

## PLAN OF MANAGEMENT



**CAPE BYRON TRUST** 

# CAPE BYRON HEADLAND RESERVE



## Cape Byron Headland Reserve



Plan of Management

A report prepared for the Cape Byron Trust by:

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### **FOREWORD**

Cape Byron Headland Reserve is a State Conservation Area and covers an area of 98.5 hectares, including the most easterly point of the Australian mainland, rugged headlands and sheltered rainforest gullies. It is situated only 2 kilometres from Byron Bay on the far north coast.

The Reserve is of importance to the Arakwal Aboriginal People of Byron Bay. The Reserve maintains spiritual, cultural and historical significance for the Arakwal People and contains many sites, artefacts and landscapes which are significant in maintaining ties with the past and facilitating the continuation of Aboriginal culture. This plan of management intends to continue the process of reconciliation through the further recognition of the Aboriginal cultural values of the Reserve and the support of the Arakwal People's involvement in the planning, management and interpretation of the Reserve.

Cape Byron Headland Reserve is of particular importance because of its spectacular scenery, the diversity of natural features and environments and the cultural historical heritage importance of the Cape Byron Lighthouse and associated buildings.

The Reserve is a major focus for local, regional, national and international tourism, as well as for many types of recreation in a natural coastal environment. These range from passive enjoyment of the Reserve's scenery to activities such as lighthouse tours, education programs and whale watching.

The care, control and management of the Reserve rests with the Cape Byron Trust in accordance with the *National Parks and Wildlife Act 1974*. The Cape Byron Trust has a membership consisting of representatives of the community, local and state government and the Arakwal Aboriginal Corporation.

This plan of management establishes the scheme of operations for the Cape Byron State Recreation Area. In accordance with section 75 of the National Parks and Wildlife Act 1974, this plan of management is hereby adopted.

**BOB DEBUS** 

**Minister for the Environment** 

## **Acknowledgments**

The principal author of this plan of management is Andy Baker, Principal Consultant, Wildsite Ecological Services. The plan has been developed from a detailed discussion of issues prepared by Peter Helman a previous Trust Board Member. the plan. Nick Rigby, former Reserve Manager, conducted extensive community issues workshops. Bob Speirs, Director, Commercial and Community Services, Queensland Parks and Wildlife Service, provided invaluable guidance in the development of the planning framework adopted by

Peter Parker, author of the 1989 plan of management, Graeme McGregor, Planning Officer, Northern Rivers Region, and a peer review panel, which included Lorraine Cairnes, Adrian Davey and Jim Starling reviewed a preliminary draft.. Vanessa Coverdale provided assistance with plan structure and layout.

Peter Parker, on appointment to the Trust, reviewed the final draft together with Sue Walker, Sean Court and Andy Baker. This review brought the draft plan up to date and included the latest resolutions, actions and aspirations of new Trust members.

The assistance of the Trustees and Reserve staff in the preparation of the plan is also acknowledged.

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Part A
Basis for
Management

## Introduction

Cape Byron Headland Reserve is a special and unique part of Australia, which contains a rich flora and fauna, Aboriginal heritage and European history.

Situated on the most easterly point of the Australian mainland, the rugged headlands and sheltered rainforest gullies are surrounded by subtropical coastal waters that support an abundance of marine life.

The Reserve, on the far north coast of New South Wales, covers 98.5 hectares of the Cape Byron headland and is a natural, cultural and recreational resource of outstanding significance.

The diversity of plant communities on the Reserve is dominated by coastal rainforest, and provides essential refuge for many important plants and animals.

The Reserve has been a significant place for Aboriginal people for many thousands of years, being both a provider of daily resources and a focus for ceremony. The Reserve continues to be significant for Aboriginal people. The Arakwal Aboriginal people are actively involved in Reserve planning issues.

The rich historic heritage of the Reserve is symbolised by the Cape Byron Lighthouse, which highlights the role of the Cape in the development of Byron Bay. The Cape and the Lighthouse continue to be reference points for the Byron Bay township and tourism.

Cape Byron has  $360^{\circ}$  views of the ocean, Byron Bay township and the Mount Warning caldera. It provides a unique setting for a range of recreational activities, ranging from walks through the rainforest to hang-glider flights over the Cape and the best of Australia's land-based whale watching.

For those who live in or visit Byron Bay, the Cape is a special place able to provide inspiration, respite and re-connection. It has a powerful sense of place and its grandeur captivates the mind.

Cape Byron is an integral part of Byron Bay, a popular tourist destination, with a significant reputation for its natural beauty, cultural diversity and a relaxed and rejuvenating atmosphere.

Cape Byron Headland Reserve is part of the New South Wales National Parks and Wildlife Service (NPWS) estate. The Reserve's management is distinctive among National Park and Wildlife Service areas, being managed by a community-based Trust. The Cape Byron Trust (the "Trust") has a membership of community and government representatives who have a broad range of opinions, skills and experience.

The Trust has achieved remarkable success in its first decade of management — from the restoration and promotion of the Reserve's cultural heritage, and the sensitive development of diverse recreation opportunities, through to the preservation and regeneration of the Reserve's unique plant and animal communities. It has established essential infrastructure, an effective management framework, and an experienced and skilled staff. This foundation has been achieved through the development and implementation of creative self-funding opportunities.

This Plan provides the framework within which the Trust will manage the Reserve for the next ten years. Working in partnership with the community, the Trust will build on this solid foundation to protect and promote the outstanding values of the Reserve.

## The Management Plan

## Plan preparation

The National Parks and Wildlife Act 1974 (NSW) requires that a plan of management be prepared for each National Park and Wildlife Service area. A plan of management is a legal document that outlines how an area will be managed in the years ahead. The Cape Byron Headland Reserve was previously subject to a plan of management adopted in 1992 by the Minister for Lands.

The planning framework established in this Plan has been derived from the Great Sandy Region Management Plan (Queensland NPWS 1994).

A peer review panel was established by the Cape Byron Trust to review the Draft Plan prior to public exhibition. The role of the panel was to advise the Trust on how well the Draft Plan meets the goals of best practice for natural and heritage conservation planning and management.

## Plan review

This Plan provides the framework within which the Cape Byron Headland Reserve will be managed. The year 2011 is the planning horizon which will allow sufficient time to enact the major actions identified in this Plan and to evaluate outcomes.

The guidelines, policies and actions in this Plan will commence from the date of approval and continue until the Plan is amended by the Minister. Amendments may be made as a result of changing circumstances or better information resulting from research and monitoring activities.

The policies and actions established in this Plan provide the framework for management of the Reserve and are consistent with the significance of the Reserve and the anticipated resources available to the Trust. Other management actions may be developed over the life of this Plan consistent with the policies set out in the Plan.

Where not specifically provided for in this Plan, management of the Cape Byron Headland Reserve will be in accordance with the *National Parks and Wildlife Act* and with Trust and National Parks and Wildlife Service policies.

The planning process leading to the development of this Plan has involved the collection and use of a large amount of information which, for reasons of document size, has not been included in the Plan.

## Management principles

This plan was prepared in accordance with the *National Parks and Wildlife Act 1974*.

The purpose of reserving land as a state conservation area is to identify, protect and conserve areas that:

- (a) contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance, and
- (b) are capable of providing opportunities for sustainable visitor use and enjoyment, the sustainable use of buildings and structures or research, and
- (c) are capable of providing opportunities for uses permitted under other provisions of the Act.

A state conservation area is to be managed in accordance with the following principles:

- (a) the conservation of biodiversity, the maintenance of ecosystem function, the protection of natural phenomena and the maintenance of natural landscapes,
- (b) the conservation of places, objects and features of cultural value,
- (c) provision for the undertaking of uses permitted under other provisions of the Act having regard to the conservation of the natural and cultural values of the state conservation area,
- (d) provision for sustainable visitor use and enjoyment that is compatible with the conservation of the state conservation area's natural and cultural values and with uses permitted under other provisions of the Act in such areas,
- (e) provision for the sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to the conservation of the state conservation area's natural and cultural values and with uses permitted under other provisions of the Act in such areas,
- (f) provision for appropriate research and monitoring.

2 The Plan

## Understanding and implementing this Plan of Management

This Plan constitutes the planning framework within which the Cape Byron Headland Reserve will be managed to the year 2011. This Plan sets out the process that identifies what outcomes are desired and what actions will be undertaken to achieve them. However, it is also the responsibility of management to monitor and report whether and how cost effectively the outcomes are actually being achieved.

Information in this document is presented in two parts: Part A provides the basis for management and Part B provides strategies which include the following:

- natural resource management;
- cultural resource management;
- recreation, tourism and visitor management; and
- complementary management of adjacent

Each subject is dealt with in the following format:

## Headland Reserve

Plan of Management

## Cape Byron Subject heading

Subject name and number for reference purposes

See also: Specifies other subjects within the plan that address similar or related matters.

## **Background Information**

Information which needs to be known in order to comprehend this subject and which provides a context for the outcomes, guidelines and actions.

**DESIRED OUTCOMES**  The desired condition of one or more specific attributes of the subject to be achieved by or before 2011.

**EXISTING** SITUATION The current condition of the attributes referred to in 'Desired outcomes'.

**GUIDELINES** AND POLICIES Guidelines and policies to guide the change from the existing situation to the desired outcome.

**ACTIONS** 

Actions needed to bring about the proposed change from the existing situation to the desired outcome.

The actions are not in order of priority and include items of required information, positions on relevant issues, and the implementation of actions ranging from on ground works to those that encourage attitudinal and behavioural change.

See Table 4 for action priorities.

## **Local and Regional Setting**

## Location and boundary

Cape Byron Headland Reserve, on the eastern most point of the Australian mainland, is situated on the far-north coast of NSW, approximately 2 kilometres east of the town of Byron Bay.

The Reserve covers 98.5 hectares and adjoins freehold land and Crown reserves. The internal boundary of the Reserve is complex and adjoins residential areas, public roads and service easements.

## Regional context

The Reserve is an integral component of a regional system of national parks and nature reserves lying along the northern NSW coastline (Map 1). It supports littoral rainforest, a vegetation community which once occurred extensively along the northern NSW coastline. The largest remaining remnant of littoral rainforest is located within the Iluka Nature Reserve, approximately 80 km south of Cape Byron.

The coastal landscape when viewed from the Reserve includes the following:

- to the south, along Tallow Beach is the Arakwal National Park and existing Broken Head Nature Reserve;
- to the south-west on the escarpment is the Hayters Hill Nature Reserve;
- to the west and north-west on the coastal plain are the Cumbebbin, Tyagarah, Marshalls Creek, Brunswick Heads, Wooyung and Billinudgel Nature Reserves;
- to the far west the Mt Warning, Nightcap, Mt Jerusalem and the Border Ranges National Parks form an significant landscape element; and
- offshore to the north in Byron Bay embayment are the Julian Rocks Aquatic Reserve and Julian Rocks Nature Reserve.

These reserved areas and other unreserved vegetation remnants combine with Crown and freehold land to form a network of conservation assets which contribute to the region's biodiversity. The retention and enhancement of natural areas and their connecting corridors is important for the ecological sustainability of the Reserve.

The Reserve is close to the large regional centres of northern NSW and the major population centres of southeast Queensland with approximately two million people residing within less than three hours travelling time of the Reserve. This population is expected to increase substantially over the next 20 years.

The Reserve is a significant tourist attraction, with over 600,000 persons visiting the Lighthouse Precinct each year and it is estimated that the entire Reserve receives in excess of one million regional, interstate and international visitors entering the Reserve each year. The Reserve is a significant regional employment provider through direct employment, contracted services and by providing opportunities for commercial interests.

The Reserve is a significant recreational resource, providing access to a diversity of opportunities. The range and quality of recreational opportunities offered is unmatched in the region.

## Surrounding land uses

The Reserve lies within the local government area of Byron Shire. Land tenures adjacent to the Reserve include Crown and Council Managed Reserves, freehold land within the Wategos and Lighthouse Road residential area and road networks.

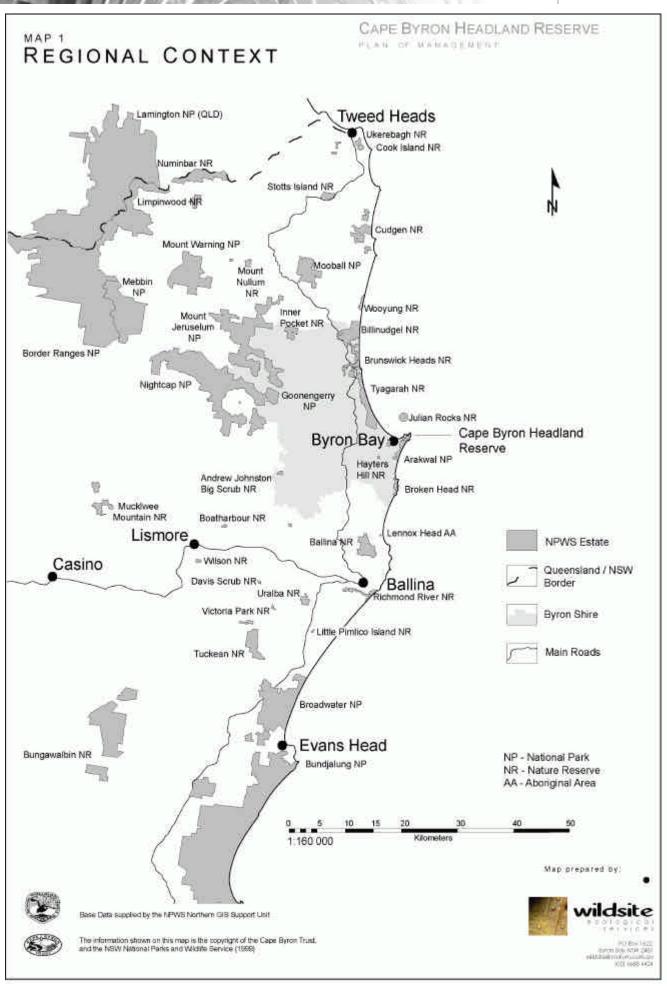
The variety of land uses adjacent to the Reserve is an important consideration of management as they have the potential to impact on the natural, cultural and recreational values of the Reserve.

The seaward boundaries of the Reserve extend to the mean low water mark and adjoin marine areas that provide for commercial and recreational water activities. The Arakwal National Park comprises the coastal lands to the south of the Reserve, adjoining the southern boundary. The management of these lands by the National Parks and Wildlife Service will complement the conservation of the Reserve's natural, cultural and recreational values.

Land uses adjoining the complex internal boundaries of the Reserve include residential areas, service easement corridors and a public road network. The extended and irregular shape of the Reserve's internal boundary exposes the Reserve to impacts from weeds, domestic animals, stormwater and pedestrian access.

There is a permissive occupancy within the Reserve at Clarkes Beach.

Two encroachments on the Reserve are occupied under licence and/or lease agreements.



## Management and Administration

## Cape Byron Headland Reserve

The Cape Byron Headland Reserve was established in 1903 for 'public recreation and the preservation of native flora'.

In 1933, three *Special Leases* were granted, for gardens, orchards and grazing within the Reserve at Wategos Beach. In the 1960s, these lands were excised from the Reserve for urban subdivision. Residential subdivisions along Lighthouse Road were excised from the Reserve in the 1940s.

In 1989 the Cape Byron Trust was established, and the Reserve was managed as a Crown Reserve under the NSW *Crown Lands Consolidated Act* 1913.

