial bushwalking tours will be permitted on Thorsborne Trail or elsewhere in the park.

4.8.3 Private boat-based camping

Apart from camping associated with bushwalking, a demand for boat-based camping exists on the island. This group of visitors is generally from the adjacent area and responds rapidly to good weather conditions. This is a well-established use which predates the national park and occurs mainly on the east coast. While camping sites have suffered some damage in the past, little damage has occurred in recent times.

Guidelines and actions

- Private boat-based camping will be permitted in the Natural-Recreation Zone and the Recreation Zone at the following beaches: George Point, Mulligan Bay, South Zoe Creek, North Zoe Creek, Banshee Bay, Sunset Beach, Macushla, The Haven. (See tables 2 and 3.)
- Permitted group sizes and camping locations will be in accord with Table 3.
- To protect beach stone-curlews, boat-based camping will be prohibited at Agnes Island/Banksia Bay, beaches south of South Shepherd Bay, and other sensitive sites from October to March. (See table 3.)

4.8.4 Commercial boat-based camping

Permits have been issued for commercial boat-based camping at The Haven. No other sites on Hinchinbrook Island are considered suitable as they are used fully by other groups and many have unreliable or unsafe access due to weather conditions.

Guidelines and actions

- Commercial boat-based camping will be permitted at The Haven only. This will be reviewed when current permits expire.
- As for all site users, operators of commercial boat-based camping at The Haven will be required to comply with any cultural resource management plans and programs developed for the site.

4.8.5 Sea kayaking and canoeing

Sea kayaking is becoming increasingly popular. Department of Transport approval is required for commercial sea kayaking tours. In many cases, sea kayakers camp on the beach and have little impact on the vegetation. A small amount of private sea kayaking occurs on the east coast.

Sea kayaking and canoeing in the estuaries on the channel side of the island is potentially dangerous due to the presence of estuarine crocodiles.

Guidelines and actions

- Commercial sea kayaking camping trips will be permitted for a total of no more than 20 operating days in any month.
- Beaches where commercial sea kayaking will be permitted are: George Point, Mulligan Bay, Sunken Reef Bay, North Zoe Creek, Agnes Beach (seasonally closed, see Appendix A), Banksia Bay, Blacksand Beach, Banshee Bay, Sunset Beach.
- Due to the limited camping sites available, no more than two operators will be allocated permits.
- Maximum group size will be 16 people.
- Commercial or organised sea kayaking and canoe tours will not be granted permits to use Hinchinbrook Island's western coast. Private canoeists will be discouraged from using the western side of Hinchinbrook Island National Park, due to the presence of estuarine crocodiles and absence of suitable landing areas.
- Due to existing levels of use by other groups, commercial sea kayaking operators will not be permitted to take groups to Mulligan Falls and Nina Peak. Access to Zoe Falls is permitted.

- Private sea kayaking camping will be permitted on any beach where camping is permitted, except at South Zoe Creek.
- The maximum group size for private sea kayakers will be 6 people.
- No more than 12 private sea kayakers are to be on the east coast at any one time.

4.8.6 Commercial houseboats and charter yachts

Currently, a small number of charter vessels operate in the area. The number of charter yachts (bareboats) is likely to increase dramatically when Port Hinchinbrook resort is operating. Generally, visitors sleep aboard but visit sites on the island. The Department of Transport regulates the size, passenger capacity, cruising range, sewage discharge, and other aspects of charter boat survey. Marine regulations also require bareboats to anchor overnight in safe locations.

Large numbers of visitors from bareboats in the Hinchinbrook region would have the potential to impact on popular areas. This plan cannot limit the number of bareboats available for hire in the area, but number limits at specified sites will affect bareboat-based visitors. The Cardwell-Hinchinbrook Regional Management Plan currently being prepared should consider limits on the number of these vessels permitted to operate in the Channel.

Houseboat hire is an established use in the Channel area. Houseboat users are a group at potential risk of crocodile attack, because they often use the estuaries along the Channel.

Guidelines and actions

- Limits will be set on use by houseboats and charter yachts at some locations.
- Information on crocodiles should be available to all houseboat users. A laminated information sheet suitable for attaching to houseboat walls will be produced. A permit condition will be that this is displayed. This sheet should contain information on crocodiles and other relevant matters.

4.8.7 Privately-owned vessels

This major group of users includes people from cruising yachts, charter yachts, hired small craft, and other private vessels. Use patterns of this group are essentially those of a day-user group as they sleep aboard their vessels or return to port before night. This group's use levels will escalate if proposed developments on the mainland proceed.

Because of the restricted number of suitable anchorages and potential congestion and impact at some key localities, numbers of vessels which anchor near the island or visitors that land on the national park might need to be limited in the future. Current use levels are causing few problems.

Ramsay Bay boardwalk has little use by private vessels, but if this use escalates to a congested level, time limits may need to be set as space is severely limited in this area.

Guidelines and actions

- Regular patrols will ensure private vessel owners are aware of their national park obligations.
- Interpretive signs at boat ramps, marinas and yacht clubs will be developed.
- Great Barrier Reef Marine Park Authority (GBRMPA) and QPWS have developed a reef and island user's guide of information, 'The Great Barrier Reef Marine Park (Reef) Manual', suggesting the best environmental practices for all users of marine and national parks.
- Maximum limits will be set for popular sites such as Zoe Bay, Banksia Bay, Macushla and The Haven. If these limits are exceeded regularly, these could be declared restricted access areas under the *Nature Conservation Act 1992* and the number of available permits for private day use limited. These indicative limits are:

- Zoe Bay — 30 people or (other than from commercial day trips) 6 vessels in one day
- Banksia Bay — 20 people in one day
- Macushla — 40 people in one day
- The Haven — 50 people in one day
- Paluma, Gayundah, Mendel, Deluge Inlets — total of eight vessels anchoring overnight in each estuary at once. If these limits are exceeded regularly, moorings will be installed and anchoring other than on a mooring will be prohibited.
- Ramsay Bay boardwalk — if this area becomes popular with private vessels, time at the boardwalk will be limited to a maximum of one hour and a permit system will be introduced.

4.8.8 Commercial day use

Access is limited by natural constraints on Hinchinbrook Island and demand for available sites is heavy. Commercial day use is concentrated at Ramsay Bay boardwalk, Macushla, Zoe Bay, 89 Metre Rock, Deluge Inlet, Freshwater Creek, Mulligan Bay, George Point, Missionary Bay and The Haven. The number of commercial operators at Cardwell and Lucinda running day trips to Hinchinbrook Island is discussed in Appendix A.

Special interest groups, group activities, and educational activities are considered separately. (See section 4.10.)

Guidelines and actions

- Commercial day trips will not be permitted in the Remote-Natural Zone. On the resort lease, they will be at the discretion of the resort and QPWS. (See tables 1 and 2.)
- Day trip operators using the national park will be encouraged to emphasise the natural and cultural values of the area and its national park status in their commentaries and promotional publications.
- In keeping with the aim of maintaining a ‘wilderness’ experience, large groups (more than 30 people) will not normally be permitted to land on Hinchinbrook Island, other than at The Haven where larger groups will be acceptable on a limited basis and subject to certain conditions. (See Appendix A.)
- GBRMPA and QPWS have developed a reef and island user’s guide of information, ‘The Great Barrier Reef Marine Park (Reef) Manual’, suggesting best environmental practices for all users of marine and national parks.
- As for all users of the site, operators of commercial day-visitor tours at The Haven will be required to comply with any cultural resource management plans and programs developed for the site.

4.8.9 Resorts and other commercial developments

The overriding objective of conserving natural and cultural values of Hinchinbrook Island precludes development of any new resorts or other similar developments on the island. Hinchinbrook Island will be retained as a natural area accessible to a range of visitors. The area is ringed with existing and proposed resorts, effectively removing the need to satisfy visitor accommodation requirements by further resort development on the island. In the past, there have been proposals for development at Zoe Bay. As Zoe Bay is a key area for conservation and nature-based recreation, any development would be unacceptable. The vegetation of the foredunes — featuring very large *Calophyllum* trees — and the closed forest of the area behind the dunes have high conservation values and should not be damaged. Landscape values are also high and should not be compromised.

Guidelines and actions

- Any major redevelopment of the Cape Richards Resort will be subject to QPWS approval and will not be granted outside the existing lease.
- No extensions to, or redevelopment of, Hinchinbrook Island Resort will be permitted where the national park’s landscape values are compromised significantly.

- No approval will be given for development of an airstrip near Cape Richards or elsewhere on Hinchinbrook Island.
- No private development will be permitted on Hinchinbrook Island other than the existing resort.