In 1997, the Cape Byron Headland Reserve was gazetted as a State Recreation Area and part of the NSW National Parks and Wildlife Service estate. Under the National Parks and Wildlife Amendment Act 2001 the reserve became a State Conservation Area on 4 October, 2002. The Cape Byron State Conservation Area is known publicly as the Cape Byron Headland Reserve.

## Cape Byron Trust

The management of the Cape Byron Headland Reserve differs from most other National Parks and Wildlife Service areas as it is managed by a local community trust, an incorporated, non-profit body.

The Cape Byron State Conservation Area Trust, known as the Cape Byron Trust is empowered by Section 47GA of the *National Parks and Wildlife Act, 1974*. Under the Act, the Trust is consolidated as a corporation and 'has the care, control and management of the Cape Byron Headland Reserve'. The Trust Board is appointed by the NSW Minister for the Environment and is subject to the control and direction of the Director-General of National Parks and Wildlife. Re-appointment of the Trust is due on 30 June, 2003.

Since its establishment, the Trust has been successful in the management of the Reserve. The mix of community and government representation on the Trust enables the effective integration of a wide range of aspirations and results in an informed and careful approach to management.

## Community involvement

Strong and meaningful community involvement is the cornerstone of the Trust's management of the Reserve. There is strong support for continued community involvement in the care, control and management of the Reserve by an independent and autonomous Trust.

Due to the diversity of Board members, the Trust has been effective in integrating the views of both special interest groups and the wider community in the consideration of management issues.

The Trust maintains community ownership and stewardship of the Reserve through the provision of opportunities for the community to be involved in planning and management.

## Financial independence

The Trust provides an outstanding model for protected area management. successfully generating the majority of income required to manage the Reserve.

In 2000-01, the Trust covered approximately 90% of its recurrent costs, only relying on public funding for special projects and capital improvements.

All income generated by the Trust is returned directly to fund Reserve management.

The Trust's philosophy is that income-generating activities should be appropriate and sustainable with charges and licence fees reflecting the cost of management and the benefits gained from the use of the Reserve.

## Memorandum of Understanding

The Trust has powers and functions conferred upon it by the *National Parks and Wildlife Act, 1974* and by a Memorandum of Understanding between the Trust and the Director-General of National Parks and Wildlife

The Memorandum of Understanding establishes the framework for the operational relationship between the Trust and the NPWS and the role of the Trust in relation to the care, control and management of the Reserve.

Through the Memorandum of Understanding, the Trust is guaranteed 'the highest level' of management autonomy whilst meeting any statutory requirements resulting from its operation under the *National Parks and Wildlife Act, 1974*. The Memorandum of Understanding seeks to ensure a harmonious, beneficial and effective working relationship between the Trust and the NPWS.

The Trust can establish policies and procedures to implement planning and management strategies however these should be guided by National Parks and Wildlife Service policy.

## Planning context

## NSW Environmental Planning and Assessment Act, 1979

Part 5 of the NSW Environmental Planning and Assessment Act, 1979 (EPA Act) places a duty on all public authorities to fully assess the environmental impact of their activities before making a determination. When considering the likely impact of a proposal certain matters (specified under sections 111 and 112 of the EPA Act and clause 82 of the EPA Regulation) must be taken into account.

## **NSW Coastal Policy**

The New South Wales Coastal Policy (1997) provides a framework for the coordinated management of the coastal zone. The Policy applies to inshore areas, coastal water bodies and land of coastal features such as lakes, bays and tidal rivers. Thus, lands within the Reserve are covered by this Policy.

## **Cultural heritage**

The Charter for the Conservation of Places of Cultural Significance (the 'Burra Charter') was prepared by the International Council on Monuments and Sites (Australia ICOMOS) to provide a consistent framework for the recognition and protection of cultural places in Australia. The Charter seeks to care for culturally significant places by understanding the cultural values of the place and its setting and providing appropriate policies regarding its management, use and interpretation. The Charter provides the basis for the Trust's heritage assessments, conservation plans and overall management of the European and Aboriginal cultural heritage values of the Reserve. The National Parks and Wildlife Service Lighthouses: Draft Conservation Management and Cultural Tourism Plan (1999) is consistent with the Charter and guides the practical management of the historical resources on the Reserve.

## **Arakwal Aboriginal Corporation**

On 22 December 1994, the Arakwal Aboriginal Corporation lodged a Native Title Determination Application (NC95/01), which covers the land and sea between Byron Bay and Broken Head including the Reserve.

The Arakwal Aboriginal Corporation, established under the *Aboriginal Councils and Association Act* 1976, is a prescribed body to represent the native titleholders and their rights, interests and benefits in trust.

In April 1997, the NSW Ministers for the Environment and for Land and Water Conservation signed an agreement with the Arakwal Aboriginal Corporation and the Arakwal claimants. The agreement allowed for the transfer of Reserve lands from the Department of Land and Water Conservation to the National Parks and Wildlife Service, while maintaining the Native Title application. The agreement also provided for the appointment of an Arakwal Aboriginal Corporation representative to the Cape Byron Trust by the Minister for the Environment.

The Trust has established a cooperative partnership with the Arakwal Aboriginal Corporation through continued representation on the Trust. The Trust intends to continue the process of reconciliation through the further recognition of the Aboriginal cultural values of the Reserve and support of the Corporation's involvement in the planning, management and interpretation of the Reserve.

## **Regional Environment Plan**

The North Coast Regional Environmental Plan (REP) provides guidelines for planning, the preparation of Local Environmental Plans and recognition of government policy such as the Coastal Policy.

Under Schedule 2 of the REP, the Cape Byron Lighthouse and lighthouse buildings are classified as 'Heritage Items of State and Regional Importance'. The Plan places strict controls on the alteration of buildings or the setting of heritage items.

The objectives of the REP with respect to the lands surrounding the Reserve are to:

- provide corridors between significant areas of natural vegetation and wildlife habitat; and
- enhance and protect the visual quality of the coastal environment, including areas adjacent to headlands, skylines and escarpments.

The Department of Urban Affairs and Planning (DUAP) has commenced the Northern Rivers Regional Strategy to review the regional plan and incorporate sustainable development principles.

The initial report of this strategy, *Guiding Principles* for a Sustainable Future, recognises and adapts the definition of sustainability principles incorporated into NSW legislation, for example, the Local Government Amendment (Ecologically Sustainable Development) Act 1997 (NSW).

Ecologically Sustainable Development Principles have been adopted by the Trust and are outlined below.

 Precautionary principle: Public and private decisions should assess the risk of options and be guided by consideration of the need to avoid serious or irreversible damage to the environment.

- Inter-generational equity: The need for the present generation to ensure that the diversity and productivity of the environment is maintained for future generations.
- Conservation of biodiversity and ecological integrity: A fundamental consideration of all decision making should be the conservation of biodiversity and the protection of ecological processes.
- Improved valuation, pricing and incentives:
   Environmental factors should be included in the valuation of assets and services through payment for pollution, users contributing to the full cost of environmental management and providing incentives to improve environmental management.

In addition, the Northern Rivers Regional Strategy endorsed the following:

- a global perspective and the region's relationship with other areas;
- the quality of human welfare and community participation;
- the value of the region's natural capital and the limits on natural resource use; and
- · efficient of use of resources.

## Byron Shire Local Environment Plan

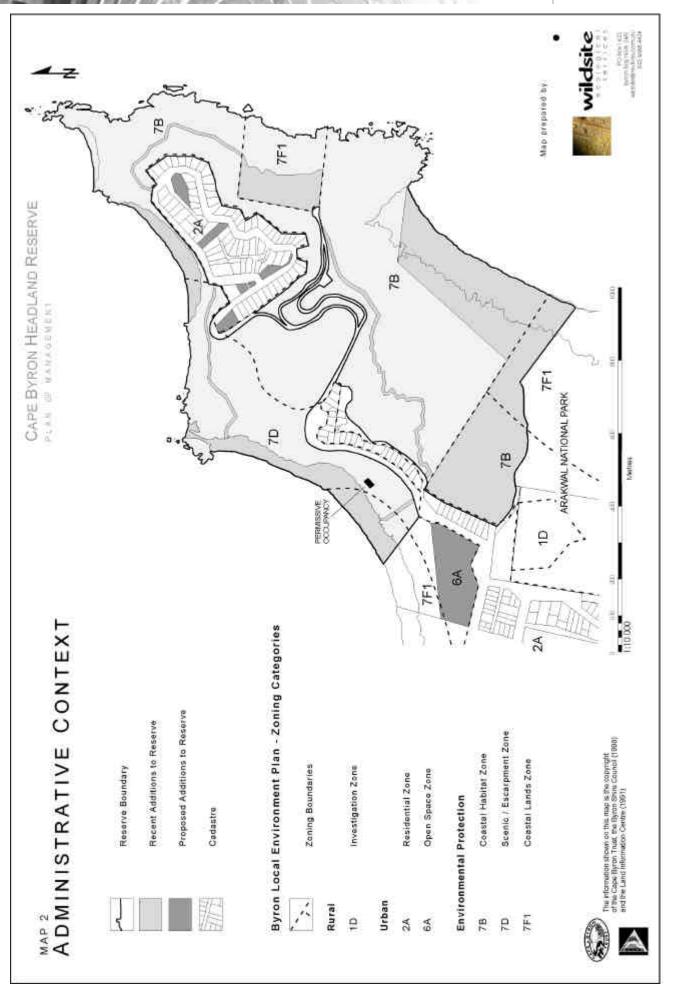
The proposed new Byron Shire Local Environment Plan will see the Reserve identified as a place with a specific character statement. Any development within the Reserve will be in accordance with any Management Plan that may apply to the land at the time or with the National Parks and Wildlife Act 1974. Byron Local Environment Plan (1988) (BLEP) recognises the Lighthouse Complex as an item of environmental heritage (Schedule 2) to which special considerations apply to any proposed works or alterations. The zoning of the Reserve and adjacent areas includes the following (Map 2):

- 1(d) (Investigation Zone) Lands under investigation.
- 2(a) (Residential Zone) Land zoned for housing and associated neighbourhood facilities with controls for the location, form, character and density of development.
- 6(a) (Open Space Zone) Land zoned for recreational use.
- 7(b) (Coastal Habitat Zone) Land zoned for coastal habitat protection and prohibits most developments.
- 7(d) (Scenic/Escarpment Zone) Land zoned for its scenic quality and prohibits most development.

 7(f1) (Coastal Land Zone) – Coastal land zoned for its environmental sensitivity and prohibits development which would adversely affect, or be adversely affected by coastal processes.

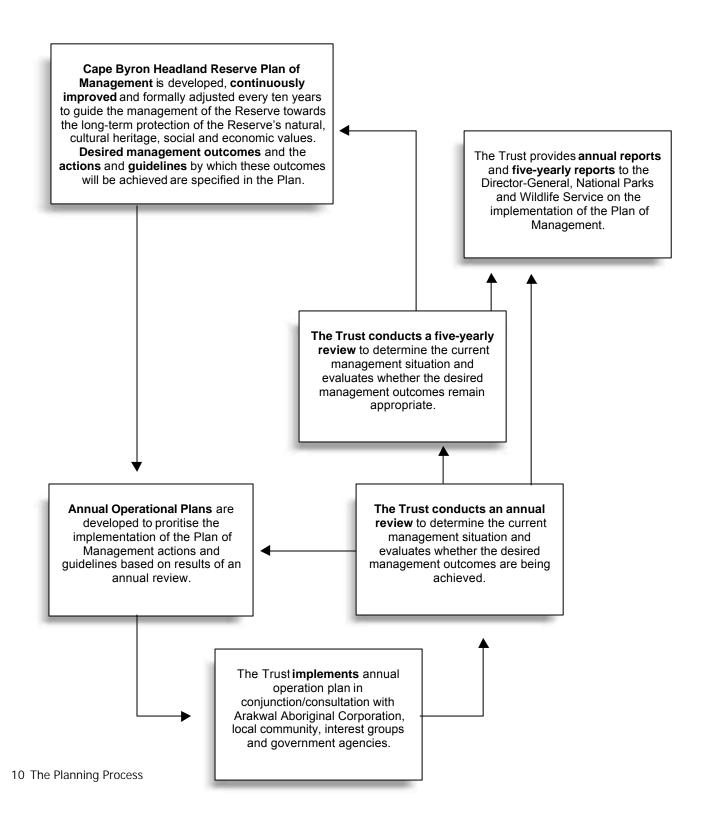
The National Parks and Wildlife Service estate is exempt from Council approval processes.

Amendments to the BLEP should see the Reserve rezoned to 8(a) 'National Parks and Nature Reserve Zone'.



## **The Planning Process**

This Plan provides a framework within which the cultural, natural, social, economic and recreation values of the Reserve can be conserved and enhanced. The planning process includes the preparation of annual operational plans, evaluation, monitoring and reporting. The year 2011 has been chosen as the planning horizon within which this Plan will be implemented.



## Evaluation of management effectiveness (achievement of outcomes)

An evaluation of management will be based on a monitoring program which will identify the extent to which outcomes have been achieved.

Cape Byron Headland Reserve	Subject heading	
DESIRED OUTCOMES	As specified in the Plan of Management.	
PERFORMANCE INDICATORS AND MEASURES	<ol> <li>Identification of parameters that indicate the condition of the attribute(s) of the subject.</li> <li>Specification of means by which to measure change in the indicators.</li> </ol>	
PERFORMANCE ASSESSMENT	Assessment of the extent to which the condition of the attribute(s) of this subject have changed from the condition existing in 2001 toward the condition sought by or before 2011.	
MANAGEMENT RESPONSE	Proposed amendments to the guidelines, policies and actions for this subject.	

## Monitoring the implementation

A management information system will be established which will track the process of implementing the specified strategies and actions.

Cape Byron Headland Reserve	Subject heading
DESIRED OUTCOMES	As specified in the Plan of Management.
GUIDELINE/ POLICY/ACTION	Individual guideline, policy or action as specified in the Plan of Management.
STATUS	Statement of progress made (e.g. completed, extent to which completed, not yet commenced).
RESOURCE COST	Direct cost (and indirect cost where appropriate) of implementation of this guideline, policy or action – expended or committed.
CONTRIBUTIO N TO OUTCOME	Assessment by manager of the extent to which complete or partial implementation of this guideline, policy or action has contributed to achievement of the outcome specified above.
MANAGEMENT RESPONSE	Proposed amendments to the guidelines, policies and actions for this subject.

## Values of Cape Byron Headland Reserve

### Natural values

## Vegetation

A variety of vegetation communities are found within the Reserve. These range from wet sclerophyll forests dominated by brushbox (Lophostemon confertus) and cabbage palm (Livistona australis) along sheltered creeklines draining to The Pass and to Clarkes Beach, through to low, wind-swept grasslands dominated by kangaroo grass (Themeda australis) on the exposed headlands (Map 4).

Several of the plant communities in the Reserve are remnants of formerly widespread vegetation types which are of local, regional or state significance. In particular, littoral rainforest has a restricted distribution along the NSW coast today due to extensive past land clearing.

Three plant species found on the Reserve are listed under the *Threatened Species Conservation Act* 1995: scented acronchia (*Acronychia littoralis*), a fern, (*Drynaria rigidula*) (both Schedule 1, Endangered), and stinking cryptocarya (*Cryptocarya foetida*) (Schedule 2, Vulnerable).

More than 10% of the plant species found on the Reserve are of regional, state or national conservation significance.

## **Native Animals**

The Reserve provides a diversity of fauna habitats including those of threatened frog, bird and bat groups.

Over 100 species of birds, including both local and migratory species, have been recorded within the Reserve.

The marine environment adjacent to the Reserve supports several threatened fauna species, including the humpback whale (Megaptera novaeangliae), the southern right whale (Eubalaena australis), the leathery turtle (Dermochelys coriacea), the green turtle (Chelonia mydas) and the loggerhead turtle (Caretta caretta).

Threatened fish recorded within marine waters adjacent to the reserve include the grey nurse shark (*Carcharias taurus*).

The remains of many terrestrial vertebrate species, including the greater glider and the eastern grey kangaroo, have been found within midden deposits on the Reserve, however these species have not been recorded within coastal Byron Shire for some years.

## Cultural heritage values

The Aboriginal and cultural significance of the Reserve is outstanding. The cultural heritage values of the Reserve provide a unique insight into the long history of human occupation of the region and the importance of Cape Byron in the region's development.

## **Aboriginal**

Cape Byron has been a place of great significance for Aboriginal people for many thousands of years. The Aboriginal values of the Reserve remain significant for both indigenous and non-Aboriginal communities, despite changes to the landscape brought about by European settlement.

Aboriginal cultural values range from significant sites and artefacts to the natural landscape elements that reflect the pre-European environment.

Three open camp/midden sites have been recorded on the Reserve. The Pass midden is the oldest (circa 1,440) and only large and substantially undisturbed foredune pipi midden between Ballina and the Queensland Border.

Scattered stone artefacts and an Aboriginal Bora Ring have also been reported above Lighthouse Road. The Reserve is also believed to be a significant location of tribal fights.

### Historic cultural heritage

The heritage values of the Reserve are closely associated with the historical development of the Byron Bay region; through exploration, settlement, trade, commerce and land use.

The most significant heritage element is the Cape Byron Lighthouse and the associated buildings. The Lighthouse is of national significance for its association with navigation safety, its method and the technology used during construction and its state of conservation.

The first permanent non-Aboriginal structure in Byron Bay was Jarman's Hotel. This was located within Palm Valley and contained a hotel, store, bakery and butchery.

The Reserve contains evidence of shifts in regional land-use and industry, such as timber getting, grazing, agricultural plantations, sand mining, and more recently, tourism.

## Recreation and tourism values

The Reserve supports a high level of community ownership and is a major recreational resource for Byron Bay and the north-coast region. It provides easily accessible recreation opportunities of a diversity and quality unique to the north-coast (Map 6).

The Reserve's natural and cultural setting allows a sense of escape from the Byron Bay township and complements recreational opportunities provided by the nearby Broken Head and Tyagarah Nature Reserves.

Recreational opportunities include picnics, barbecues, walking, jogging, cycling, surfing, fishing, snorkelling, hang-gliding and lighthouse tours. The Reserve is recognised as one of the best land-based whale watching sites in the world. Holiday rental accommodation is available in cottages managed by the Trust within the Reserve.

The Reserve is easily accessible from the popular tourist destination of Byron Bay and contains many sites of interest. These include the Lighthouse and its historic precinct and cottages, the eastern most point on the Australian mainland, spectacular scenic walks, rocky headlands and cliffs, unprecedented views, protected beaches, sheltered rainforest gullies and abundant marine life.

### **Economic values**

The Reserve has significant economic value for the region by providing direct and indirect employment and enhancing the scope and attractiveness of local tourist assets.

Many of the businesses in Byron Bay utilise the Lighthouse and the coastal landscape of the Reserve to promote their identities.

Of the nine lighthouses located in NPWS estate, Cape Byron Lighthouse is recognised as the most sophisticated in terms of tourist development and management.

## Research and education values

The Reserve provides an ideal natural and cultural resource for research and education by tertiary institutions, school groups, tour operators and special interest groups.

Many aspects of the Reserve, including biological, geological, cultural, social, tourism and recreational components, present opportunities for education, interpretation and research. Education and interpretation provides opportunities to generate awareness of, and support for, the Trust's management of the Reserve.

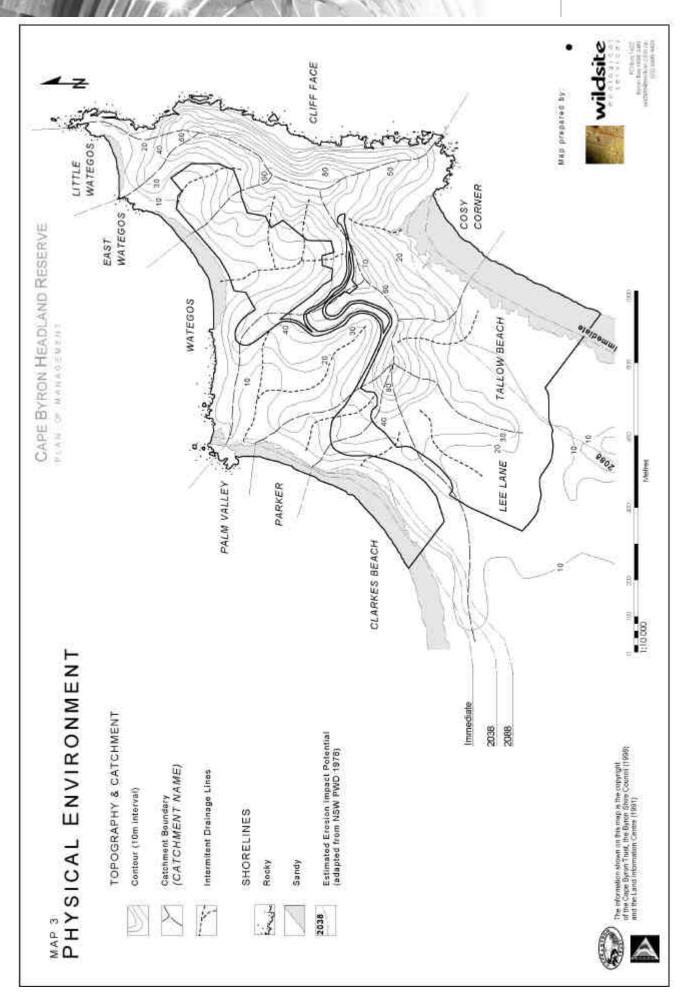
The Trust has provided significant resources for education and interpretation and has developed a sophisticated volunteer program whereby members of the local community are trained in interpretive activities.

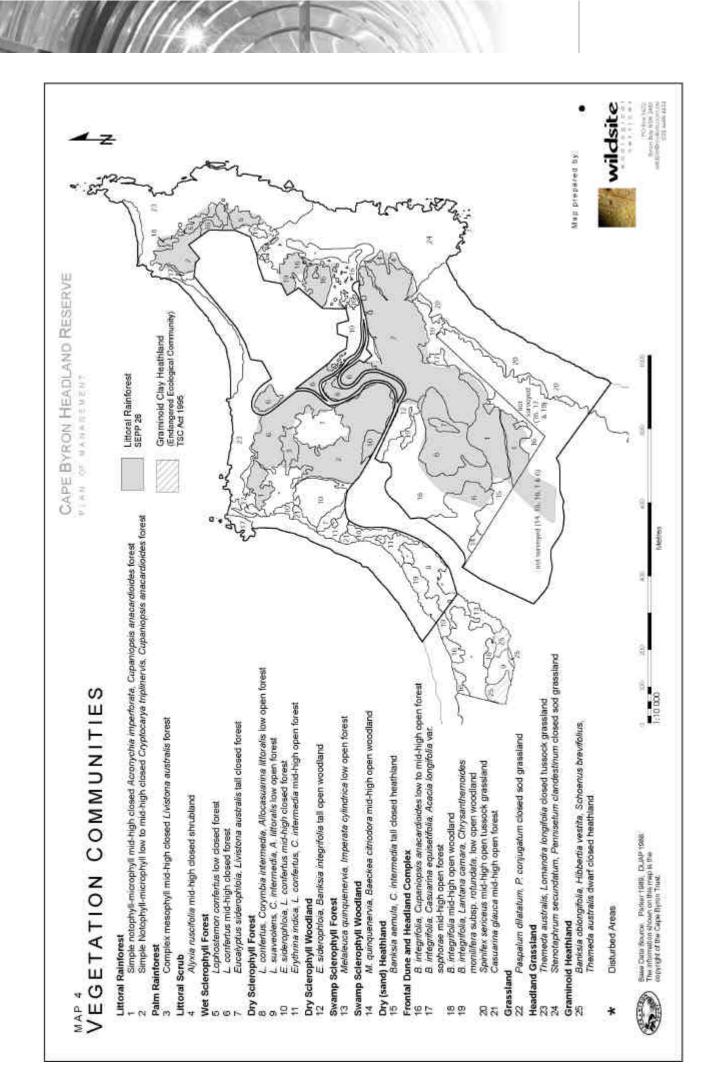
## Scenic and aesthetic values

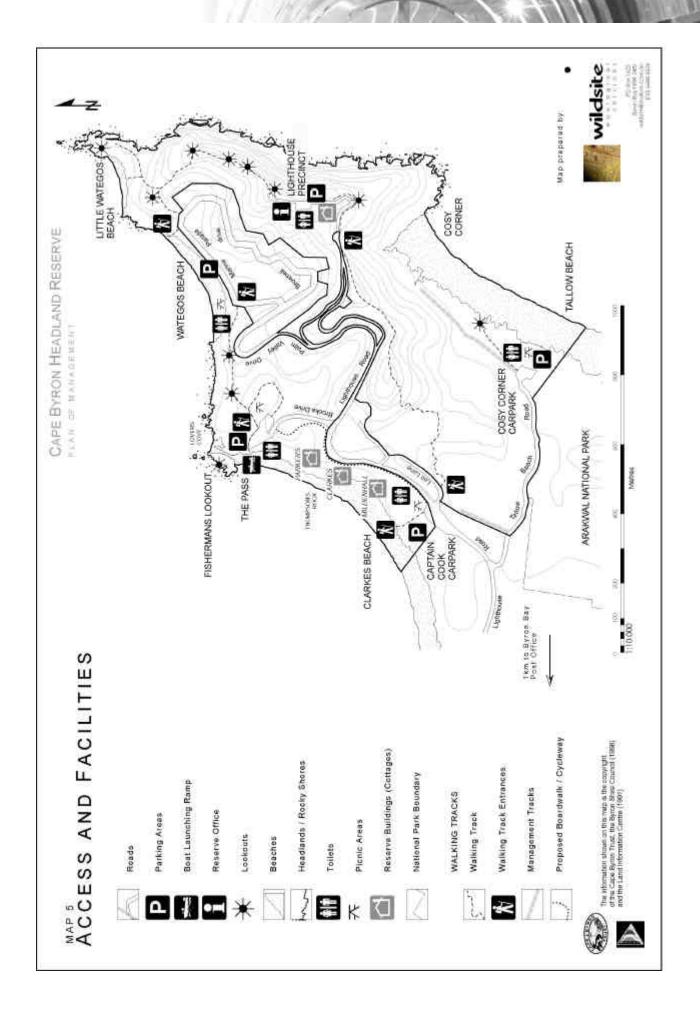
The Cape Byron headland and Lighthouse are a prominent visual element within the Byron Bay area. The Cape is a significant component of the coastal landscape and provides unrivalled views of the Tweed to Ballina coastline, the hinterland and the ranges. Viewing platforms located at prominent positions and walking trails enhance the presentation of the Reserve's scenic and aesthetic values (Map 5).

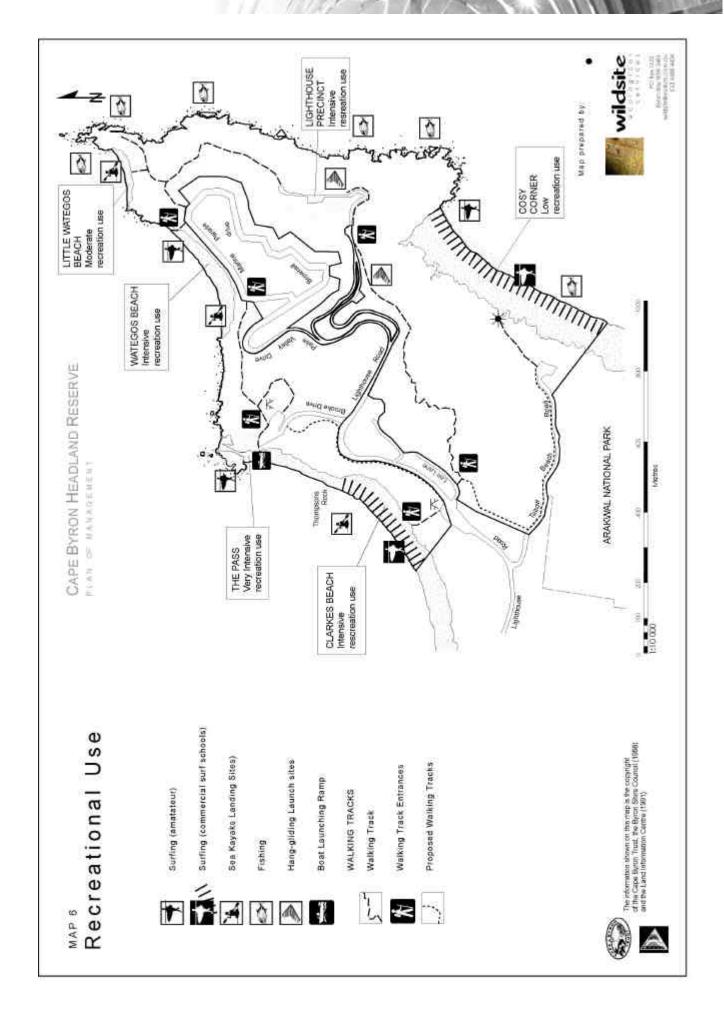
## Existence, bequest and inspiration values

People derive pleasure from knowing that the Reserve is protected, even though they may never visit it. The Reserve supports a high level of public ownership and the Trust's role in preservation allows the community to experience the areas natural and cultural values.









## Statement of Significance

The Reserve is one of a number of reserves on the far north-coast of NSW which protects significant features of the natural and cultural environment, and provides a diversity of recreation opportunities.

### The Reserve:

- protects important communities of vegetation on the far north-coast of NSW and contributes to a larger system of vegetation communities and corridors;
- protects threatened native plants and animals, and provides numerous habitats for a variety of more common native animals;
- is a significant area to the Arakwal Aboriginal people;
- contains and protects and conserves one of the largest and oldest Aboriginal middens in the region;
- contains and protects and conserves the Cape Byron Lighthouse and associated buildings which are of national historic significance;
- provides opportunities for a variety of recreational activities in a natural landscape setting adjacent to Byron Bay township;
- is an important tourist resource which attracts around one million visits a year;
- is the most easterly point of the Australian mainland;
- offers spectacular panoramic views of the ocean, stretching coastline and the Australian mainland, and is itself a significant landscape feature of coastal Byron Shire;
- is a focus of community involvement in nature conservation and education activities:
- provides a valuable environmental educational resource; and
- is a nationally significant land-based whale watching site from which to observe the annual migrations of the humpback whale.

## **Purposes of Management**

This Plan of Management has been prepared to assist the Trust in managing:

- the natural resources and cultural values of the Reserve;
- the diversity of recreational and educational opportunities available;
- how the community will participate in Reserve planning; and
- the business opportunities available.