4.8.10 Fishing

Mangrove estuaries in Hinchinbrook Island National Park and Channel have been popular with commercial and recreational fishers for about 130 years. The area offers safe, sheltered waters which are easily reached from the mainland.

Recreational fishing occurs inside national park boundaries. Both commercial and recreational fishing have a long history in the area and are well established activities. *The Nature Conservation Act 1992*, as amended in 1994, allows recreational fishing to continue. A consultation process with peak fishing groups took place in 1997. As a result, agreement was reached to close Ninth Creek in Missionary Bay to all fishing.

Several freshwater streams support populations of jungle perch, some of which are semi-tame and an attraction to visitors. These could be severely depleted by fishing.

At Zoe Bay, the adjacent State Marine Park and Great Barrier Reef Marine Park are zoned Marine National Park A, which allows limited fishing. Waters surrounding the remainder of the island are zoned General Use A and B where fishing is also allowed.

Desired outcomes

Recreational fishing continues in most saltwater areas where it has traditionally occurred.

All fishing is sustainable.

Jungle perch in freshwater streams are not threatened by fishing.

Guidelines and actions

- Fishing will be prohibited in all freshwater areas in the national park.
- Fishing will be prohibited in Ninth Creek and any other estuaries where agreement is reached with the peak bodies representing recreational fishing.
- All recreational fishing inside the national park will be subject to the same controls as are present outside the park.

4.8.11 Motorised water sports

The issue of motorised water sports in the Channel will be covered by the Cardwell-Hinchinbrook Regional Coastal Management Plan and other plans being developed under the *Marine Parks Act 1982* and the *Great Barrier Reef Marine Park Act 1975* (Commonwealth legislation) and will not be covered here.

Motorised water sports within the national park boundary are incompatible with the park's management objectives and opportunities for the pastime exist elsewhere.

Guidelines and actions

- No motorised water sports will be permitted in Hinchinbrook Island National Park. This includes: water skiing, para-flying, jet skis and powered vessels travelling at excessive speeds.
- Motorised vessels will be permitted to traverse the estuaries inside the park at reasonable speeds.

4.8.12 Aircraft flights and landings

Landing by seaplanes is permitted in Missionary Bay for the purpose of servicing the resort. Aircraft (fixed wing, helicopter and ultra-lights) landings on the park and low-level scenic flights over or adjacent to the park are considered incompatible with the peaceful experience sought by other park visitors. Wildlife could also be disturbed. Experience indicates that flights above 1500 feet above ground level are acceptable, provided they are not too frequent.

Landing on heavily-used beaches such as Zoe Bay is considered unsafe. It also disturbs wildlife and other park users.

Guidelines and actions

- No aircraft will be permitted to land on the national park other than in emergencies. This includes ultra-lights.
- No flights will be permitted below 1500 feet above ground level over Hinchinbrook Island National Park. (Exceptions will be made for emergencies, for approved filming, for management purposes, and seaplane landings at Cape Richards resort).
- The number of commercial scenic flights permitted over the national park will be limited to a maximum of four a day and 24 a week.
- In planning for the adjacent marine park, consideration should be given to prohibiting low-level (i.e. below 1500 feet) scenic flights within a kilometre of Hinchinbrook Island's east coast.
- The east coast should be considered in rezoning of the Great Barrier Reef Marine Park Central Section and Townsville/Whitsunday State Marine Park, as an 'area to be avoided by aircraft' within one kilometre of the coast.
- In the Cardwell Hinchinbrook Regional Coastal Management Plan and other plans being developed under the *Marine Parks Act 1982*, consideration should be given to prohibiting landings on beaches and by seaplanes in areas other than near the resort.

4.8.13 Public safety

Part of the attraction of an area such as Hinchinbrook Island lies in the element of personal challenge which involves self-reliance and a degree of risk. Public safety issues include the presence of snakes, crocodiles, and a range of dangerous marine animals. While it is not feasible or desirable to remove such animals, all visitors should be aware of the dangers. As well as dangerous animals, risks involve cliffs, loose and slippery rocks and falling branches. Walkers who leave the Thorsborne Trail, or walk alone in remote areas, place themselves in levels of increased risk. The video and brochure which have been prepared for trail walkers include information on dangers. Weather conditions such as cyclones, floods or drought can also pose dangers to walkers.

In the mountains, there are no trail markers so each party of bushwalkers should include an experienced member. Consideration must be given to the fact that some of the walkers on the Thorsborne Trail are inexperienced and could become lost if trail markings are not clear.

The island's mountainous backbone offers some interesting challenges to walkers, but conditions can be dangerous, and only fit and experienced walkers should attempt walks to Mt Bowen and other locations. Camping permits required for overnight stays do not allow inclusion of specific conditions not related to camping, and a restricted access permit would be useful in this regard in addition to the camping permit.

Guidelines and actions

- All visitors intending to undertake overnight journeys must contact QPWS staff to ensure they are informed of the conditions.
- Continuing efforts will be made to ensure all staff who issue permits or give advice on visiting

Hinchinbrook island are fully aware of (a) conditions on the island and (b) policy on issue of permits etc.

- A detailed plan for search and rescue on the island's rugged mountainous section will be developed. (This is the responsibility of police with the involvement of the State Emergency Service and QPWS.)
- The mountainous interior and some of the island's other remote sections will be declared restricted access areas, requiring people entering these areas to have a permit. This will allow better control of people in remote parts of the island.
- A register of injuries (including causes) relating to use of the Thorsborne Trail will be maintained.
- Issue of permits for the Thorsborne Trail and other areas will be suspended when a cyclone watch is current for the area, or when other extreme weather conditions, potential fire danger, or prescribed burning present possible risks to the Trail area.
- Trail marking will be kept in good condition and useful maps and other information will be provided to walkers on the Thorsborne Trail.

4.8.14 Campfires and rubbish

Generally, rubbish is not a major problem on Hinchinbrook Island. In many locations, casual users from vessels occasionally leave rubbish behind. This is best controlled by public education and regular patrols. As long as any accumulated rubbish is removed quickly, few problems are predicted.

Collecting firewood destroys habitat for insects and reptiles. Some preliminary work by James Cook University indicates that collection of firewood has had a significant impact on habitat at Nina Bay. Campfires also present a risk of wildfire, particularly along the Thorsborne Trail.

Guidelines and actions

- All visitors will be required to remove their rubbish to the mainland.
- Heavily used sites will be patrolled regularly and rubbish removed.
- Disposal of rubbish by the resort will be in accord with lease conditions.
- Campfires will not be permitted; walkers on Thorsborne Trail will be advised that no fires are permitted anywhere on the Trail. Regulatory notices to this effect will be erected where necessary.
- Campfires may be permitted if they are for educational purposes and are part of an Aboriginal cultural tour run by persons approved by the representative Aboriginal body, or are for other approved Aboriginal traditional purposes.
- QPWS staff at Cardwell and Ingham should remind intending campers to carry fuel stoves.
- Gas barbeques will be provided at Macushla and The Haven.

4.8.15 Toilets

There are toilets at Macushla, The Haven, Mulligan Falls, Zoe Bay, Little Ramsay Bay and Nina Bay. Toilets could be installed at Ramsay Bay Boardwalk and some other locations. Monitoring has indicated that toilets are essential for health reasons in some locations. Along the Thorsborne Trail, human waste has caused problems in the past.

Currently, all are pit toilets which can suffer from odour problems and, if badly sited, could release pollutants to the environment. Current indications are that the toilets are well sited with few problems, but with increasing usage, problems could arise. Pit toilets should be regarded as a temporary measure until resources permit installation of something better.

Guidelines and actions

- All pit toilets will be replaced by composting toilets as soon as possible.
- New toilets will be installed where monitoring detects a potentially serious health problem.

4.9 Research and monitoring

Background information

Hinchinbrook Island is an important natural area. This plan proposes measures to ensure these natural values are maintained. The island also has a growing reputation as a research site. However, manipulative research has the potential to have an impact and must be limited. There is a potential for research workers to target the island, when more accessible and robust sites on the mainland would do equally well.

Monitoring effects of recreation and fire management will be important to many of this plan's objectives. More information is needed for management purposes (e.g. data on beach stone-curlews).

Desired outcomes

Opportunities for research which contribute to baseline information on the park's resources and management are provided.

A monitoring plan to measure any changes to island ecosystems is commenced.