The Reserve will be managed for the following purposes:

- to protect, conserve, present, rehabilitate and transmit to future generations the physical landscape, biological, cultural heritage and other significant values of the entire Cape Byron Headland Reserve, together with the components and processes required for their continuance;
- to provide a diversity of high-quality recreation and educational opportunities to ensure the widest possible cross-section of the community is able to experience and appreciate the Cape Byron Headland Reserve commensurate with their needs, interests, capabilities and expectations:
- to maintain community ownership and stewardship of the Cape Byron Headland Reserve, through the provision of meaningful opportunities for the community to participate in and be consulted about the planning and management of the Reserve; and
- to maintain a high degree of financial autonomy in the management of the Reserve, through the implementation of ecologically sustainable income-generation opportunities.

# Part B Management Strategies

## Strategy 1 Natural resource management

Natural resource management relates to the management and understanding of the interaction between physical features such as geology, soils, water, air, plants and animals.

The definition of conservation adopted in the IUCN Nature Conservation Strategy (IUCN 1980) is:

'The management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations whilst maintaining its potential to meet the needs and aspirations of future generations.'

This definition, which has been adopted by the Trust, recognises the interdependence of humans on the biosphere and its natural resources and that all elements of biosphere have intrinsic value and rights of existence.

The protection of biodiversity will ensure conservation at its three levels of diversity; genetic, species and ecological.

The Trust has established a management regime to ensure the adequate maintenance of biological and geological diversity. This regime will continue under the actions described in this Plan.

## Cape Byron Headland Reserve



**Plan of Management** 

## 1.01 Vegetation management

See also: 1.02 Fauna management p.28

1.03 Fire management p.31

1.05 Land rehabilitation p.36

1.06 Coastal landscape p.38 3.04 Community participation p.58

3.05 Visitor access p.60

3.10 Commercial recreation management p.71

3.18 Concessions, leasing and licensing p.88

4.01 Reserve neighbours p.92

4.02 Conservation of adjacent areas p.94

## **Background Information**

The outstanding values of Cape Byron was confirmed by the dedication of the Cape Byron Headland Reserve for *'recreation and the preservation of native flora'* in 1903. The Reserve supports a mosaic of vegetation communities which includes littoral rainforest, sclerophyll forest, heathland and grassland. The Reserve provides refugia for native plants and animals, many of which are listed as threatened species in NSW. It also provides for aesthetic, spiritual, scientific and educational experiences and opportunities.

A total of 25 vegetation communities has been recognised in the Reserve. These communities support over 270 species of flowering plants and ferns,of which more than 10% are of regional, state or national significance (Table 1). Species of conservation significance include: the scented acronychia (*Acronychia littoralis*), of which only 100 specimens are known to occur in the wild, and only several mature specimen on the Reserve and the stinking cryptocarya (*Cryptocarya foetida*), whose restricted population has its stronghold around the Cape and adjacent littoral rainforest remnants.

The Reserve's vegetation is undergoing a complex phase of recovery and recolonisation resulting from past clearing, fire, dieback, tree fall and land slippage. Timber cutting, grazing, plantations, beach sand mining and urban and recreational development have all played a role in shaping the vegetation communities we see today.

The most significant vegetation type recognised on the Reserve is littoral rainforest, which covers almost 50% of the land area and supports most of the known threatened species. This littoral rainforest is included under the State Environment Planning Policy (SEPP) 26 – Littoral Rainforests. NPWS areas are exempt from the provisions of SEPP 26, although the Trust will adhere to the most rigorous environmental impact assessment procedures, if and when assessing development proposals within this area.

Some of the plant communities found in the Reserve are of high conservation significance due to factors such as reduced distribution through clearing and inadequate representation in conservation reserves. Other communities are well conserved elsewhere, but are at risk from habitat modification such as weed invasion.

Over 60 species of plants in the Reserve are exotics. Several of these environmental weed species pose a significant threat to the natural values of the Reserve by the displacement of native species. Weeds also threaten the aesthetic and recreational values of the Reserve.

Major weed species include madeira vine (*Anredera cordifolia*), bitou bush (*Chrysanthemoides monilifera*) and winter senna (*Senna pendula var. glabrata*). Several introduced species, including broad-leaved pepper tree (*Schinus terebrinthifolia*), umbrella tree (*Schefflera actinophylla*) and Indian coral tree (*Erythrina x sykseii*) are rapidly increasing in numbers. Many of these weeds found on the Reserve are dispersed from lands adjacent to the Reserve.

In addition to environmental weeds there are numerous noxious species in the Reserve which are listed under the *Noxious Weeds Act 1993*. The *Noxious Weeds Act* places an obligation upon public authorities to manage noxious weeds on land they occupy to the extent necessary to prevent such weeds spreading to adjoining lands.

A habitat restoration program, which involves the application of bush regeneration and revegetation techniques to restore the degraded ecosystems of the Reserve commenced in 1994. This program is coordinated by bush regenerators with the assistance of volunteers of the Cape Byron Friends, school groups and government employment program participants. There are currently around ten volunteers involved in bush regeneration. Volunteers have spent several thousand hours to date assisting with weed management and bush regeneration.

Current weed management programs have targeted mixed species infestations in areas of high ecological or recreational significance and the management of highly invasive and destructive species such as madeira vine.

Infestations of bitou bush have increased over the last few years and now form extensive stands on the steep slopes to the east and south of the Lighthouse Precinct. Other conspicuous weed species include bat's wing coral tree along Clarkes Beach. Works within this Plan will target these species.

Visitor impacts on vegetation are not insignificant. Impacts include the creation of informal tracks and damage resulting from unauthorised car parking and camping.

Vegetation management both within and adjacent to the Reserve is undertaken by agencies who may have varying objectives. The Trust will need to provide planning input into powerline and utility maintenance by Northpower, road reserve slashing by Council and garden maintenance by neighbouring residents in order to maintain and enhance the vegetation values within the Reserve.

Table 1. Flora of conservation significance recorded on the Reserve.

Conservation Significance	Number of Plant Species
Threatened Species Conservation Act 1995 Endangered (Schedule 1)  Vulnerable (Schedule 2)	Acronychia littoralis Drynaria rigidula Xylosma terra-reginae Cryptocarya foetida Macadamia tetrapyhlla
Nationally Rare or Threatened (ROTAP) Endangered Vulnerable Rare Poorly known	Acronychia littoralis Cryptocarya foetida Cordyline conjesta Xylosma terra-reginae Plectranthus cremnus
Rare in NSW	Drynaria rigidula Melicope vitiflora Xylosma terra reginae
Regionally uncommon in north-eastern NSW	Aotus lanigera
Depleted habitat/sparse	Crinum pedunculatum Mucuna gigantea
Disjunct populations	Cordyline congesta Ochrosperma citriodorum
Limit of distribution within region Northern Limit Southern Limit	Ochrosperma citriodorum 22 species

## DESIRED OUTCOMES

### To have:

- the biological diversity of native vegetation conserved and the populations of flora of conservation significance secured and increased where appropriate.
- the conservation values of the Reserve largely free from the effects of introduced flora.

## EXISTING SITUATION

The existing Priority Weed Plan (1991) does not reflect the current distribution and status of weed infestations or the extent of lands now managed by the Trust and requires revision.

Volunteer assistance through the *Cape Byron Friends* currently contributes a significant proportion of the weed management effort on the Reserve through the implementation of the annual Habitat Restoration Program.

No vegetation assessments have been undertaken for the Reserve additions.

The current state of knowledge does not allow a realistic assessment to be made of the long-term viability of all plant species and communities within the Reserve.

While current management practice is based on present understanding of species and community requirements, long-term and regular monitoring is necessary to ensure that desired outcomes are being achieved.

Conflicting vegetation management practices within and adjacent to the Reserve such as powerline and road reserve maintenance are currently uncoordinated with the Habitat Restoration Program and threaten the natural values of the Reserve.

## GUIDELINES AND POLICIES

All activities undertaken in the Reserve will be required to minimise disturbance to native vegetation and rehabilitate any damage resulting from the activity, and where necessary, include bush regeneration strategies to ameliorate the spread of weed species from or onto the activity site.

Priority will be given to the removal of introduced species which are known to be increasing in abundance, extending their range, highly invasive of undisturbed native plant communities or threatening the survival or integrity of threatened or locally uncommon plant or animal species or communities.

Preference in exotic plant management will be given to those programs that utilise management measures that have least harmful or residual environmental impact.

When replanting is necessary, in situ propagules should be derived from immediately local in situ or ex situ populations of native species, and issues of genetic purity and pollution duly considered.

Nursery propagated material of uncertain origin will not be used.

Weed management programs will take into consideration retention of native animal habitat and erosion management strategies.

Manipulation of native plant communities will be considered where it can be demonstrated that natural processes responsible for the continued survival of a species or community are subject to human interference.

The continued and increased use of volunteers in rehabilitation activities will be encouraged.

Habitat restoration planning and activities will be integrated with landscape and coastal planning, fire management and the neighbours program.

## **ACTIONS**

The Vegetation Management Strategy will be finalised. The strategy will:

- update the 1991 Priority Weed Plan, identify environmental and noxious weeds, prioritise target weed species and mixed species infestations on their potential for ecological impacts and prioritise activities for regeneration programs;
- address visitor impacts, fire ecology and neighbour activities in relation to the management of vegetation on the Reserve;
- map significant vegetation values to guide Reserve planning;
- revise and update vegetation assessment and mapping of the recent Reserve additions: and
- undertake surveys of species of conservation significance to determine distribution and ecological requirements and prioritise communities that are vulnerable to impacts of fire, weeds and human visitation.

Regeneration and weed management programs will be undertaken for environmental and noxious weeds which have a high potential for ecological impact or are in visually prominent areas.

Measures used to manage exotic plant species will be periodically reviewed to determine their effectiveness and environmental impact.

Bush regeneration activities will be entered into a geographic information system.

The condition of vegetation communities will be periodically evaluated and monitored.

The cause and methods of treatment of fungal associated dieback will continue to be investigated.

Pandanus will be inspected for dieback and a pest control plan developed.

Locations of threatened plant species will be added to the NSW Wildlife Atlas.

Maintenance agreements outlining vegetation management procedures will be developed in conjunction with utility suppliers with interests within or adjacent to the Reserve.

The relocation of utility easements outside significant vegetation communities will be investigated and implemented where appropriate.

Dunal vegetation threatened by recreation activity, such as at Clarkes Beach, will be protected by way of fencing or similar means as appropriate.

Interpretative signage will be provided to restrict access and inform visitors of significant vegetation and restoration programs on the Reserve.

Community education material will be developed to provide information relating to weed management on the Reserve and on neighbouring properties.

The Trust will seek the co-operation of Byron Shire Council, land management authorities and neighbours to retain native vegetation and to implement complementary weed management programs in adjacent bushland or in areas contributing to the spread of weed species into the Reserve.

## Cape Byron Headland Reserve



**Plan of Management** 

## 1.02 Fauna management

See also: 1.01 Vegetation management p.24

3.13 Beach and rock fishing p.79

3.17 Education and research p.87

4.01 Reserve neighbours p.92

4.02 Conservation of adjacent areas p.94

## **Background Information**

The Reserve lies within a region which supports a rich diversity of terrestrial vertebrates which is among the highest in Australia. The region also provides the northern or southern distributional extreme of many species.

Intertidal areas and nearby marine habitats support a diversity of lifeforms including humpback whales, dolphins, turtles and transequatorial migratory birds.

A total of 40 fauna species of State or regional significance has been recorded on the Reserve or within the adjoining marine environment (Table 2).

Birds are the best represented vertebrate group with over 100 species being recorded. Furthermore, the Reserve provides important habitat for migratory bird and bat species.

With the exception of the adjoining Arakwal National Park there is poor connectivity between the Reserve and nearby vegetation remnants reduces recolonisation opportunities of terrestrial species from adjacent areas.

Archaeological investigations of The Pass midden site indicate that several significant fauna species including the greater glider and grey kangaroo have become locally extinct, possibly since European settlement. Alternatively, the swamp wallaby population appears to be recovering on the Reserve as the vegetation communities regenerate.

Several introduced species including goats, rats, mice, cane toads and birds occur within the Reserve. Some of these species, such as the goat have significant ecological impacts including vegetation modification and erosion. Most carnivorous introduced fauna (e.g., dogs and cats) may decrease the populations of native wildlife through competition and predation.

Table 2. Fauna of conservation significance recorded on and adjacent to the Reserve.

Conservation Significance	Animal Species			
Threatened Species Conservation Act 1995 (NSW)				
Endangered (Schedule 1) Vulnerable (Schedule 2)	Caretta caretta Sterna albifrons Crinia tinnula Gygis alba Haematopus fuliginosus Litoria olongburensis Miniopterus australis Miniopterus schreibersii Nyctophilus bifax Pandion haliatetus Phaethon rubricauda Ptilinopus magnificus Ptilinopus regina Sterna fuscata	loggerhead turtle little tern  wallum froglet white tern sooty oystercatcher olongburra frog little bent-wing bat common bent-wing bat eastern long-eared bat osprey red-tailed tropicbird wompoo fruit-dove rose-crowned fruit-dove		
Population strongholds in the region	Sterna iuscata Syconycteris australis  Ailuroedus crassirostros Egernia major Litoria dentata Pseudophryne coriacea Ptilinopus magnificus Saiphos equalis Tropidechis carinatus Vespadelus pumilus	rostros green catbird land mullet bleating tree frog riacea red-backed toadlet cus wompoo fruit-dove three-toed skink rough-scaled snake		
Endemic to region	Crinia tinnula Litoria olongburensis Sericulus chrysocephalus	wallum froglet olungburra frog regent bowerbird		

#### **DESIRED OUTCOMES**

#### To have:

- the biological diversity and genetic integrity of native animals and their habitats conserved and the populations of fauna of conservation significance secured and increased where appropriate.
- the conservation values of the Reserve free from the effects of introduced fauna.

#### **EXISTING** SITUATION

Records of most groups of terrestrial vertebrate fauna are comprehensive.

Knowledge of some fauna communities is limited, particularly the terrestrial and intertidal invertebrates, terrestrial reptiles and amphibians and cliff face communities.

The goat herd has been regularly maintained at a minimum size. However, even at low numbers goats impact on the values of the Reserve through the spread of weeds, erosion and the degradation of cliff face habitats.

#### **GUIDELINES AND POLICIES**

Dogs and other domestic animals are not be permitted in the Reserve, with the exception of registered assistance animals.

Disturbance of wildlife populations or communities by future development will be minimised.

Fauna habitat will be maintained through the management of introduced species of fauna and flora, appropriate fire management and the management of recreation related impacts.

#### **ACTIONS**

Research will be encouraged into the habitat requirements, status and distribution of significant fauna species within the Reserve and threatening processes.

Further research into poorly understood species and communities will be encouraged including intertidal and cliff face communities.

The management and protection of wildlife corridors will be encouraged.

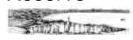
Research will be encouraged into the habitat requirements, status and distribution of introduced fauna in the Reserve. Methods to manage these species will be investigated and implemented where appropriate.

Goats will be removed from the Reserve by relocation.

Surveys will be undertaken targeting threatened fauna and the locations of threatened fauna species will be added to the NSW Wildlife Atlas.

Interpretative material will be produced to foster an appreciation and understanding of the conservation, cultural importance and management of wildlife.

Material to educate the community on the impact of domestic animals on wildlife will be developed.



Plan of Management

#### Fire management 1.03

See also: 1.01 Vegetation management p.24

3.07 Visitor risk and safety p.65

4.01 Reserve neighbours p.92

#### **Background Information**

Fire is a natural part of the Cape Byron Headland Reserve environment and is essential to the survival of some plant and animal communities. However, proactive fire management is necessary to conserve the conservation values of the Reserve and to protect life and property. Inappropriate fire frequency and intensity can cause the loss of particular plant and animal species or community. Fire can also damage Aboriginal sites, heritage values and recreation facilities and can threaten visitors and neighbouring lands.

The relative abundance of rainforest and the humid microclimate found within these rainforests which makes them comparatively resistant to burning greatly reduces the likelihood of intense, uncontrollable wildfires in the Reserve.

A large percentage of the Reserve boundary adjoins a residential area which places an onus on management to reduce the risk of fire spreading from the Reserve to adjoining areas. Fortunately, fire resistant rainforest communities fringe a majority of the Reserve's boundaries in the residential area of Wategos Beach.

The Trust has the following goals for fire management:

- to reduce the risk of fire damage to life and property both within and immediately adjacent to the Reserve;
- to effectively manage fires to avoid the localised extinction of species and vegetation communities which are known within the Reserve;
- to manage fires for the protection and conservation of the natural, cultural, scenic and recreational features of the Reserve;
- to prevent human-caused unplanned fires within the Reserve; and
- to co-operate and work with other organisations in fire management planning.

The Reserve contains a network of management tracks and public access roads providing good access for fire management. These access points provide fire fighters with strategic cut off points to manage wildfires (Map 5).

Ecological research in fire-prone ecosystems, similar to the eucalypt forests on the western slopes of Tallow Ridge, has established broad principles about the fire regimes needed to avoid the extinction of species and thus conserve biodiversity.

A diversity of fire regimes is needed to maintain natural diversity. Accordingly, the management of fire should aim to provide a pattern of fires of varied intensity, frequency and extent.

The following fire regimes (Table 3) have been identified for the management of fire within the Reserve. These are based on the similarity of the vegetation communities found in the Reserve with those of other coastal and sub-coastal areas on the far North Coast.

Table 3. Fire regime thresholds for vegetation communities in the Reserve.

Vegetation Community	Fire Threshold		
Littoral Rainforest	No fire acceptable.		
Closed Forest	No fire acceptable.		
Wet Sclerophyll Forest	Decline expected if successive fires, of any intensity, occur less than 50 years apart. Decline predicted if no fire for more than 200 years.		
Dry Forest Complex	Decline expected if more than two successive fires occur at intervals of less than 5 years. Decline expected if there are no fires for more than 30 years. Decline expected if successive fires occur which totally scorch or consume the tree canopy.		
Shrubland/heath Complex	Decline expected if more than two successive fires occur at intervals of less than 8 years. Decline expected if more than two successive fires occur at intervals of more than 15 years. Decline expected if there are no fires for more than 30 years.		
Grassland Complex	Decline expected if more than two successive fires occur at intervals of less than 5 years. Decline expected if more than two successive fires occur at intervals of more than 15 years.		

#### DESIRED OUTCOMES

To have fire managed for the protection of life and property, and to ensure the maintenance of biodiversity through the continuation of natural processes.

#### EXISTING SITUATION

Fire management on the Reserve focuses on the protection of life and property.

The 1994 *Fire Management Plan* is in need of revision due to additions to the Reserve and the proposed Arakwal National Park.

A Preliminary Draft Fire Management Plan (1999) has been developed in accordance with the objectives outlined in this Plan of Management.

No neighbour orientated fire management program has been developed.

The optimal fire regimes for animal and plant species and plant communities within the Reserve are not fully understood.

The extended absence of fire in the heath and dry sclerophyll forest communities within the Reserve is not within recognised fire frequency thresholds for these communities.

A disused vehicle access between Tallow Beach Road and Lee Lane currently provides only limited access for fire management.

# GUIDELINES AND POLICIES

Fire management will aim to exclude fire from closed forest communities and to maintain an appropriate diversity of age classes in open forest, woodland, heathland and grassland communities within the Reserve

Fire management will seek to maintain the full range of biodiversity rather than maintain species-specific habitat conditions.

Natural fire advantages and existing strategic management lines will be used to manage fires where possible.

Consistent with the provisions of the Fire Management Plan, neighbours, cultural sites and facility areas will be protected by fire management trails, fire radiation zones and areas of hazard reduction where appropriate. The size of fuel reduction zones will be dependent on whether natural features (e.g. topography aspect, low risk vegetation types, etc.) provide some existing protection.

The impacts of any fire management activities on the values of the Reserve will be minimised as far as possible.

All fire management activities will be subject to a review of environmental factors, except for emergency fire suppression activities.

The use of heavy machinery, especially tracked machinery, for fire suppression activities will be avoided as far as possible.

Prescribed burns, if undertaken, will incorporate both pre-fire and post-fire weeding where necessary.

The use of wetting agents and fire retardant for fire suppression within the Reserve will be avoided as far as possible.

A co-operative management approach currently undertaken with fire management authorities and neighbours will be maintained and enhanced.

Close contact will be maintained with the Byron Shire Bush Fire Management Committee through the NPWS Regional Fire Management Officer to facilitate a coordinated approach to fire fighting.

#### **ACTIONS**

A Fire Management Plan will be prepared for the Reserve.

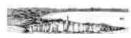
A fire management track will be established along the currently disused vehicle access between Tallow Beach Road and Lee Lane, in accordance with the proposed Fire Management Plan.

Manual fuel reduction may be undertaken in high-risk areas in accordance with the proposed Fire Management Plan, to reduce the risk of high intensity fires and improve the capacity of firefighters to safely manage wildfires.

Records of fire occurrences will be entered into a geographical information system, with particular emphasis on mapping and recording the extent, frequency, seasonality and intensity of fire.

Research into appropriate fire regimes and practices for management of native species will be encouraged, including ecological prescription burns and alternatives to burning, such as litter reduction, and simulated disturbance.

Information will be provided to neighbours about fire management and protection measures and neighbours will be encouraged to become involved in co-operative fuel management works where appropriate.



**Plan of Management** 

## 1.04 Geology and landform evolution

See also: 1.05 Land rehabilitation p.36 1.06 Coastal landscape p.38

#### **Background Information**

Shifts in the Reserve's beaches and dunes and the changing profile of the cliffs and slopes are part of the character of the area. Cape Byron and Byron Bay form an outstanding example of a zeta-form bay. This feature results from the differential erosion of sand on beaches to the north and south of the Cape, associated with the northward migration of sand along the NSW coastline.

The Reserve contains outstanding examples of past and present geomorphological (evolution of the landform) processes. There are two major landform elements of distinctly different geology - the Carboniferous/ Devonian metamorphosed sediments (metasediments) of the Brisbane Metamorphics (the headland) and the Quaternary coastal dune systems (Cosy Corner and Clarkes Beach).

The metasediments that comprise the bulk of the headland are part of the oldest rock formations in the region (345 - 405 million years). The greywacke, slate, phyllite and quartzite metasediments have been extensively folded to form the prominent features of Cape Byron, Julian Rocks and Broken Head.

Quaternary sands in low areas adjacent to the present shoreline have subsequently buried this bedrock geology. These sediments of alluvial, marine and aeolian (wind blown) origin are up to 130 000 years old and were formed during Quaternary sea level fluctuations. Around 130 000 years ago, the sea level was several metres above the present level and sand dunes were deposited in ridges behind Tallow Beach. Wind blown sand from this period occurs up to 60 m above sea level on the slopes above Cosy Corner. These old sand dunes extend to the present-day coastline where they are covered by the more recent sands of the foredunes and beach. Cape Byron has existed in its present form for approximately 6000 years following establishment of the present-day sea level.

The dune-swale system behind Tallow Beach has been extensively modified by sand mining operations, including gold extraction in the 1880s, mineral sand extraction in the 1930s and extensive dredging for mineral sands during the 1960s, resulting in the simplification of the previously complex mosaic of dunes and wetlands.

DESIRED OUTCOMES

To have all landforms and the processes by which they are formed free of humaninduced disturbance.

EXISTING SITUATION The diversity and accessibility of significant geomorphological sites on the Reserve provide opportunities for interpretation and education. There is currently little interpretation of the geomorphological processes associated with the Reserve.

Areas within the Reserve which are potentially threatened in the short term include, the midden at The Pass, The Pass boat launching ramp and Marine Parade at Wategos Beach.

#### **GUIDELINES** AND POLICIES

No permanent structures will be provided on or near features likely to be affected by significant natural erosion.

The Trust will only consider management intervention after extensive assessment of the relative value of the threatened feature, the plausibility of effectively mitigating the erosion and the impact of proposed management activities.

Removal or relocation of facilities threatened by natural erosion will be investigated and implemented where appropriate.

#### **ACTIONS**

Interpretive material will be produced to foster an appreciation of geomorphological processes.

A monitoring system for tracking shoreline fluctuations and trends within the Reserve will be established.



Plan of Management

#### 1.05 Land rehabilitation

See also: 1.01 Vegetation management p.24

1.02 Fauna management p.28

1.04 Geology and landform p.34 1.06 Coastal landscape p.38

2.01 Aboriginal cultural heritage p.44

3.01 General recreation management p.52

3.05 Visitor access p.60

#### **Background Information**

The Brisbane Metamorphics weather to form thin soils which are highly erodable and hence are extremely susceptible to disturbance. This soil type is common throughout the ridgelines and midslopes of the Reserve. Sheet erosion increases substantially wherever the vegetation is disturbed. Minor to severe gullying frequently occurs on unpaved roads and tracks. Additionally, the unconsolidated sand masses of the shoreline and coastal plain are vulnerable to wind erosion following disturbance of the vegetation cover.

Human and introduced animal activities can lead to accelerated rates of erosion. Examples of such activities include pedestrian induced erosion on Fisherman's Lookout, clearing of vegetation, major earthworks and the activities of feral goats. Many areas on the Reserve are subject to human induced erosion which has resulted in a loss of vegetation cover and subsequent exposure to wind and water erosion.

The aim of rehabilitation is to stabilise the land and to recover the condition which would have existed had erosion not occurred. This may involve reshaping the land and making drains or diversion banks, regulating visitor access and establishing a permanent cover of vegetation.

#### DESIRED OUTCOMES

To rehabilitate land and sites of significant or representative ecological, cultural or archaeological value eroded by non-natural activities.

#### EXISTING SITUATION

The introduced goats have accelerated the process of erosion, particularly around the edge of cliff tops.

Recent rehabilitation has reduced the rate of erosion on Fisherman's Lookout.

The midden at The Pass is subject to coastal erosion. The site has been revegetated and pedestrian access excluded, however, the site is still being degraded by natural erosion.

A dune-blow at Lovers Cove threatens the integrity of the forested remnant containing scented acronychia. This site has been revegetated and pedestrian access reduced, however, unregulated access still threatens the integrity of the dune.

#### **GUIDELINES AND POLICIES**

The design and construction of permanent structures will be undertaken to minimise

To the greatest extent possible, all earthworks undertaken on the Reserve will utilise local, lithologically similar materials and will be designed and undertaken in a manner which minimises soil erosion and incorporates soil conservation principles.

Rehabilitation work will be in a manner which when carried out will not threaten significant or representative natural or cultural features.

Rehabilitation works on beaches and dunes throughout the Reserve will only be carried out if there is certainty that the works will not affect other areas within this fragile zone.

The assistance of recreation user groups and special interest groups may be enlisted to help revegetate degraded sites.

Where a natural feature or cultural site is subject to erosion, the conservation importance of the area will be determined. The Trust will only take measures to manage natural erosion, where it is determined that the importance of the resource overrides the importance of maintaining the natural processes.

Plans for development sites will be prepared to ensure areas of disturbance are minimised and rehabilitation work is conducted in the most efficient and effective manner.

#### **ACTIONS**

Erosion management and stabilisation work will be undertaken along the Reserve walking track and road system.

The stabilisation of the Lovers Cove dune-blowout and The Pass Midden revegetation works will continue.



**Plan of Management** 

### 1.06 Coastal landscape

See also: 1.01 Vegetation management p.24

1.04 Geology and landform p.34

1.05 Land rehabilitation p.36

3.03 Sense of place p.57

4.01 Reserve neighbours p.92

4.02 Conservation of adjacent areas p.94

#### **Background Information**

Cape Byron and the Lighthouse are recognised symbols of the eastern-most point on the Australian mainland.

The Cape and the Lighthouse provide a visual pinnacle and dramatic backdrop to the township of Byron Bay and much of Byron Shire and is one of the most significant landscape elements along the NSW coastline.

Cape Byron rises 100 m above sea level, providing an elevated vantage point with  $360^{\circ}$  views of the ocean, the waters of Byron Bay and the hinterland. The coastline is visible from Ballina to the Queensland border. The volcanic plateau of the Mount Warning caldera and the Border Ranges form a dramatic inland background.

Management of landscape and scenic values are essentially concerned with viewfield protection. The form and contrast of any disturbance or development, its distance from the observer and the location of the observer are all factors that influence its impact on the landscape.

The range of viewfields from distant vistas to foregrounds must be managed carefully. Views from the Reserve as well as from within it need to be considered and require co-operative management with neighbours. The visual impact from development including signs, walking tracks, shelters, toilets, roads, car parks and buildings needs to be assessed.

This assessment will need to consider the maintenance of the natural and cultural heritage character of the site in when determining siting, design, scale and construction materials.

#### DESIRED OUTCOMES

To have the visual and physical integrity of the coastal landscape elements on the Reserve and adjacent areas maintained and enhanced where possible. All areas of human disturbance will be visually integrated with the surrounding natural landscape where appropriate.

#### EXISTING SITUATION

The NPWS has guidelines relating to the siting, design and materials used in construction to minimise visual impacts of Reserve signage and facilities. The Trust has adopted these guidelines.

The Trust is represented on the Byron Shire Coastline Management Committee. This committee is advising Byron Shire Council on the preparation of a Coastline Management Study and Coastline Management Plan.

The regenerating vegetation on the Reserve is progressively obscuring both positive and negative visual elements within the Reserve.

The Trust has adopted the principle of sustainable integrated coastal planning for the Reserve in line with the NSW Government Coastal Policy.

Aerial power lines in the residential area of Wategos Beach significantly compromise the landscape values of this sector of the viewfield.

The Trust is not formally notified by Council of developments which may impact on the visual quality of the Reserve.

#### **GUIDELINES AND POLICIES**

The Trust will not support developments within the viewfield of the Reserve that will have adverse visual or other impacts on the Reserve and will encourage Byron Shire Council to put in place planning controls to protect the visual amenity of the surrounding coastal area.

The Trust will consult with other government agencies, local authorities and private organisations regarding future developments outside the Reserve which are likely to impact upon landscape viewfields in the Reserve.

#### **ACTIONS**

A landscape assessment of areas on and adjacent to the Reserve will be encouraged to identify significant or representative elements.

Byron Shire Council will be requested to formally notify the Trust of advertised Development Applications that may affect lands visible form the Reserve.

Byron Shire Council will be requested to reduce the visual impact of the Wategos water supply reservoir.

Authorities will be encouraged to reduce the visual impact of highly visible impacts within and outside the Reserve if they detract from the view from high-use vantage points.

The replacement of overhead powerlines adjacent to and within the Reserve, with underground services, will be implemented where appropriate.