Guidelines and actions

- Research will be encouraged where the Regional Service Director is satisfied that it: is important high-quality research; is useful to the national park's management or some other related matter; is of acceptable impact; and, cannot be performed satisfactorily off the national park.
- Any proposal which has potential to impact either the national park or adjacent areas will be required to comply with environmental monitoring programs and mitigation strategies as a condition of a permit.
- Research should not be undertaken in the Remote-Natural Zone or Resort lease unless no alternative is available.
- Control sites will be established at or near approved research sites where a likelihood of impact exists. These are to be photographed and measured at regular intervals to detect any environmental change.
- A study of beach stone-curlews will be encouraged to look at their distribution, numbers, breeding success and seasonal differences, and tolerance of human impact.
- Plans for conserving and managing populations of dugong, turtles and cetaceans in all Queensland waters are being prepared. All proposals relevant to the Hinchinbrook area will be implemented.
- A survey of crocodile numbers will be carried out every two years.
- Monitoring programs will be established to record the impact of visitors at critical sites such as Ramsay Bay, Zoe Bay, Thorsborne Trail campsites, Freshwater Creek, 89 Metre Rock, sites on Mount Bowen and other sites in the mountains.
- Appropriate studies by external sources on visitor awareness and satisfaction will be encouraged and supported.
- Monitoring programs to record visitors' impact on cultural heritage sites will be established.
- Monitoring of the effects of prescribed and wild fires will be carried out to determine how natural communities respond.

4.10 Public utilities

Background information

Hinchinbrook's isolation and insulation from most pressures faced on the mainland has resulted in a lack of infrastructure, other than a few navigation beacons on the west coast. A shipping lane exists through Hinchinbrook Channel; buoys and beacons essential to navigation are present in the Channel and on Hinchinbrook Island. This plan considers this position should remain, and that further building should be permitted only in exceptional circumstances. (See section 4.4.)

Any proposals to construct public utilities would be subject to the provisions of the *Nature Conservation Act 1992* (Section 35) which require that: the Cardinal Principle for management of national parks is followed to the greatest possible extent; use will be in the public interest; use is ecologically sustainable; and no reasonable practical alternative exists. As the island is listed on the Register of the National Estate and is part of the Great Barrier Reef World Heritage Area, obligations associated with these listings must also be considered before any such development can be approved.

Desired outcomes

The landscape of Hinchinbrook Island is free from major or obvious intrusions.

Maintenance and repair of existing public utilities continue, while ensuring minimal disturbance to the natural environment.

Guidelines and actions

- All proposals for public utilities on Hinchinbrook Island will be subject to detailed environmental impact assessment. Approval will be granted only if the proposal meets the requirements of the relevant legislation (both State and Commonwealth), is vital to public safety and no feasible alternatives exist.
- An independent assessment will be obtained to determine if a feasible alternative exists.
- Discussions will be held with public authorities to ensure prior notification is given of any maintenance activities in the national park.

4.11 Education, adventure training and group activities

Background information

Hinchinbrook Island has been used for adventure training, defence force exercises, school group visits and other educational activities. Hinchinbrook has been favoured for 'survival' type exercises because of its inaccessibility and extremely rugged terrain.

The island's use for adventure training and defence forces exercises has the potential to interfere with other users' enjoyment and might cause environmental damage. However, these activities also have the potential to gain valuable resource information and contribute to labour-intensive construction tasks. Any such activities must be consistent with this plan's objectives.

Desired outcomes

Opportunities for nature-based, low-impact education and training activities are provided.

Guidelines and actions

- Education and training activities for collection of resource information, or construction or maintenance works which require the participation of large numbers and which are consistent with the desired outcomes of this plan, will be assisted.
- Education, adventure training and group activities will be subject to a permit and the same conditions as other visitors, except where they are requested by QPWS to undertake work of benefit to park management.
- Large educational groups will be encouraged to use The Haven. (See table 3.)
- Permits for large, organised group activities will not be issued if the activities are not nature-based. Group activities such as organised parties, concerts and other functions are not acceptable.
- The maximum size for approved activities will not normally exceed 16 people.

4.12 Interpretation and information

Background information

Visitors to Hinchinbrook Island seek a range of experiences, from a low-key resort holiday to wilderness bushwalking. To enhance visitor experience, education and interpretation will be provided. This can be in the form of brochures or on-site signs at appropriate locations. In the developed parts of the island (Cape Richards, Macushla, The Haven and possibly Ramsay Bay), there is opportunity for on-site interpretation. In areas such as the Thorsborne Trail, signs can intrude on wilderness experience and brochures are more appropriate. Maintenance of publicly-accessible QPWS offices at Ingham, Dungeness, and, in particular, Cardwell, have proved important in interpreting Hinchinbrook Island to users.

Opportunities for interpretation of Aboriginal occupation of the island exist in several places, the best being at The Haven. The site is ideally placed to allow an interpretation program run by Aborigines focusing on fishtraps, middens and food plants.

Most visitors reach Hinchinbrook Island via a commercial operator service. All operators will be encouraged and helped to deliver accurate information to their guests. In this way, visitors can develop an awareness of potential impacts they might have on their surroundings. This will help in effective management and protection of natural and cultural values.

Desired outcomes

Visitors understand, enjoy and behave responsibly towards the area's natural and cultural values.

Minimal-impact use practices are promoted and accepted by private visitors and commercial operators.

Guidelines and actions

- An office at Cardwell will be open to the public seven days a week, and one at Ingham will be available at least five days a week.
- Interpretation facilities such as signs and track guides will not be provided in the Remote-Natural Zone. All necessary information will be provided off-park such as in brochures and videos.
- Visitor information sheets and brochures containing general resource and management information on topics such as plants, birds etc. will be produced as resources allow.
- The Thorsborne Trail brochure will be kept current, and a more accurate contour map will be provided as resources allow.
- An information sheet on walking in the mountains will be produced, but will be made available only on the issuing of the appropriate permit.
- Aboriginal cultural information will be made available only after approval by the relevant Aboriginal representative group. (See section 4.5.)
- QPWS will provide interpretation and management support and assistance for tour operators and resort management.
- An interpretive program at The Haven (or other suitable place) run by Aboriginal people will be encouraged. (See section 4.5.)
- As well as cultural values, interpretation at The Haven will focus on providing an introduction to Hinchinbrook Island's natural values.

Appendix A Area profiles

To preserve conservation, landscape, and cultural values, and protect visitor experience, all development needs to be planned carefully and levels of use set to ensure unacceptable impacts on the natural environment do not occur. Appendix A considers the current use of each of 26 sites on Hinchinbrook Island in light of management strategies derived in section 4. It also lists management actions and reasons for these. It should be read with the zoning plan which provides a general setting for each zone. In the more heavily used areas, the desired setting is described in more detail here.

In this appendix, the terms 'heavily', 'moderately' or 'lightly used' are applied to beaches and other sites. These terms are used relatively in the Hinchinbrook Island context and few if any would be considered 'heavily used' in comparison with certain other island situations. Generally, heavy use is defined as regular camping and/or day trips. Moderate use refers to regular walker use of the beach as part of the Thorsborne Trail and some use by private vessel owners. Light use is defined as occasional walker or private vessel owner use.

Unless specified, the maximum number of consecutive nights allowed for camping at any location is two. The maximum group size for bushwalking campers is six.

The limits listed below are summarised in Table 3.

I The Haven

This area is popular with private visitors for both day visits and overnight stays. It is also a popular destination for commercial operators. A large, previously disturbed area is the focus of use, however, a short walking track exists at the site. The area is currently used by larger groups such as school groups and cruise ships and is a popular camping destination.

This site is one of only one or two on the island suited to large groups of commercial day visitors. The Haven is close to Cardwell and the Port Hinchinbrook development. It is the only location on the channel side of the island suited to day use and camping. It is also one of the few areas on the island well suited to the development of recreation and interpretive facilities, including walking trails.

The lack of a suitable landing area, particularly at low tide, will be a constraint to this site's development. This aspect will need to be considered in the development of any site plan for the area. There may be requests for a jetty to allow all-tide access. Any construction of this nature could have major visual impacts.

The area associated with The Haven holds evidence of historical activity by Aboriginal people. It contains highly significant cultural sites with fishtraps and a midden being prominent. Any proposed increase in use must not impact on these sites. Local Aboriginal people's advice will be sought and followed in development of site plans for the area. The area offers considerable potential for interpretation of the original inhabitants' lifestyle. Existing, limited interpretive material at the site currently focuses on this aspect, and this should be a key element of a future interpretation program.