Interpretative material will be developed to foster an appreciation and understanding of the conservation, cultural importance and management of the landscapes of the Reserve and surrounding lands.



**Plan of Management** 

## 1.07 Catchment management and water quality

See also: 1.01 Vegetation management p.24

1.05 Land rehabilitation p.36

4.01 Reserve neighbours p.92

#### **Background Information**

The Reserve has a number of small short catchments that drain directly to the ocean and are not part of the major coastal catchments of the Brunswick or Richmond Rivers.

The Palm Valley creek, draining to The Pass, is the only semi-permanent watercourse on the Reserve. Other small catchments are intermittent and display surface flow only during, or temporarily after, periods of rainfall.

The Reserve contains small wetland areas which are periodically inundated and provide important habitat for fauna, including the threatened Wallum froglet and olongburra frog. Although these dunal wetland systems are common within the region, their occurrence is extremely limited on the Reserve, being restricted to the sandplain behind Tallow Beach and a small swale behind Clarkes Beach.

Runoff entering the Reserve from adjoining residential areas can result in a range of issues including increased weed invasion, soil erosion, siltation of creeks and wetlands, flooding, water logging, damage to terrestrial and aquatic ecosystems and offensive odours.

Improvements to wastewater management on the Reserve include the recently constructed amenities building in the Lighthouse Precinct and the composting toilet and artificial wetland greywater system at the Clarkes Beach Cottage.

#### DESIRED OUTCOMES

To have the water quality of all waterbodies within the Cape Byron Headland Reserve within limits necessary for maintenance of natural processes, biodiversity, and ecological integrity.

#### EXISTING SITUATION

There has been no assessment of the water quality of the catchments associated with the Reserve.

Large volumes of stormwater runoff are generated from the impermeable surfaces of the Lighthouse Precinct, roads and the adjacent urban areas and create significant erosion and sedimentation problems.

The two catchments draining to Wategos Beach have a high potential for urban stormwater pollution. The eastern sub-catchment receives drainage from the Lighthouse Car park and blackwater from the Lighthouse septic trenches.

The Wategos Beach residential area is serviced by a sewage pumping station (SPS) that pumps via a rising main to gravity sewer in Lighthouse Road. The Palm Valley area is serviced by a SPS located in The Pass carpark which also pumps via a separate rising main to gravity sewer in Lighthouse Road. The two systems are independent. The Palm Valley catchment is dominated by natural vegetation, although some pollutants may be concentrated in the car park after dry periods.

Small catchments associated with Clarkes Beach contain a significant amount of residential development. Runoff from these areas is likely to impact on the water quality within the intermittent streams, the dunal wetland behind the beach and the lagoons that periodically develop on the beach in periods of sand accretion.

#### **GUIDELINES AND POLICIES**

The preparation of soil and water management plans will be required when considering development proposals which are likely to affect water quality on the Reserve. These plans will detail means for minimisation of soil erosion and water quality impacts .

Nutrient inputs to streams and wetlands will be minimised.

#### **ACTIONS**

Septic systems will be maintained for optimum performance and where feasible will be connected to Byron Shire Council's sewage system.

Stormwater management measures will be implemented on the Reserve, particularly at the Lighthouse Precinct and the Reserve roads and carparks.

The Precinct toilet facilities will be connected to Council's sewage system.

A program for the inspection and maintenance of the Reserve's wastewater (including stormwater) facilities will be developed to minimise risks to environmental quality and visitor safety.

Liaison with Council will be undertaken to ensure that the operation and maintenance of sewer rising mains and pumps in the Reserve does not result in environmental or health impacts.

Encourage Byron Shire Council to address stormwater management through Stormwater Management Plans for the adjoining residential areas.



**Plan of Management** 

## 1.08 Noise pollution

See also: 3.01 General recreation p.52

3.03 Sense of place p.57

3.10 Commercial recreation management p.71

4.01 Reserve neighbours p. 92

#### **Background Information**

The Reserve is a popular feature for scenic joy flights and ultra-lite aircraft which can be chartered from the Tyagarah Airport.

The use of powered aircraft over the Reserve commonly impacts on the sense of tranquillity offered by the natural bushland setting of the Reserve and consequently on visitor's enjoyment of the sights and sounds of nature.

Several food vending vehicles operate on the Reserve and public access areas adjacent to the Reserve. These vehicles usually operate on the beaches or adjacent to picnic areas and may conflict with the natural ambience of the Reserve.

Noise is also generated by vessels launching from The Pass.

Jet skis are not permitted on Byron Shire beaches or from launching at The Pass, thus their impact is minimal.

# DESIRED OUTCOMES

To have noise emissions that adversely affect the Reserve managed within acceptable environmental and social standards.

#### EXISTING SITUATION

The noise generated by recreational and chartered aircraft, food vending vehicles, and vessels launching out of The Pass, reduces the enjoyment of some visitors.

Food vendors and vessel operators use the Reserve under licence.

# GUIDELINES AND POLICIES

The Trust will not permit any new activities that generate excessive noise to the extent that it diminishes visitor enjoyment of the Reserve.

The Trust discourages the use of jet skis in proximity to the Reserve.

Vendor licences will require operating conditions to minimise noise generation to within acceptable levels where appropriate.

Commercial vessel operators will be required to use practices to minimise noise.

#### **ACTIONS**

Investigations will be undertaken to assess the noise emitted by various activities to determine whether further action to manage noise emissions is required.

Liaison will occur with vessel operators to determine potential methods for reducing noise generation at The Pass.

Liaison will occur with the Civil Aviation Authority and local flight operators to investigate the designation of appropriate areas within the airspace above the Reserve as 'sensitive areas' and associated overflight restrictions will be implemented where appropriate.

# Strategy 2 Cultural resource management

Places and items of cultural significance provide insights into the past and contribute to ones experience and appreciation of the present social and natural environment.

The cultural significance of a place is embodied in a broad range of elements including its fabric, setting, contents, and use as well as in people's memories and associations with the place. These elements combine to tell a unique story of the place. The aim of heritage conservation is to retain the cultural significance of a place which includes provision for its security, its maintenance and its future. Each heritage place or area has specific significance or value and special requirements for conservation.

Heritage management at the Reserve needs to respect and involve different cultures and aspirations, particularly indigenous groups.

An important concept in the conservation, maintenance and presentation of the cultural heritage values of the Reserve is the adaptive reuse of places. However, the adaptive reuse of items of cultural heritage needs to be consistent and sensitive to the conservation and appreciation of the item.



**Plan of Management** 

## 2.01 Aboriginal cultural heritage

See also: 1.05 Land rehabilitation p.36

3.02 Public contact, visitor education and interpretation p.54

3.17 Education and research p.87

4.02 Conservation of adjacent areas p.94

#### **Background Information**

Historically, Aboriginal people have been displaced from traditional lands, the learning of culture through ceremony has been disrupted and the use of traditional language discouraged. This process has lead to a loss of cultural information although Aboriginal people continue to maintain strong cultural traditions.

Today, Cape Byron - or Walgun, as it is known by the Aboriginal custodians – maintains spiritual, cultural and historical significance for the Arakwal people. The Reserve contains many sites, artefacts and landscapes which are significant in maintaining ties with the past and facilitating the continuation of Aboriginal culture.

The Aboriginal heritage values of the Reserve enrich the cultural, scientific and educational experience of visitors and are all a special part of the regions cultural heritage.

Palm Valley represents the most culturally significant indigenous area of the Reserve. The Pass midden (Site 4-5-61) is a significant Aboriginal site and is the single oldest (approximately 1440 years) large and substantially undisturbed foredune pipi midden between Ballina and the Queensland Border. The site is an important remnant of a series of discontinuous middens that once stretched from The Pass to Tyagarah before disturbance by sand mining. The midden was a fishing camp comprising of fish (e.g., bream and shellfish). Animals and plants from nearby bushland were also prepared here. The midden is an important site to the Aboriginal custodians and provides opportunities to foster increased community awareness and appreciation of Aboriginal culture.

Other significant elements include scattered stone artefacts of regional significance and the relatively intact natural landscape of the Reserve. It is likely that other important sites exist around the shorelines especially near freshwater springs at Cosy Corner, Tallow beach and Clarkes Beach.

Aboriginal sites are protected under the National Parks and Wildlife Act. Activities which encroach on, or interfere with any Aboriginal site or area must have Local Aboriginal Land Council approval.

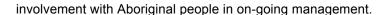
Aboriginal sites may be threatened by natural processes and visitor impacts. The Pass midden has been significantly disturbed by inappropriate developments in the past, by natural erosion and visitor impacts. Recent restoration works have restricted pedestrian access to the site, although natural erosion of the dune by wave action and freshwater flows still threaten the midden.

The Aboriginal community have active and meaningful involvement in all aspects of Reserve management, through the representation of the Arakwal Aboriginal Corporation on the Trust Board.

Recent agreements between the Arakwal Aboriginal Corporation, the Trust and the NPWS, have provided new avenues for the involvement of Aboriginal people in the management of natural and cultural resources on the Byron Shire coast.

The Trust has created a position for an Aboriginal Field Officer and recently provided an interpretive space, the Arakwal Room, in the Head Lighthouse Keeper's Cottage to assist in the provision of meaningful participation of the Aboriginal people in Reserve management and interpretation.

The Trust will seek to continue the process of reconciliation through the further recognition of the Aboriginal cultural values of the Reserve and co-operation and



#### DESIRED **OUTCOMES**

#### To have:

- the Aboriginal cultural heritage values of the Reserve protected, maintained and appropriately presented.
- the history, culture and aspirations of Aboriginal people recognised, respected and documented.
- opportunities for active and meaningful involvement by Aboriginal people in the management of the Reserve, maintained and developed.

#### **EXISTING** SITUATION

The Trust acknowledges the cultural importance of all sites, objects and places to the contemporary Aboriginal community, and also the scientific, educational and aesthetic significance of sites to society as a whole.

A Deed of Agreement between the Minister for the Environment, Minister for Land and Water Conservation, the Arakwal People, Arakwal Aboriginal Corporation and the Tweed Byron Local Aboriginal Land Council was endorsed on 3 April 1997. This Deed of Agreement recognises that the traditional owners shall have access to the Reserve for traditional purposes, and that the preparation of the Reserve's Plan of Management requires their consent.

Interpretation of the Aboriginal cultural heritage values of the Reserve is inadequate.

The Arakwal Aboriginal Corporation have lodged a Native Title Determination Application (NC95/1) with the Native Title Tribunal (22 December, 1994) over land and sea between Byron Bay, Julian Rocks and Broken Head, including the Reserve.

An additional Native Title Determination Application (NC 97/36) has been lodged with the Native Title Tribunal over land adjacent to the Reserve on the corner of Lighthouse and Tallow Beach Roads. The Corporation intends to develop an interpretive centre on the site, in partnership with other government land management agencies.

All Aboriginal objects, sites and places are protected under the National Parks and Wildlife Act.

The location and extent of identified sites of Aboriginal cultural significance has been researched in detail and is well documented and understood.

Other sites and artefacts of Aboriginal cultural significance are likely to exist on the Reserve, particularly within the recent Reserve additions.

The Trust is currently undertaking restoration and protection works on The Pass Midden to minimise impacts associated with visitors and natural processes.

The Special Places Education Kit was launched and the Arakwal Room was opened by Sean Kay, Chairperson of the Arakwal Corporation on 18 May 2001.

#### **GUIDELINES AND POLICIES**

Opportunities for resourcing the protection and enhancement of Aboriginal cultural values will be investigated.

The Arakwal Aboriginal Corporation shall be consulted on all developments that impact on the Aboriginal cultural values of the Reserve and be provided with the opportunity to determine the future of sites, objects and Aboriginal places, and their interpretation.

In consulting with Aboriginal communities it is recognised that organisations included but not limited to the Native Title Claimants, and Holders, Elder Corporations and Aboriginal Land Councils may have members who have information concerning the issue/item of consultation.

Site and artefact locations will not generally be publicised without the consent of the Arakwal Aboriginal Corporation. Decisions on the desirability of interpreting Aboriginal sites within the Reserve will be made in consultation with the Arakwal Aboriginal Corporation.

All Aboriginal sites will continue to be protected from disturbance or damage by human activities.

The Arakwal Aboriginal Corporation is granted access to the Reserve for traditional purposes, including:

- protection and conservation of cultural heritage;
- access to sites of significance;
- access for ceremonies under traditional law;
- gathering material for traditional medicines and ceremonies; and
- access for fishing purposes.

At all times, two members of the Trust shall be a nominee of the Arakwal Aboriginal Corporation as ex-officio members of the Trust.

#### **ACTIONS**

Significant Aboriginal cultural resources will be mapped to guide Reserve planning.

A conservation and management strategy will be developed in consultation with Arakwal Aboriginal Corporation, for the continuing management of Aboriginal cultural heritage.

A Memorandum of Understanding between the Trust and the Arakwal Aboriginal Corporation will be developed to facilitate opportunities for employment, training and participation in the administration and affairs of the Reserve.

An assessment of the Aboriginal cultural heritage significance of the recent additions to the Reserve will be undertaken and encouraged.

Further research into the pre-European environments, Aboriginal resource uses, and spiritual and cultural associations of the Reserve and the adjacent coastal areas will be encouraged.

Sites of Aboriginal significance will be regularly inspected and restoration works consistent with the conservation and management strategy will be undertaken where required. The Arakwal Aboriginal Corporation will be encouraged to participate in these inspections.

Names and locations which have an Arakwal name will be investigated and used with the agreement of the Arakwal Aboriginal Corporation.

The mitigation of coastal processes acting on the midden will be investigated and implemented where appropriate in consultation with the Arakwal Aboriginal Corporation.

Pedestrian access will continue to be regulated and vegetation cover maintained at The Pass midden.

In consultation with the Arakwal Aboriginal Corporation interpretive material on the Aboriginal resource use and the mythological, ceremonial and cultural significance of the Reserve will be developed, including the development of the Arakwal Interpretive Room in the Lighthouse Visitor Information Centre.

The development and implementation of education and information programs will continue to be resourced by the Trust with ongoing participation of the Arakwal Aboriginal Corporation in recognition of the Arakwal People as traditional owners of the Reserve.



**Plan of Management** 

#### 2.02 Historic cultural heritage

1.05 Land rehabilitation p.36 See also:

3.02 Public contact, visitor education and interpretation p.54

3.03 Sense of place p.57 3.05 Visitor access p.60

3.06 Visitor facilities p.63

3.07 Visitor risk and safety p.65

3.09 Lighthouse tours p.69

3.16 Visitor accommodation p.85

3.17 Education and research p.87

#### **Background Information**

The Reserve has a rich and diverse historic heritage. Within this Plan of Management, 'historic' refers to places, events and items associated with people since European settlement. Historic values include the Cape Byron Lighthouse, little known sites associated with early agriculture and industry and less tangible features such as photographs and stories. Historic features all embody particular stories about people and the region.

The Cape Byron Headland has played a significant role in the historical development of Byron Bay for more than 150 years.

The Lighthouse, which was constructed in 1901, is an outstanding example of period construction and engineering and is an important symbol of historical methods of communication and transport although it no longer has an essential role in navigation. The Precinct buildings, lighthouse equipment, documentary and artefactual evidence of use all make the Cape Byron Lighthouse a rare and intact example of a significant period in Australian history.

The Trust has undertaken considerable restoration works to maintain and protect the historical values of the Lighthouse Precinct, including the reinstatement of the terracotta roof tiles and repainting of the Lightkeeper's Quarters and general maintenance works on buildings and fencing. The buildings of the Lighthouse Precinct are currently used for a range of purposes including the Trust office and administrative spaces, the Visitor Information Centre, interpretive space and accommodation. Palm Valley was the location of Jarman's Hotel, the first European settlement in Byron Bay (c. 1883). This was destroyed by fire and little evidence remains today.

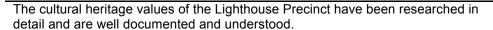
The beaches of the Reserve were once used to access the region and are therefore historically significant in terms of European exploration, commercial use and settlement. Timber from the Reserve, particularly brush box, was harvested during the cedar-felling era, from around 1840 to 1870. The main bullock track used for hauling cedar from the escarpment to ships awaiting in Byron Bay passes to the south of the Reserve. Other historical uses of the Reserve include sand mining and activities which continue today, such as boat launching and beach hauling.

Cape Byron also played a significant part in the commercial whaling industry which operated from Byron Bay between 1954 and 1962. Where the cape is now used as a site for observing whales for pleasure and research, between 1954 and 1962 it was a strategic site for locating passing whales for the patrolling whaling vessels.

**DESIRED OUTCOMES**  To have the historic cultural heritage values of the Reserve, including the fabric, form, scale, context and setting, protected, maintained and appropriately presented.

**EXISTING** SITUATION

The Trust is guided by the Australia ICOMOS Charter for the conservation of Places of Cultural Significance (The Burra Charter) and supports the use of these guidelines in all cultural conservation projects. The conservation, management and presentation of the Lighthouse Precinct is currently guided by the Heritage Act 1977 (NSW) and the NPWS Lighthouses: Conservation Management and Cultural Tourism Plan 1999.



The location, extent and significance of historic heritage values of the recent additions to the Reserve are poorly understood.

A review of all lighthouses within National Parks and Wildlife Service areas, concluded that Cape Byron Lighthouse was subject to the most advanced management.

The documentation of the cultural heritage values of the Reserve (both Aboriginal and historical) is widely scattered among several disparate documents. Importantly, there is no comprehensive documentation of the history of the Reserve.

The Australian Maritime Safety Authority maintains and operates the Lighthouse for marine navigation under a lease from the National Parks and Wildlife Service.

The historic heritage of the Reserve is inadequately interpreted.

# GUIDELINES AND POLICIES

Systematic photographic surveys will be carried out, catalogued and archived before, during and after any works implemented within the Lighthouse Precinct.

Where information is considered to be inadequate, further documentary and physical research of the historical heritage items and places will be undertaken and encouraged prior to carrying out works or removal.

Where necessary, conservation assessments and the preparation of conservation plans will precede any works on a historic structure other than routine maintenance or urgent stabilisation work.

The use of historical buildings will only be permitted if it is consistent with the conservation of building fabric, the appreciation and enjoyment of cultural features and the quality of experience of other Reserve users.

The Trust shall conserve and manage the Cape Byron Lighthouse in full recognition of the heritage and environmental management provisions of the NPWS Lighthouses Conservation Management and Cultural Tourism Plan, relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, Environmental Planning and Assessment Act 1979 (NSW), Regional and Local Environmental Plans, the National Trust of Australia (NSW), National Parks and Wildlife Service and good conservation practice as promoted by Australia ICOMOS.

Uses and activities within the Lighthouse Precinct that lessen, obscure or confuse the historical associations of the place will be discouraged and prohibited where appropriate.

The conservation and tourism management of the Lighthouse will be consistent with the maritime safety objectives of the Lighthouse operation.

The historical cultural heritage of the Reserve will be incorporated into the Trust's interpretation program and will also include more contemporary cultural values (e.g. surfing and modern artefacts).



Significant historic cultural resources will be entered into a geographic information system to guide Reserve planning.

An assessment of the historical cultural heritage significance of the recent additions to the Reserve will be encouraged.

Site management guidelines and a works schedule for the maintenance of all historic heritage features will be developed and implemented.

A system will be developed to catalogue and conserve all artefacts found on the Reserve.

The Lightkeeper's Quarters and associated buildings in the Lighthouse Precinct will be used as interpretive space and for appropriate commercial activities.

Documentation on the cultural heritage of the Reserve will be consolidated.

# **Strategy 3**Recreation, tourism and visitor use

The Cape Byron Headland Reserve offers a diversity of recreation opportunities – from the natural experiences of the rainforests and beaches, to the adventurous recreation activities of hang gliding and surfing.

The Reserve is a significant provider of recreation within the region. It is an important recreational resource for many local residents, and a major attraction to international visitors, who comprise one third of visits to the Lighthouse Precinct.

The Cape maintains a high level of public identity, support and community "ownership" with the community recognising the diversity of recreation opportunities available.

The Reserve is a major tourist destination, having a significant role in the NSW tourism industry. In terms of economic development, tourism is rapidly becoming the most significant industry in the region. The Reserve receives approximately one million visits each year and is situated within the fastest growing region of NSW and adjacent to the fastest growing region in Australia – South East Queensland. Approximately half a million people live within one hours travel time of the Reserve, and around two million people within four hours.

Visitor surveys indicate that of the seven most important attractions to visitors to the Byron Bay area, four are located within the Reserve, including the Cape Byron Lighthouse, Wategos Beach, Cape Byron Walking Track and Clarkes Beach.

The effective management of recreation on the Reserve requires the use of specific plans or policies.



**Plan of Management** 

### 3.01 General recreation management

See also: 1.01 Vegetation management p.24

1.06 Coastal landscape p.383.02 Public contact, visitor education

and interpretation p.54
3.03 Sense of place p.57

3.05 Visitor access p.60 3.06 Visitor facilities p.63 3.10 Commercial recreation management p.71

3.11 Whale watching p.74

3.13 Beach and rock fishing p.79

3.14 Surfing p.81

#### **Background Information**

The Reserve offers a diversity of recreational opportunities and is a significant provider of recreation within the region. Its location adjacent to Byron Bay makes it an important recreational resource for many local residents, interstate and international visitors. Focus areas within the Reserve include the Lighthouse Precinct, the Cape Byron Walking Track, Palm Valley and the beaches. Walking, jogging and cycling are particularly popular activities among local residents.

These activities are all associated with particular settings—from seeing a swamp wallaby on a morning walk through Palm Valley; to sighting of a whale 'breaching' in the Bay — the recreational experiences of the Reserve are firmly linked to their unique settings. The effective management of the Reserve's recreational values must aim to preserve these unique settings and avoid conflict between the various pursuits.

The recreational opportunities within the Reserve are under increasing pressures and demands. Careful planning and management is essential to protect Reserve values without destroying the very qualities that attract visitors in the first place.

#### DESIRED OUTCOMES

#### To have:

- a diversity of high-quality, sustainable recreation opportunities that are consistent with the protection of the natural and cultural values of the Reserve, and which complement other local and regional recreation opportunities.
- visitors behaving responsibly towards the Reserve's natural and cultural features and ensuring their own and other visitors' safety.

#### EXISTING SITUATION

A diversity of recreational opportunities is available within the Reserve.

There is a high level of visitor satisfaction with the level of recreation opportunities available on the Reserve.

Although visitor use of the Lighthouse Precinct is well understood, the recreation settings elsewhere on the Reserve require further assessment.

Impacts associated with recreational activities collectively present the most significant threat to the natural values of the Reserve.

Not all recreational activities are being managed without conflict between users and without threat to the environment and the integrity of the recreational settings.

No significant attempt has been made to assess the social, physical and managerial attributes of the recreation sites in the Reserve. The attributes that are important to user satisfaction and enjoyment are not well understood. Evidence suggests that these conditions are being compromised at most sites at certain times.

Visitor use of the Reserve continues to increase rapidly, with high levels of visitation on weekends (particularly Sundays), school holidays, and public holidays.

#### **GUIDELINES AND POLICIES**

Recreation opportunities available within the Reserve will be based on the special features of the Reserve, and will aim to complement rather than duplicate opportunities offered elsewhere in the region.

Visitor numbers and behaviour will be managed where natural, social or cultural values of the area are threatened or in order to retain a predetermined range and quality of recreation opportunities.

Activities that are determined to have an unacceptable impact on the natural, cultural heritage or recreation values of the Reserve will not be permitted.

Recreation management policies will be modified as necessary, as demands for particular recreation activities change, or as additional information is obtained.

All non-commercial activities with the potential to cause disturbance to other visitors or the Reserve will require a licence or consent agreement.

The natural recreation setting at Cosy Corner will be maintained.

#### **ACTIONS**

A Recreation Management Strategy will be developed and implemented.

Indicators by which changes in recreation settings can be measured over time will be identified and standards to be maintained will be established.

A regular program to monitor recreation setting conditions and adjust management to maintain the desired standards will be developed and implemented.

Pre-visit information will be made available regarding the recreation opportunities and experiences available in the Reserve.

Liaison with State and local government agencies and private enterprise will occur to coordinate recreation management within Byron Shire and the region.



**Plan of Management** 

# 3.02 Public contact, visitor education and interpretation

See also: 1.01 Vegetation management p.24

1.03 Fire management p.31

2.01 Aboriginal cultural heritage p.44

2.02 Historic cultural heritage p.47

3.04 Community participation p.58

3.09 Lighthouse tours p.69

3.11 Whale watching p.74

3.17 Education and research p.87

#### **Background Information**

Public contact is about providing information, education, interpretation, promotion and publicity with the aim of increasing awareness, encouraging appropriate behaviour and enhancing the quality of visitor experiences. The Trust provides information through a variety of means including guided tours, signage, interpretive displays, education programs and the publication of information sheets and brochures. These services shape the public image of the area and support its protection and conservation.

The Reserve is an ideal location to interpret the natural heritage, cultural heritage and human use of the region and to promote important conservation messages.

The aims of the Trust's public contact activities are:

- to enrich experiences for visitors by providing information and education services and facilities;
- to enhance public understanding and interest in the physical, biological, historical and cultural processes which have shaped the environment of Cape Byron;
- to promote a conservation ethic in the local community, which will be reflected
  in community support and commitment to management of the Reserve's
  natural and cultural heritage values through planned education and information
  services and programs; and
- to promote public awareness, understanding and confidence in Reserve management and interpretive programs.

The Trust employs staff to develop and implement educational, interpretative and community programs and has produced a range of pre-visit information material including booklets, brochures, videos and tourism industry kits. Information is made available through the Byron Bay Tourism Information Centre and the Trust's Visitor Information Centre and Trust Office.

*Welcome In* and the Arakwal Room are interpretive spaces situated in the Head Lightkeeper's Quarters. *Welcome In* presents information about the values of the Reserve and encourages visitor reflection and communication of their experiences.

A display sponsored by Southern Cross University, promoting the natural, cultural, recreation and tourism values of the region and the Reserve is currently located in the Head Lighthouse Keeper's Quarters.

An interpretive display is planned for the Lighthouse tower, with a focus on maritime history.

The Trust provides a range of education and interpretation opportunities through personal contact. *Roving Ranger* provides a welcoming service to visitors and informal site interpretation around the Lighthouse Precinct. Trust staff give regular talks to schools, technical colleges, and university student groups. Environmental education programs conducted by the Trust provide activities that include night-time story telling and the award winning *Kids on the Coast* program. Additional activities include the hosting of occasional seminars.

The Trust uses the local media for the promotion of its activities.

#### **DESIRED OUTCOMES**

#### To have:

- an appreciation within the wider community of the natural, recreational, cultural, educational, scientific and economic values of the Reserve, and an understanding and appreciation of the physical, biological, historical and cultural processes which have shaped and continue to shape Cape Byron.
- community awareness, understanding, confidence and support for the actions of the Trust and the benefits of conservation in general, reflected in behaviour that is environmentally responsible, and ensures their own and other visitors' safety.
- assistance provided to visitors to obtain the greatest possible benefit. satisfaction and enjoyment from their visit while gaining an understanding and appreciation of the Reserve's values.
- to foster among people an awareness of economic, social, political and ecological interdependence and provide visitors with a range of opportunities to acquire knowledge, skills, attitudes, values, and the commitment needed to protect and improve the natural and cultural environment.

#### **EXISTING** SITUATION

Interpretation of values and processes associated with the Reserve is extremely limited.

Interpretative space/material is provided within the Head Lightkeeper's Quarters and the Lighthouse.

Interpretive signs have been provided at various locations along the walking track, including a self-guided walk within Palm Valley. However, the age and discontinuous nature of the signage system requires a major upgrade to provide an overall communication system.

No public contact or interpretation plans have been developed for the Reserve.

Minutes and reports of Trust meetings are available to the public.

Directional signs on the Reserve have been upgraded in accordance with the standards of the National Parks and Wildlife Service Signage Manual.

Information relating to the Reserve's values and their management is currently spread across a large range of disparate documents, in a variety of formats, and requires collation to provide a base of information for developing public contact materials.

Education programs undertaken by the Trust have been very successful to date.

#### **GUIDELINES AND POLICIES**

All public contact material associated with Aboriginal cultural values will be developed in consultation with the Arakwal Aboriginal Corporation.

All information, on which interpretive programs are based, will be thoroughly researched to present the most up to date and accurate knowledge available. Interpretation programs developed by the Trust will be imaginative and effective.

The community will be kept informed of Trust management activities, including plans, new initiatives and management decisions.

Signs within the Reserve will be designed, constructed, sited and maintained with the guidance of the National Parks and Wildlife Service Signage Manual.

Facilities within the Lighthouse precinct will be used for providing interpretive activities and information.

#### **ACTIONS**

A website will be developed and maintained.

Information panels will be provided at the Lighthouse Precinct, Captain Cook

Carpark, The Pass, Wategos and Cosy Corner.

A self-guided interpretive sign system for the Reserve walking tracks will be developed.

Guidelines will be developed to ensure merchandise provided in the Visitor Information Centre is consistent with, and promotes the conservation of natural and cultural heritage values of the Reserve.

A formal public report register will be developed and the comments received will be reviewed and appropriate management responses taken.

The Trust will seek to be involved in providing an interpretive component in the proposed Arakwal Cultural Centre.

An Interpretative Plan will be developed and implemented.

The use of multilingual signs will be investigated and implemented where necessary.

The production of a saleable brochure for the Reserve will be investigated and implemented if feasible.

The Trust will participate where appropriate in local Tourism Boards and Forums.

The maritime history of Cape Byron including information on the shipwrecks off the Byron Shire coastline will be interpreted.



**Plan of Management** 

#### Sense of place 3.03

See also: 1.06 Coastal landscape p.38

1.08 Noise pollution p.42

2.02 Historic cultural heritage p.47 3.01 General recreation management p.52

3.05 Visitor access p.60

3.10 Commercial recreation management

4.01 Reserve neighbours p.92 4.02 Conservation of adjacent areas

#### **Background Information**

The Reserve has a powerful sense of place providing inspiration, respite and reconnection. While the individual values of the Reserve are significant in isolation, the combination of these values create an overall sense of place and unique character.

The Reserve offers unique opportunities to experience and connect with the elements, the ocean and the landscape. Open, exposed and expansive, the settings of Cape Byron capture the imagination – its wild, rugged and imposing landscapes; its panoramic view over the mainland, ocean and stretching coastline; and its ever changing moods linked to the wind, storms, and the rise and fall of the sun and moon. From the sense of remoteness and vulnerability of the Lighthouse Precinct, to the awe and beauty of whales breaching off the coast, Cape Byron is able to inspire.