Several local operators hold permits to visit The Haven. These had been current for some years before the release of the draft plan. At the time of this plan's preparation, actual use by commercial tour operators is less than permitted. If the latent capacity is taken up, it will allow use considerably above present levels. This plan considers that the permitted level of use is appropriate to likely future demands and it will not be increased. However, existing facilities will not cope with this level of use and improvements will be required.

Other plans under development at the time of this plan's preparation will place controls on the number of people accessing areas such as The Haven. These plans are being prepared under the *Marine Parks Act*

1982, the *Great Barrier Reef Marine Park Act 1975* (Commonwealth legislation) and the *Coastal Protection and Management Act 1995*. These plans should ensure that future access is within the limits of existing permits.

Camping is to continue here, although if the area becomes a high use day-visitor area, this might be reconsidered in future.

Desired outcomes

The Haven provides opportunities for small and large groups to engage in passive, nature-based recreation activities, in a natural setting with a moderate level of facilities in the picnic/camping area and minimal facilities (other than walking tracks) away from the developed area.

Information on Hinchinbrook's cultural values and introductory information on its natural values is provided to visitors at The Haven.

Cultural heritage management plans and programs for significant sites are developed with Aboriginal people.

Guidelines and actions

- Current permitted use of the area for both recreational and commercial purposes will be maintained at or near the current level.
- Facilities at The Haven are not considered sufficient to cater for any significant increase in use and barely cater for current use. Better toilet facilities will be installed as soon as practical. Consideration will be given to using composting toilets.
- Any development of the site will be preceded by preparation of a comprehensive site plan for the area. As the area has valuable cultural sites (fishtraps and middens), the site plan will be developed in consultation with relevant Aboriginal people.
- Approval for a jetty of similar construction will not be granted due to landscape concerns, possible effect on native title, and likely impact of increased use.
- An expanded walking track system is acceptable in principle and will be investigated as part of the site plan. This will also be the subject of consultation with Aboriginal people.
- Consideration will be given to allowing specialist tours which interpret cultural aspects of the area and are run by appropriate people. Permit capacity will be reserved for this.
- Due to obvious material links of The Haven with Aboriginal interests, any new applications for commercial use will be referred to appropriate representative Aboriginal groups for consideration.
- In general, access to the area by large groups from cruise ships is considered acceptable on a limited basis and will be permitted to continue. To assist in protecting cultural resources and values, operators wishing to visit the area with groups larger than 50 will be required to employ a guide approved by QPWS on each such visit. QPWS will consider the wishes of the Aboriginal people in nominating guides and will train the guide(s) in interpreting the values of the national park. Commercial operators will be responsible for paying for the time and transport of these guides.
- Until such time as facilities are adequately upgraded, permits will be managed so that:
 - the daily number of visitors from commercial tours is not more than 100; and
 - only one daily commercial tour of more than 20 people is permitted, tours with smaller numbers are not limited (other than by conditions of their permits).
- Limits will apply to day tours once facilities are upgraded.
 - Groups of up to 8 people will be permitted 4 times a week.
 - Groups of 9–50 will be permitted 20 tours each week. (Five a week out of this capacity are to be reserved for future approved cultural tours.)
 - Groups of 51–100 will be limited to 30 tours each year. Six of these are reserved for operators wanting to visit one or two times a year. All tours of 50 or more must have an approved guide. (See above.)

- No more than 50 people from a single operation are to be at the site at any one time, unless accompanied by an approved Aboriginal guide.
 - If accompanied by an approved Aboriginal guide, group size of up to 100 will be permitted. (Note: This is to be instituted for new permits and renewal of existing permits).
 - No more than a total of 70 people at the site at any one time (other than where an Aboriginal guide is present, as set out above).
 - Permits will be managed so the daily number of people from commercial tours does not exceed 200.
- Use by private campers will be permitted. The maximum number of campers is to be 35 at one time. Maximum length of stay is to be seven days.
 - Educational groups will be encouraged to use the area, but group size is to be kept to 70 or less. Maximum length of stay for these groups will be three days. Groups of this size will be allowed no more than 10 times a year, and not during December to March, when the area has a normal rest period during the wet season.
 - The Haven offers good opportunities for interpretive activities based on Aboriginal culture, history and natural history. QPWS will encourage this activity at The Haven, subject to consultation with Aboriginal people.
 - Coconut trees will be removed only if they become weakened and a threat to public safety.

2 Freshwater Creek

This area is in a natural, largely undisturbed condition and no development is planned. It has a low level of use from private visitors and commercial tours. In future, a short track could be provided along the creek subject to impact assessment. Minimal use of signs is acceptable.

Large numbers of pied imperial-pigeons drink at Freshwater Creek during their daily flights to and from the island and mainland for feeding. This event occurs in the early morning and late evening from October to April. As far as possible, visitors should be kept out of the area at these times.

Desired outcomes

Freshwater Creek provides a remote and natural setting for small groups of day visitors.

Visitor impact is negligible.

Guidelines and actions

- No camping is permitted.
- No facilities other than signs will be provided.
- To maintain a remote atmosphere in this locality, each commercial day-visit group will be limited to 15 people, with no more than four trips a month permitted.
- No commercial use will be permitted before 10am and after 3pm from October to March. If there is substantial private use occurring at these times, the area will be declared a restricted access area.

3 89 Metre Rock

This rock on the bank of Coral Creek provides spectacular views over the Missionary Bay mangroves. The rough scramble track to the top will not stand heavy use and the top of the rock is small. Group size must be low to reduce risk. Currently the level of private and commercial use is low.

Desired outcomes

89 Metre Rock provides a remote and natural setting for small groups of day visitors.

Visitor impact is negligible.

Guidelines and actions

- No camping will be permitted.
- Commercial day visits will be managed at a maximum group size of six people, and four trips a month.
- Any permits issued will make it clear that QPWS reserves the right to reduce or remove all commercial use if monitoring reveals major problems.

4 Macushla

Macushla is popular with private campers because of its accessibility, fine views and a diverse array of localities which are accessible from this area. It is also popular with day visitors from vessels and from the resort. Walking tracks link Macushla to the resort and to North and South Shepherd Bay.

It has been used by large groups (more than 50 campers) in the past but this is considered inappropriate. Monitoring of past use has revealed unacceptable degradation and the area of flat land available for camping is small.

Desired outcomes

Macushla provides opportunities for small and moderate-sized groups engaging in passive, nature-based recreation activities, in a natural setting, with a moderate level of facilities in camping areas and minimal facilities (other than walking tracks) away from the developed area.

Guidelines and actions

- No commercial camping is permitted.

Private camping

- Maximum number of private campers is to be 30, with no more than 15 at either part of the camping area.
- Maximum stay will be seven nights.
- Generators will not be permitted.

Day visits

- Maximum group size of day visitors at Macushla is to be 30.
- Commercial visits will be managed so that no more than 60 people visit during any one day and no more than 30 people are present at any time.
- Large groups of day visitors (more than 15) should use Macushla as a landing or departing place and not remain in the area longer than necessary.
- Numbers in a group on the walking track should be a maximum of 15 to ensure the amenity of visitors is maintained.

Site Plan

- A site plan for facilities will be developed, considering:
 - some organisation and hardening of tent sites and beach access;
 - maintenance of existing tracks between Cape Richards and Macushla and South Shepherd Bay, and including the self-guiding section to North Shepherd Bay; and
 - a track to a lookout above the beach at Macushla, subject to impact assessment.

5 Cape Richards

The resort at Cape Richards is situated on a special lease on the national park and as such, is subject to lease conditions. Among other things, the lease conditions state that any development on the lease must be approved by the Director of Queensland National Parks and Wildlife Services. Recently, a major upgrading of the resort was permitted. QPWS has encouraged the resort in its present philosophy of a small, nature-orientated resort, and has opposed major expansion. The lease area is not big enough to sustain a large resort and the impact from large numbers would be unacceptable in nearby parts of the national park.

A dedicated road through the lease area provides public access to Orchid Beach. Successive resort managements have noted problems of increasing numbers of day visitors using the resort area for access to the walking tracks. Under the lease conditions, the resort has the right to exclude day visitors from improvements on their lease. This means day visitors could be prevented from using resort toilets and this poses a problem for large numbers of day visitors or for day visitors staying a long time. In the absence of agreement for use of the resort's toilets, facilities must be available on vessels. The foreshore behind Orchid beach is esplanade and is not included in the national park.

Clearly a co-operative agreement between commercial operators and the resort is the best method of solving such problems.

As the resort jetty provides one of the few access points to Hinchinbrook Island, public access from the jetty to Orchid Beach and the head of the walking track must be maintained. However, the jetty is the property of the resort. When marine park permits are finalised, the resort almost certainly will retain some control over the jetty's use and will have the right to charge for its use by permitted commercial operators.

Desired outcomes

The Cape Richards area provides opportunities for small to moderate sized groups to stay overnight on the national park and engage in nature-based recreation activities, in a developed or semi-natural setting, with levels of accommodation and other facilities appropriate to a modern resort.

Guidelines and actions

- No camping will be permitted.
- The question of access by commercial day visitors to the walking track system, currently through the resort, will be examined in the light of requests from resort management. If a feasible compromise which takes commercial visitors away from the resort area can be found, it will be implemented.
- Maximum group size allowed on walking tracks will be 15 people.
- The track system will be maintained, upgraded and expanded where possible.
- Any increase in lease size, change in tenure or any substantial increase in the number of guests accommodated beyond current levels is considered inappropriate to the Hinchinbrook Island setting. In particular, any proposals for development which involve or may result in destruction of areas of natural vegetation will not be approved. Redevelopment of existing buildings is acceptable, unless it changes the nature of the resort or results in a significant increase in capacity. Additional resort facilities such as tennis courts or a golf course are not considered acceptable, as these activities are not consistent with a nature-based resort and existing natural vegetation is likely to be cleared to allow for construction.
- Apart from signs, QPWS will not provide facilities on the leased area.

6 North Shepherd Bay

North Shepherd Bay is joined by walking track to the Cape Richards resort and Macushla. It is used by resort guests, campers from Macushla and day visitors. A picnic table stands in a small natural clearing at the northern end of the beach but no fresh water is available.

Desired outcomes

North Shepherd Bay provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is at acceptable levels.

Guidelines and actions

- No camping will be permitted.
- No additional facilities will be provided.
- Commercial day tours from Macushla or Cape Richards will be permitted, maximum group size of 15 people.

7 South Shepherd Bay

South Shepherd Bay is served by the walking track from the resort and Macushla. Major use is from day visitors using this track. No freshwater is present.

Desired outcomes

South Shepherd Bay provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is not significant.

Guidelines and actions

- No camping will be permitted.
- No facilities will be provided.
- Commercial day tours from Macushla will be permitted, with maximum group size of 15 people.

8 Sunset Beach

Sunset Beach has a low level of use from commercial sea kayaking tours and private visitors either from vessels or bushwalking along the coast. It has a small area of flat land and is not suited to large groups.

Desired outcomes

Sunset Beach provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is not significant.

Guidelines and actions

- Maximum number of commercial sea kayak campers will be 16 staying a maximum of two nights.
- Private boat-based camping will be limited to one group of up to six people, with a maximum stay of two nights.
- No facilities will be provided.

9 Banshee Bay

Banshee Bay has a low level of use from commercial sea kayaking tours and private visitors from their own vessels. It has a relatively large area of flat land, but is exposed and consequently receives little camping or private boat-based camping use.

Desired outcomes

Banshee Bay provides opportunities for occasional small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is not significant.

Guidelines and actions

- Maximum number of commercial sea kayak campers will be 16, staying a maximum of two nights.
- No facilities will be provided.
- The area will be available for limited numbers of boat-based campers and bushwalking campers.

10 North Ramsay Bay

The northern end of Ramsay Bay is considered here to extend from about 1 km north of the boardwalk to the end of the beach. It is very infrequently used by day visitors to the boardwalk and occasional bushwalkers. Bushwalkers can camp at Sunset Beach or Banshee Bay. The sand dunes are fragile and the beach is used by beach stone-curlews, resulting in a need to keep the usage at low levels.

Desired outcomes

The northern part of Ramsay Bay remains an area of low public usage, where natural processes continue with minimal disturbance.

Guidelines and actions

- No camping will be permitted on Ramsay Bay.
- The only use will be of the beach, with no use of the dunes.
- Number limits will be imposed in the future if necessary.
- No facilities will be constructed.

11 South Ramsay Bay

This area is heavily used by bushwalkers and day visitors. The access route from Seventh Creek to Ramsay Bay traverses a narrow, environmentally sensitive band of mangroves, salt flats and sand dunes. The eastern face of the dune is subject to natural episodic erosion and accretion events. The salt pan could be degraded by excessive or uncontrolled use. This renders the area fragile and disturbance could lead to undesirable changes. Care will be required in managing use in the mangrove, salt pan and dune areas.

Natural factors limit use of the area. These include the small area and shallow water at the head of Seventh Creek where the landing is situated. Any action to increase the space to accommodate larger vessels (either at Seventh Creek or some other locality) which would result in the destruction of mangroves or other natural communities, is unacceptable. Another limiting factor is the exposed nature of Ramsay Bay which effectively makes it unsuitable for vessel access from the east.

Within these limitations, Ramsay Bay is one of the few points suitable for day use on the island. It will be managed for this purpose within limits imposed by its ecological sensitivity and the intention to retain a natural recreation setting. Limited hardening of the site might occur. This would involve the dune ladder, an extended boardwalk over the salt pan and a toilet if required. The area will not be developed for camping or picnicking.

The area has a history of use by Aboriginal people as evidenced by midden material. There are also oral records of an Aboriginal trail through the mangroves where the present boardwalk is situated.

Desired outcomes

Ramsay Bay provides opportunities for relatively small groups to engage in passive, nature-based recreation activities, in a remote natural setting with minimal development of facilities or hardening of sites. It will also be managed as the major northern access point for the Thorsborne Trail.

Visitor impact is at acceptable levels and appropriate management actions are taken to correct any problems.

Guidelines and actions

- No camping will be permitted.
- Southern Ramsay Bay will be monitored to determine:
 - total number of day visitors using the site;
 - the impact of this number — this will be assessed and the permitted numbers reduced or appropriate site hardening carried out if impacts are excessive; and
 - the effectiveness of the ferry service to the bushwalkers.
- Aboriginal advice will be sought for development of cultural resource management plans and programs for this area.

Commercial operators

Virtually all use of the boardwalk and Ramsay Bay area is from commercial operators. As a priority, QPWS will seek to ensure that a regular and reliable (preferably daily) service is provided to Thorsborne Trail bushwalkers out of Cardwell. Historically, this bushwalker service has been run in conjunction with day-visitor services. Based on present use and impact levels, the area's ecological sensitivity, and desired recreational setting, the following will apply:

- A maximum of two operators will be licensed to service the regular day-visitor quota. An annual contribution to maintenance of the boardwalk and dune ladder access may be required from the permitted commercial users, based on their level of use.
- No more than 210 day visitors a week can be transported to Ramsay Bay by 'regular' Cardwell-based day trip operators. (Note: This limit is intended as a guideline to ensure numbers are kept below that which would be achieved if two operators ran seven trips a week each with the maximum number on each trip.)
- Maximum group size for day visitors will be 30 people (excluding users of the Thorsborne Trail).
- Regular commercial operators will be permitted to overlap, provided combined totals present at one time are not more than 30 people.
- As well as regular operators, provision will be made for semi-regular operators, including the Hinchinbrook Island Resort. The number of visits will not exceed a total of four a month each. Annual permitted number levels might be set if necessary.
- As far as possible, efforts will be made to ensure semi-regular operators' visits do not coincide with those of regular operators.

Visitor facilities

Major infrastructure needs are for environmentally appropriate access through the mangroves, across or around the salt pan, and over the dune.

- The existing dune ladder will be maintained and its effectiveness monitored. If problems arise, experts

in dune conservation will be consulted.

- No significant destruction of mangroves will be permitted in the vicinity of the boardwalk.
- If use of the present location becomes untenable due to erosion, an alternative site will be assessed. Access should not be moved any further north, but a southern site on the dunes or one in another southern creek may prove feasible. No access point which requires any significant destruction of mangroves will be permitted.
- The boardwalk will be maintained and extended over the salt flat if monitoring reveals a need.
- A message box for the Thorsborne Trail will be maintained.
- An interpretive sign may be erected at the midden.
- Suitable locations exist for a toilet, and one will be considered for this site if monitoring indicates a need.

12 Blacksand Beach

This site receives some day-visitor use from adjacent Ramsay Bay boardwalk, and is also on the Thorsborne Trail. Requests for use by sea kayakers have also been received as it is strategically placed on the east coast. Potential for overuse exists and careful management will be required.

Desired outcomes

Blacksand Beach provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities other than Thorsborne Trail.

Visitor impact is at an acceptable level.

Guidelines and actions

- No bushwalking camping will be permitted.
- Blacksand Beach is a useful locality for sea kayaking groups because of its location halfway between Mulligan Bay and Cape Sandwich. Camping by sea kayakers will be permitted for one night only.
 - Camps are not to be present during that part of the day that day visitors and bushwalkers use the area.
 - As far as possible, tents will be placed on the beach and not in the vegetation.
 - Group size is not to exceed 16 people.
- No private boat-based camping will be permitted.
- Commercial day visits to this locality usually take the form of a few people walking unguided from Ramsay Bay, having arrived on a commercial vessel. This plan puts no limit on this form of use other than number limits imposed under the section on Ramsay Bay (11). If visits take the form of a guided walk to Blacksand Beach, then no more than two a week will be permitted.
 - Access to Blacksand Beach to be via the walking track, not by vessel.
 - Maximum group size will be 20 people.
- No facilities will be provided.

13 Nina Bay

This is one of the most heavily used campsites on Thorsborne Trail as it is the first beach reached from the more popular northern end of the trail. Access to the bay from the sea is poor and it is not used for day visits. A pit toilet is provided.

Desired outcomes

Nina Bay provides opportunities for small, self-reliant groups to engage in passive, nature-based recreation activities, in a remote natural setting with minimal development of facilities or hardening of sites.

Visitor impact is at an acceptable level.

Guidelines and actions

- No private boat-based camping, sea kayak camping or commercial day visitors will be permitted.
- No further development is planned, although distribution of campers on the beach appears to create some problems. If this causes unacceptable impacts, signs will be used to direct people to appropriate campsites.
- Regular monitoring will be started and a site plan developed.

14 Little Ramsay Bay

This is a heavily used site with campers tending to spread along the length of the beach. While a concentration of campers in one area might be desirable, achieving this is not practical at present levels of patrolling. This use pattern requires monitoring to ensure the impact is sustainable. Because of the exposed nature of the beach, the area is unsuitable for day visits. A pit toilet is provided.

There is a tendency for the main camping area to expand.

Desired outcomes

Little Ramsay Bay provides opportunities for small groups engaging in passive, self-reliant, nature-based recreation activities, in a remote natural setting with minimal development of facilities and hardening of sites.

Visitor impact is at an acceptable level.

Guidelines and actions

- No private boat-based camping, sea kayak camping or commercial day visitors will be permitted.
- No further development is planned.
- Regular monitoring will be undertaken to determine any problems which require action (such as expansion of the main camping area).

15 Banksia Bay

This area supports a little bushwalking use, some use by sea kayakers and a small amount by private boat campers. All this use is accommodated by the plan, but there are concerns about the impact on breeding of beach stone-curlews. Any recommendations on the issue of permits will be subject to revision, when data on bush stone-curlews become available. Camping in this area could be seasonally prohibited between October and March.

Desired outcomes

Banksia Bay provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is not significant.

Guidelines and actions

- Maximum number of walkers camped at one time will be six, maximum stay to be two nights.
- A maximum of two private boat-based camping groups of six at one time will be permitted to use this area, for a maximum of three nights each. Permits will be issued in such a way that clashes with sea kayakers are avoided.
- Sea kayakers will be permitted to camp in the area, subject to numbers listed elsewhere.
- Camping numbers will be reviewed when more data on beach stone-curlews become available.
- No facilities are proposed.

16 Agnes Beach

Agnes Beach is the beach near Agnes Island. It is used by sea kayak campers, private boat-based campers, and occasionally by bushwalkers who may camp there or use it as a destination for a day walk. It is a known habitat of beach stone-curlews, and it is likely these threatened birds nest there.

Desired outcomes

Agnes Beach provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Beach stone-curlews are not disturbed during their nesting season.

Visitor impact is negligible.

Guidelines and actions

- Maximum number of walkers camped at one time will be six, maximum stay to be two nights.
- A maximum of one private boat-based camping group of six at one time will be permitted to use this area, for a maximum of three nights. Permits will be issued in such a way that clashes with sea kayakers are avoided.
- Sea kayakers are to be permitted to camp in the area, subject to numbers listed elsewhere.
- Due to the probable presence of breeding beach stone-curlews, no camping will be permitted from October to March.
- No facilities will be constructed.

17 North Zoe Creek

The mouth of North Zoe Creek is used by private yachts as an anchorage, by bushwalkers, camped at South Zoe Creek as a day trip destination, by sea kayak campers and by private boat-based campers.

Desired outcomes

The mouth of North Zoe Creek provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities and minimal impact on the natural surroundings.

Guidelines and actions

- Camping by commercial and private sea kayakers will be permitted for a maximum of two nights.
- Maximum number at one time will be 12 people.
- Maximum group size for private boat-based campers will be six (larger groups from one family could be accepted).
- Maximum stay will be three nights.
- No commercial boat-based camping will be permitted.
- No facilities will be provided.

18 South Zoe Creek

Zoe Bay is noted for its magnificent scenery and has been a popular destination for cruising yachts, self-reliant bushwalkers, water-based camping parties from the local area and a few nature-based, commercial day trips. Virtually all visitors walk the one kilometre track to the falls, and most swim in the pool at the falls' base. The area remains in reasonable condition, although some informal camping sites have developed at the falls in inappropriate areas and some damage to vegetation has occurred near the beach. Increased damage of this type seems possible, especially at the falls where damage to the vegetation by the development of informal scramble tracks or campsites would readily impact on waterfall scenery, recognised as a scenic feature of north Queensland. Similarly, the 'wall' of beachfront vegetation which extends to high tide mark is a feature of the landscape, and its protection is vital to the existence of rainforest immediately behind the beach.

Added to these threats is the less definable one to the social amenity of visitors to the area. An undoubted factor in Zoe Bay's appeal is its isolation, the 'wilderness' feel of the area and the amount of effort required to get there. Increased development or use would impact on this value.

This plan considers that Zoe Bay has a special character for bushwalkers and yacht and small boat users which should be retained. Significantly increased use would require hardening of the area which in turn would detract from the present natural and social setting, and might cause significant ecological impact. Many other highly developed sites similar to the waterfall exist in north Queensland. To replicate this setting at Zoe Bay would be unnecessary and inappropriate. The Zoe Bay waterfall is one of few such places in north Queensland which is available to relatively small groups and remains free from development. This plan proposes that Zoe Bay should continue to provide a remote, semi-natural setting in which crowded conditions and hardened, developed areas are absent.

While the impact of current use is acceptable in general terms, Zoe Bay's reputation and natural attractions are almost certain to lead to increased use if controls are not introduced. To contain physical and social impacts, it will be necessary to manage and limit use at Zoe Bay. The nature of Zoe Bay is such that on about two days out of every three, weather conditions are unsuitable for the operation of vessels of all sizes. This limits the amount of sea-borne visitors at present, but it also has the effect of concentrating use on the small number of 'good' days. Modern vessel technology could readily solve the problem of landing large numbers on days when there is a surf running on a shallow beach such as Zoe Bay, so this natural factor should not be relied on as a deterrent to large visitor numbers.

Private boat-based campers respond rapidly to good weather conditions. The area available for this activity is limited and control of numbers is necessary. The presence of boat-based campers can detract from the experience of bushwalkers who have walked for at least two days in wilderness surroundings to get to Zoe Bay.

In the past, use of Zoe Bay by commercial day trip operators has rarely been heavy because of the remote, isolated character and difficult weather conditions. As this has the potential to change, management of numbers and monitoring of impact is essential to the maintenance of the setting. While this plan recognises the validity of commercially-operated day trips in bringing the Zoe Bay experience to people without access to a boat, or unable to withstand the rigours of bushwalking, it considers this use should have strict number limits imposed.

Desired outcomes

Zoe Bay provides opportunities for relatively small groups to engage in passive, nature-based recreation activities, in a remote natural setting with minimal development of facilities or hardening of sites.

Impact of visitor use is within acceptable limits.

Guidelines and actions

Camping

- The number of bushwalker campers is restricted by limits on use of the Thorsborne Trail. To help achieve separation of bushwalkers from other users, camping nodes will be provided along the trail between the beach and the creek crossing.
- Maximum stay will be three days.
- Guidelines for acceptable numbers of private boat-based campers are:
 - maximum number at one time 16 people;
 - maximum group size six (larger groups from one family could be accepted);
 - maximum stay three nights; and
 - no commercial boat-based camping.

Commercial day visitors

- Guidelines for acceptable numbers of commercial day visitors are:
 - Regular operators (one or more visits a week) will be permitted a maximum of a combined total of 60 visits a year.
 - Semi-regular operators (about once or twice a month) will be permitted a maximum of a combined total of 60 visits a year, but will also be limited to a maximum total of two visits a month each.
 - Opportunistic operators (about one or two visits each a year) will be permitted on a case-by-case basis at the discretion of the QPWS Regional Manager with a maximum of 4 such visits per year.
 - Group size for commercial groups is not to exceed 16 people.
- Existing permits will be revised to ensure these number limits are not exceeded as the opportunity arises (e.g. permits expire).
- Organised sea kayak tours on permitted trips will be permitted to visit Zoe Bay and walk to the falls, but not to camp. These visits are to be part of the longer trips and in addition to the commercial visits listed above. Group size will be limited to 16 people.
- Where feasible, permits will be managed so only one commercial group is present at a time, with a maximum of 25 commercial visitors each day.
- No new commercial activity permits will be issued for Zoe Bay other than:
 - replacing an existing licence which has been terminated; or
 - for cultural tours operated by, or with the approval of, the appropriate representative Aboriginal group.

Private day visitors

- Use by private day visitors will be monitored. If use exceeds 30 a day more than 4 times a month, or if there are more than 6 vessels present at once more than 4 times a month, a permit system for private visitors will be introduced.

Development

- A site plan will be developed. If possible, this will separate people using the trail to the falls from campers, and boat-based campers from bushwalking campers. Avoiding unacceptable impact will be the major consideration.
- No infrastructure to assist people landing from vessels will be permitted at any site. This applies to breakwaters, ramps, pontoons or jetties in creeks or elsewhere, and to any other structure.
- Top priority will be given to maintaining the solid barrier of foliage behind the beach.
- Existing cleared areas near the falls will be closed to camping and will be revegetated.
- Individual camping nodes for Trail users will be provided between the beach camping area and the point where the Trail meets South Zoe Creek, subject to the site plan.
- No interpretive structures other than directional signs will be provided.

19 Sunken Reef Bay

This site is to be developed to take pressure off Mulligan Falls and provide an interesting site for bushwalkers.

Desired outcomes

Sunken Reef Bay will provide opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities or hardening of sites.

Visitor impact is negligible.

Guidelines and actions

- Commercial sea kayak camping will be permitted, with a maximum of 16 people staying a maximum of two nights.
- No private boat-based camping or commercial day visitors will be permitted.
- No facilities will be provided.

20 Mulligan Falls

The area at Mulligan Falls is an important staging point on the Thorsborne Trail. If the campsite is full, walkers can move to Sunken Reef Bay or the northern end of Mulligan Bay. Because it is a critical site and space is limited, it will be necessary to limit camping to one night. It is also a popular area for day trips from Lucinda. Camping is required for bushwalkers and this is to be separated as far as possible from the day visitors to the falls. A pit toilet is provided.

Desired outcomes

Mulligan Falls area will provide opportunities for small groups to engage in passive, nature-based recreation activities, including camping, swimming and nature study, in a remote natural setting with minimal development of facilities or hardening of sites.

Impact of visitor use is within acceptable limits.

Guidelines and actions

- Bushwalking camping will be in the designated areas only.
- Maximum stay will be one night.
- Up to 16 commercial day visitors will be permitted to visit the falls at one time with no more than a total of 30 visits a year.
- The area is to be monitored and improvements made to the site if required. Old campsites near the falls and at Mosquito Point are to be revegetated.

21 Mulligan Bay

This site is to be used only occasionally by bushwalkers, private boat campers and sea kayakers, and no facilities will be provided. The area is not popular for day visits and no limits are necessary.

Desired outcomes

The northern end of Mulligan Bay site provides opportunities for small groups to engage in passive, nature-based recreation activities, in a remote natural setting with no development of facilities.

Visitor impact is within acceptable limits.

Guidelines and actions

- Sea kayak camping will be permitted here. Maximum group size will be 16 people.
- Because a low level of private boat-based camping is traditional here, permits will be issued to groups to camp here. Maximum group size of six will apply.
- Efforts will be made to ensure that private boat campers and commercial sea kayak groups are not present at the same time.
- Assess need for a toilet and other simple facilities.

22 George Point-Bluff Inlet

George Point area is to be developed for limited camping and day use by private groups. Camping is intended mainly for people using the Thorsborne Trail, sea kayak tours and some limited private use. The area is unstable and subject to erosion, and consequently unsuitable for any major development.

Bluff Inlet has been suggested as a possible access point for the Thorsborne Trail. This would mean re-routing the trail behind the extensive sand area between Picnic Beach and Diamantina Creek. This would have the benefit of removing a significant amount of use from a beach where beach stone-curlews are known to exist. It would also be possible to provide access to other areas such as Mt Straloch in future, avoiding the unsatisfactory present mangrove access. The likely presence of breeding estuarine crocodiles poses a potential threat to human users of Bluff Inlet. Conversely, increased human use of Bluff Inlet would impact on the crocodiles, which effectively rules out any development in Bluff Inlet. However a possible site for landing outside Bluff Inlet exists, and this would remove virtually all the crocodile problems. This site appears to have potential for a new southern access to the Thorsborne Trail, but more assessment is required. If this alternate access were provided, a small camping ground may need to be provided somewhere near the Trail's end.

Desired outcomes

George Point provides a natural setting for mostly small groups of day visitors and campers, with minimal facilities and some limited camping.

Convenient safe access to the Thorsborne Trail and Mt Straloch is provided.

Visitor impact is within acceptable limits.

Guidelines and actions

An assessment of Bluff Inlet–Picnic Beach–George Point will be made. Possible developments will include a landing area (with some minimal infrastructure if required), and trails to Picnic Beach, Straloch Creek, and the northern end of Mulligan Bay to link to the existing Thorsborne Trail. The future of these proposals will depend on the assessment of the impact on the natural communities and cultural values of the area and the likely costs.

- No jetty or other construction which visually detracts from the island’s landscape will be permitted.
- Camping at George Point or at a future alternative will be limited:
 - maximum of 16 people a night (larger groups could be permitted if QPWS is satisfied impact will be negligible);
 - maximum of 16 people in sea kayak tours; and
 - maximum stay two nights.
- The George Point-Picnic Beach area is well suited to small groups of day visitors in their own vessels. Generally, groups should comprise no more than five or six people. Organised groups larger than 30 will be granted permits only in exceptional circumstances.
- As George Point is one end of the Thorsborne Trail, a commercial operator should be available to service walkers. Numbers at this end of the Trail are lower and, to ensure this service continues, only one operator will be licensed for the Bluff Inlet-George Point-Dungeness service. In addition, one operator will be permitted to run a maximum of 10 trips a year between George Point and Cardwell, as part of a Thorsborne Trail-Hinchinbrook Channel service.
- George Point/Picnic Beach will be maintained for low-level camping and day use with minimal facilities.

23 Deluge Inlet

There is some use by private boats and commercial tours. Breeding populations of estuarine crocodiles are known to occur in this creek and management of the area will highlight conservation of these animals and safety of visitors to the area. (See also section 4.7, Privately-owned vessels.)

Desired outcomes

The Deluge Inlet area provides opportunities for small groups in small vessels travelling at slow speeds to engage in passive, nature-based recreation activities, in a remote and natural setting with no development of facilities or hardening of sites and with few encounters with other user groups.

Visitor impact on crocodile populations and other natural values is minimal.

Risk of crocodile attack is minimised.

Guidelines and actions

- Camping will not be permitted, due to the crocodile population.
- Commercial tours by small vessels are appropriate, providing appropriate safety measures concerning crocodiles are in place.
- A maximum of two operators conducting commercial guided tours will be permitted
- A maximum of five tours a week will be permitted.
- Maximum group size will be 30 people.
- Feeding of crocodiles will not be permitted.
- Private visitors in their own vessels will be permitted to use the area, but efforts will be made to educate visitors about crocodiles and landing will not be permitted.
- If private visitor use reaches levels that are causing problems, the area will be declared a restricted access area and the number of entry permits will be restricted.
- The number of vessels anchoring overnight will be limited. (See section 4.7.)
- Due to potential problems with crocodiles, no facilities will be developed.
- Commercial permit holders will be permitted to land at one or two designated sites, subject to any required conditions.

24 Paluma, Gayundah and Mendel Creek areas

These three estuaries are grouped together as all are short and mangrove-lined. There are few possible landing places. Estuarine crocodiles are known to nest in these creeks and landing — particularly in the nesting season — may be dangerous. All are popular for fishing and as anchorages for yachts and houseboats. (See also section 4.7, Privately-owned vessels.)

Desired outcomes

These inlets provide opportunities for small groups in small vessels travelling at slow speeds to engage in passive, nature-based recreation activities (including recreational fishing), in a remote and natural setting without landing on the island.

There is no impact on the terrestrial ecosystems of the adjacent coast.

Crocodile populations will have no increased impact from public use.

Risk of crocodile attack is minimised.

Guidelines and actions

- Camping will not be permitted.
- Commercial tours by small vessels are appropriate, providing appropriate safety measures concerning crocodiles are in place.
- Commercial tours will not be permitted to land.
- No more than five tours a week will be permitted in the area.
- Feeding of crocodiles will not be permitted.
- Private visitors in their own vessels will be permitted to use the area, but efforts will be made to educate visitors about crocodiles and landing will not be permitted.
- If private visitor use reaches levels which are causing problems, the area will be declared a restricted access area and the number of entry permits will be restricted.
- The number of vessels anchoring overnight will be limited. (See section 4.7.)
- Due to potential problems with crocodiles, no facilities will be developed.

25 Thorsborne Trail

The Trail is about 30km long, extending from Ramsay Bay to George Point. It is a rough bush trail with few facilities. It is popular with bushwalkers from Australia and other countries. Overseas users comment that the Trail is of international standard. There has been a policy of limiting use to 40 bushwalkers at one time. This limit has been set largely by monitoring use and is based on observed physical impacts and to a lesser degree on social impact. Monitoring has indicated that this limit has worked well in restricting expansion of campsites and in reducing impact on user amenity.

These permitted numbers have been defined to suit the present situation of moderate use peaking in heavy use at certain times such as school holidays and Easter. The Trail's proper management depends on QPWS offices being open to the public on as many days of the week as possible. The minimum should be normal working hours Monday to Friday at Ingham. Efforts should also be made to have an office at Cardwell open seven days a week. This is important in ensuring walkers are fully informed about current conditions on the Trail and their responsibilities about low-impact bushwalking, and that the booking system functions smoothly.

Toilets are available at Mulligan Falls, Zoe Bay, Nina Bay and Little Ramsay Bay as these areas are subject to pressure from groups other than bushwalkers. This plan proposes that toilets be provided at other locations only when a serious problem appears to be developing and it cannot be addressed adequately by education or by selection of a more suitable campsite.

To date, very little hardening of the Trail or campsites has occurred. Where monitoring has shown that impact is excessive, the Trail has been relocated to a more stable location. Better construction of the trail will be carried out where there are erosion problems and no feasible relocation options exist.

Where impact problems arise, these will be solved by managing numbers further, on-ground management or visitor education. Apart from the Trail itself, walkers should see no sign of development or impact other than at the camping grounds where other groups may be present. However many walkers should see a ranger. In some ways the presence of a ranger in uniform detracts from the desired experience, but, given the inexperience of many Trail users, it is considered desirable.

Desired outcomes

The Thorsborne Trail provides opportunities for small groups to engage in passive, nature-based bushwalking activities, in a setting which is entirely natural except for the Trail itself and for some simple facilities at camping areas and with few encounters with other user groups.

Impact adjacent to the Trail and campsites is kept to minimal levels and actions are taken to address any problems as they arise.

Guidelines and actions

Bushwalking camping

- The Trail will be managed to provide walkers with a natural, self-reliant experience. To achieve this, numbers will be kept low and few facilities will be provided.
- Signs will be kept to an absolute minimum.
- Each walker will be provided with a map and brochure which explains the principles of low-impact camping, as well as how to follow the trail.
- The maximum number of bushwalkers permitted at one time will be 40. All or most of these 40 walkers should not camp in one locality. To achieve this, daily transfer of bushwalkers by commercial operators at the ends of the Trail will be encouraged. Permit issue will be managed to ensure that numbers starting out are not too unbalanced. Given the more popular nature of the northern end, a desirable goal would be 25 from the northern and 15 from the southern end.
- If use increases to the point where it appears likely that damage will occur to the Trail and/or the maximum use figure occurs consistently for more than seven months of the year, then a lower maximum will be introduced for part of the year, or seasonal closure of the Trail will be considered.
- Maximum group size will be six.
- Larger groups will be required to separate into groups of no more than six, each with a separate permit, and travelling independently. (It is recognised this will be difficult to enforce, but QPWS staff will make every attempt to see this provision is adhered to.)
- Ranger presence in the form of regular patrols will occur as often as resources allow. Ranger patrolling will also ensure that developing problems of use will be identified.
- The Trail will remain a rough bush trail. Some upgrading — including construction to graded walking track standard — will be undertaken in areas where erosion has become a problem and there are no feasible re-routing options. Proposals in the report by Fell (1992) will be instituted.
- The Trail will be closed when: dangerous weather conditions are predicted (e.g. cyclone watch); good drinking water is lacking; fire danger exists; prescribed burning is planned; or park maintenance is being undertaken (e.g. construction of new section).

Management of trail users

- Departmental offices in Ingham and Lucinda will be kept open for as long as resources allow to facilitate permit issue and keep visitors informed about the trail. Cardwell will be open seven days a week at least during the main tourist season.
- Every effort will be made to ensure that spaces in the booking system which become available due to cancellations will be filled with other walkers.
- A higher fee for use of the Trail will be considered to help fund Trail management.

Complementary zoning

- When the Great Barrier Reef Marine Park Central Section and Townsville/Whitsunday Zoning Plan are reviewed, zoning of the waters off the east coast of Hinchinbrook Island should be reviewed in light of the desired experience being sought for Thorsborne Trail users. The present zoning of General Use A offers little protection for offshore resources or the effect exploitation of these resources might have on users on the adjacent Trail.

26 The mountains

Managing bushwalking use of Hinchinbrook Island's mountainous backbone presents some problems. In the past, use has been sufficiently low that impact, while evident, has been acceptable. Now demand is increasing, this situation is unlikely to continue unless controls are introduced. Potential strategies for managing this use are to cater for increasing numbers by developing trails and hardened, or at least defined, campsites; or to limit numbers so current low levels of impact are not increased. Consultation with users, monitoring of impacts, and financial considerations have indicated that limiting numbers is the best choice at least in the foreseeable future.

Bushwalking will be permitted over much of the island (see table 2), particularly the east coast and Mt Bowen to Mt Straloch mountain range, but is to be subject to strict number limits. In many areas, mountain ecosystems are fragile. Past use in the mountains has resulted in 'trenches' being developed in the 2m-deep fern vegetation of the mountain ridges. Protection of these fragile communities and preservation of the mountains' wilderness values will be overriding considerations in managing this area.

Bushwalking conditions in the mountains are extremely rugged and can be dangerous. Treks should only be undertaken by parties where the members are a combination of skilled, experienced and fit bushwalkers.

The camping permit system does not allow inclusion of specific conditions such as might be required if walkers are to be allowed in such dangerous and ecologically fragile environments as occur in the mountains and restricted access permits would seem a better approach.

Desired outcomes

The mountainous part of Hinchinbrook Island provides limited opportunities for small, self-sustaining groups to engage in challenging, nature-based bushwalking activities, in a remote and natural setting with minimal contact with other visitors and without facilities or other traces of previous use.

Impact of visitor use in the island's mountainous interior is limited to a few existing sites and does not increase over 1997 levels.

Guidelines and actions

- To maintain wilderness values in the mountains, numbers permitted will be such that impact does not increase beyond the 1997 level; in particular, no more informal tracks, camping areas or 'trenches' in the vegetation will be permitted to develop. No tracks or signs will be put in place, although a need for marked trails might develop in future if trails proliferate.
- An information sheet will be prepared for walkers in the mountains. This is to be given to walkers along with their permit only and must not be used to promote use of the mountains. It will set out the requirements for minimal impact walking and describe conditions present. (See section 4.11.)
- The mountainous interior and other remote areas on the island will be declared restricted access areas, requiring a permit to enter.
- QPWS retains the right to refuse to issue a permit for any area considered unsuitable for bush camping or to issue permits at any time for any reason.

- To avoid degradation of the mountain environment, the number of groups permitted in any area at any time will be limited at the discretion of the QPWS District Manager. Usually only one group at a time — or two groups if numbers are small — will be permitted in an area.
- No facilities will be provided.
- A search and rescue plan will be developed.
- All walkers who are issued with a permit for the mountains will be thoroughly briefed on conditions in the mountains and associated risks, and will be required to lodge a trip itinerary before departure.
- The effects of bushwalkers on the mountain communities will be monitored. Closure of some areas will be considered if ongoing problems are detected.

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