An important component of the Reserve's sense of place is its contrast to the pace of life within the Byron Bay township. The Reserve provides separation and respite from daily routine and provides a setting, which is both alternative and complementary to that of Byron Bay. Many of the components of the Reserve's unique sense of place are beyond the influence of management, (e.g., Cape Byron's rugged topography). However, it is the maintenance of settings within which visitors appreciate and connect with these components which is important to preserve.

#### DESIRED **OUTCOMES**

To have the Reserve's unique sense of place, and the visitors' ability and means of experiencing this, maintained and where appropriate, enhanced.

#### **EXISTING** SITUATION

The contribution of the Lighthouse Precinct to the Reserve's sense of place is well understood. Other aspects (not including the Precinct) that contribute to the Reserve's sense of place, and the ability and means by which visitors experience this, are poorly understood.

The maintenance of settings within which visitors experience the Reserve's sense of place is currently not a compulsory consideration in assessing new developments associated with the Reserve.

#### **GUIDELINES AND POLICIFS**

The Trust recognises that the Reserve is a unique and special place and is committed to maintaining the Reserve's unique character and visitors' experience of

All planning and development assessments will have a component that assesses an activities' impact on the Reserve's sense of place, and the visitors' experiences of this.

#### **ACTIONS**

The Trust will promote the Reserve's unique sense of place and character.



Plan of Management

## 3.04 Community participation

See also: 1.01 Vegetation management p.24

3.02 Public contact, visitor education and interpretation p.54

3.11 Whale watching p.74

4.01 Reserve neighbours p.92

#### **Background Information**

Community participation includes the active and meaningful involvement of the community in the activities and planning decisions relating to the management of the Reserve. The Trust Board includes members of the local community which are uniquely placed to channel community concerns into management actions.

Community involvement through volunteers is an integral part of the Trust's activities. Volunteers provide the opportunity to strengthen communication links and understanding between the Trust and the community, as well as expanding the Trust's work capabilities by making a significant and practical contribution to management.

The Reserve has a long history of community involvement. The *Cape Byron Friends* is comprised of volunteers from the community who are dedicated to the conservation and promotion of the Reserve. In 1998, the success of the *Cape Byron Friends* program was recognised through receipt of the NSW Community Link Award for Volunteers in Conservation of the Environment and Heritage. The *Cape Byron Friends* now has a pool of over 30 trained workers available to participate in various bush regeneration activities and to provide education and interpretation services, including the staffing of the *Roving Ranger, Welcome in* and assistance in various education programs such as *Kids on the Coast*.

Community consultation is a dynamic two-way flow of information between the Trust and specific interest groups in the community who may be affected by the Trust's activities or who have a close and ongoing interest in the management of natural and cultural heritage. Avenues of participation include, attending Trust meetings, attending special access sessions, public meetings, visitor surveys, the exhibition of draft policies or management plans and responding to press releases.

DESIRED OUTCOMES To have a range of meaningful avenues of community participation in the development and implementation of Reserve management objectives.

To keep the community informed on Reserve issues.

EXISTING SITUATION There are high levels of community participation in the habitat restoration and education programs of the Reserve, through the *Cape Byron Friends*.

There is currently no program specifically aimed at providing Reserve neighbours with information about Reserve management issues and encouraging the participation of neighbours in the activities and planning processes of the Reserve.

The Trust has developed extensive experience in facilitating community consultation, and has developed strong and cooperative working relationships with all identified specific interest groups associated with the Reserve.

#### **GUIDELINES AND POLICIES**

Continued community involvement in the Reserve will be encouraged, particularly involvement in bush regeneration programs and educational activities.

#### **ACTIONS**

Additional opportunities for volunteer participation in Reserve management activities will be investigated and implemented.

Community consultation will continue to be undertaken to allow all stakeholders to participate in the development and review of policy and management decisions.

Local community days will be held to encourage community involvement and provide information to neighbours and the surrounding community on specific Reserve management issues.



**Plan of Management** 

#### 3.05 Visitor access

See also: 1.01 Vegetation management p.24

1.05 Land rehabilitation p.36

1.07 Catchment management and water quality p.40

3.03 Sense of place p.57

3.06 Visitor facilities p.63

3.07 Visitor risk and safety p.65

3.15 Hang-gliding p.83 4.01 Reserve neighbours p.92

#### **Background Information**

Extremely high visitation rates make access a particularly significant issue, requiring careful and flexible management. Carefully planned access is required to allow reasonable entry into the Reserve whilst maintaining the values which visitors expect.

Access to the Reserve is possible through various entrance points by vehicles (i.e. private vehicles and chartered coaches), walking, cycling and by boat or by water.

Vehicle access to the Reserve is available via Lighthouse Road. It provides direct access to the main entrance below the Lighthouse Precinct and is maintained by Council. Vehicle access is also available at the Reserve entrances located on Brooke Drive and Tallow Beach Road.

The Reserve has three classes of roads. Public vehicle access is permitted on all public and Reserve roads. Reserve roads are managed by the Trust and public roads are managed by Council. The Reserve also contains a number of management tracks that primarily serve as fire breaks and provide access for management.

The different management responsibilities for *public* and *Reserve roads* results in inconsistencies in traffic and parking enforcement and in road maintenance activities. Council has the responsibility to maintain Council roads and car parks adjacent to the Reserve.

The Cape Byron Walking Track provides access of varying grades. Entrance points at Lee Lane, Palm Valley, the Lighthouse Precinct and the eastern and western ends of Wategos Beach provide access to the track system. Beaches also provide access into and within the Reserve.

Car parking is available at the end of all access roads and limited coach parking exists in the Lighthouse Precinct car park. There is no provision for trailer or caravan parking on the Reserve, with the exception of boat trailers at The Pass.

Carparks are frequently pushed beyond capacity during holiday periods, particularly in the Lighthouse Precinct. Congestion during these periods is in conflict with the cultural and natural settings of the Reserve and significantly compromises visitor enjoyment. There is no opportunity to increase car parking space within the Reserve without compromising other values. Parking space cannot be increased in any of the Reserve's car parks due to physical limitations and strict management requirements to maintain historic and natural settings. While the Trust is committed to providing a diversity of access, the Trust will seek to encourage alternative means of access such as bus shuttle services and improved walking tracks.

The Trust has regulated traffic to the Lighthouse Precinct by introducing parking fees, providing parking officers and limiting activities which would attract additional vehicles.

Scenic drives, walking, jogging and cycling are popular activities along Reserve roads. Conflicts between road users frequently occur, particularly on Lighthouse Road and may compromise visitor safety. The roads are narrow and the steep slopes of the Reserve make widening of the roads impractical. However, it has been proposed to develop an elevated walkway between Captain Cook car park and The Pass. The proposed walkway would complement the existing Cape Byron Walking Track, forming a continuous circuit around the Reserve.

The road and track network throughout the Reserve require high levels of

maintenance to ensure serviceability, visitor safety and to minimise environmental impacts associated with runoff, including erosion, sedimentation and water pollution. Improvements of the access infrastructure in some areas are required to address these issues.

Disabled access is provided to some facilities at major locations. The NPWS design standards for recreational facilities cater for disabled access and are used by the Trust in the development of these facilities. Although the Trust will seek to provide access for disabled visitors at important locations, the provision of disabled access to all sites in the Reserve may not be possible or appropriate.

#### DESIRED **OUTCOMES**

To have a diversity of access provided within the Reserve that is consistent with the natural, cultural and recreational values of the Reserve.

To reduce the number of private vehicles within the Lighthouse precinct with access predominately by walking, cycling or by public transport.

#### **EXISTING** SITUATION

Increasingly, the unique recreation settings of the Reserve are overcome by traffic and parking congestion. Vehicle access to all areas of the Reserve, particularly the Lighthouse Precinct, has reached capacity during holiday periods and is steadily increasing between holiday periods.

Access and parking restrictions only apply within the Lighthouse Precinct.

No public transport system is provided to the Reserve from the township of Byron Bay. Although preliminary trials of a bus service have been undertaken.

The lack of formalised parking spaces at Cosy Corner results in significant vegetation damage associated with vehicle encroachment into natural areas.

Informal walking tracks on the Reserve cause damage to vegetation, increase weed invasion and erosion.

The level of public access to beaches and shorelines is currently satisfactory, however informal tracks are greatly accelerating erosion in these foreshore areas.

Disabled access is provided to public toilet facilities at the Lighthouse Precinct and The Pass. Disabled access is not provided within the Lighthouse or the associated buildings.

Pedestrians, cyclists and motorists share the roads within the Reserve at a number of sites, presenting considerable visitor safety risks.

The responsibility for maintenance of the road network associated with the Reserve is shared by both Council and the Cape Byron Trust. The shared management results in inconsistent law enforcement and road maintenance.

#### **GUIDELINES AND POLICIES**

The public access system will be regulated based on the need to limit environmental damage, reduce conflict between users, or for reasons of public safety. Regulation may include permanent or seasonal closures to private vehicles. Prior consultation will take place with the community whenever possible.

Horseriding is prohibited in the Reserve.

Cycling is not permitted on walking tracks in order to prevent damage to the tracks and minimise conflicts with walkers.

The towing of trailers and caravans to the Lighthouse Precinct is discouraged due to space limitations and public safety.

Private vehicle use will be managed through fees for management and protection of Reserve values.

Access for disabled vehicles will not be restricted.

Off road recreational vehicles are not permitted off roads or on management tracks.

No special provisions for trail bike or four-wheel drive vehicles will be made.

Where possible and appropriate, access for disabled visitors to new developments will be provided.

Methods for improving public safety on roads within the Reserve will be implemented, and may include the construction of walking track links where appropriate.

#### **ACTIONS**

Cosy Corner Carpark will be improved for drainage, traffic flow, visual amenity and environmental protection, while maintaining current capacity.

A walking track to Cosy Corner Carpark from Lighthouse Road will be provided with a link to the Tallow Ridge Track at Lee Lane to be investigated and implemented if appropriate.

A walking track/boardwalk and cycleway to connect Captain Cook Carpark to The Pass will be constructed.

The walking track surface between Tallow Ridge to Lee Lane will be upgraded.

The redesign of Captain Cook Carpark will be investigated and implemented if feasible.

The walking track from Captain Cook Carpark to the beach will be redesigned and constructed.

The installation of traffic calming devices along Lighthouse and Tallow Beach Roads, such as flat-topped speed humps, speed limit signs and signs warning of other road users will be investigated and implemented where appropriate.

Appropriate traffic control techniques will be applied to address informal Car parking issues along Tallow Beach and Lighthouse Roads and their associated Carparks.

A walking track will be provided adjacent to the road at Wategos Beach, subject to the approval of Byron Shire Council.

Access onto Wategos Beach will be improved.

Methods to discourage private vehicle access to the reserve, such as parking fees and fee incentives to use public transport, especially during peak holiday periods will be implemented.

Fee incentives will be implemented to encourage use of smaller coaches to the Lighthouse Precinct.

Alternative transport options to the Lighthouse and other locations on the Reserve will be investigated and trailed and, if successful implemented. Transport options will consider disabled access and look at facilities for carrying surfboards and bicycles.

The informal walking track between Palm Valley Drive and the Cape Byron Walking Track will be formalised to control erosion. All other informal walking tracks will closed and revegetated.

The condition of Reserve roads and walking tracks, and their impact on adjacent values and will be regularly assessed and maintenance implemented as required.

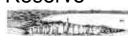
Disabled access will be provided to a representative range of the opportunities within the Reserve.

Byron Shire Council rangers will be provided with the authority to issue infringement notices on the Reserve, in accordance with National Parks and Wildlife (Land Management) Regulation 1995.

Management tracks will be maintained and gated to prevent illegal access.

The Reserve brochure will be upgraded to provide information including Reserve location, accessibility and facilities, and maps showing access roads and walking tracks.

The potential for the ownership or care, control and maintenance of the Council Road to the Lighthouse from Lighthouse Road will be investigated.



**Plan of Management** 

#### **Visitor facilities** 3.06

See also: 1.01 Vegetation management p.24

1.04 Geology and landform evolution p.34

Coastal landscape p.38 1.06

1.07 Catchment management and water quality p.40

2.02 Historic cultural heritage p.47

3.02 Public contact, visitor education and interpretation p.54

#### **Background Information**

Beaches, picnic areas and walking tracks invite visitors to spend extended periods of time on the Reserve. Picnic areas and associated facilities are provided adjacent to the beaches. These facilities are relatively discrete and generally in keeping with the natural setting. Picnic furniture, barbecues, amenities buildings, outdoor showers, drinking fountains and bins are provided at these locations. No barbecues are provided at Cosy Corner.

The provision of facilities must be carefully balanced with the maintenance of the natural and cultural heritage qualities of the site and the Reserve as a whole. Facilities should not be permitted to adversely impact on the environmental and cultural values of the Reserve or diminish the quality of experiences offered.

Facilities provided along the walking track include seating, rest spots and lookouts. The maintenance of views at lookouts is sometimes in conflict with the ecological values of the site as vegetation cover increases. These lookouts may be maintained as shady rest areas or where the view is to be maintained, they will be carefully managed to avoid impacting on the natural landscape.

The Visitor Information Centre, situated in the Head Lightkeeper's Quarters, provides visitors with refreshments, information and souvenirs. Other facilities offered within the Precinct include seating, telescopes, garbage bins and a telephone.

The type of facilities provided are important in determining which visitors will be attracted to a site. The unlimited incremental development of visitor facilities, which inappropriately shift settings towards the more developed end of the recreation opportunity spectrum, should be avoided. Consequently visitor facilities should not be provided where: there is no demonstrated demand or need for them; they are adequately provided for elsewhere; they are in conflict with the natural or cultural values, or they could result in an undesirable shift in recreation setting.

The Trust will maintain a flexible approach to the siting of facilities. Existing visitor facilities which may be inappropriately located and be in conflict with the desired recreational setting may be removed to obtain a setting for a recreational opportunity and a new or additional visitor facilities provided elsewhere.

DESIRED **OUTCOMES**  To have a diversity of facilities provided within the Reserve that are consistent with the natural, cultural and recreational values of the Reserve, and that do not detract from the enjoyment of other visitors.

**EXISTING** SITUATION Levels of visitor use and satisfaction associated with facilities in the Lighthouse Precinct is well understood.

The number of picnic areas within the Reserve is considered adequate.

There is currently no recycling of visitor waste generated on the Reserve.

**GUIDELINES AND POLICIES** 

The Trust will provide facilities, services and amenities where they meet normal visitor requirements, and are directed to improving protection or management of the area, and are consistent with the Trust's goals of nature conservation, cultural

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resource conservation and the provision of recreational opportunities.

The level and type of facilities provided should not be permitted to adversely impact on the environmental and cultural values of the Reserve or diminish the quality of the experience offered.

Visitors will be encouraged to remove their own rubbish and no fires will be permitted.

Private gas or similar portable stoves will be permitted in the Reserve but charcoal or heat bead stoves will not be permitted due to the fire risks associated with disposal of hot coals.

No new picnic areas will be constructed within the Reserve.

Mobile food vendors will be allowed on the Reserve to provide additional services to park visitors. The operation of mobile kiosks will be established under licence agreements where such services are compatible with the areas concerned.

#### **ACTIONS**

The future use of the existing café building at The Pass for office accommodation, visitor information and shop will be investigated and implemented if feasible.

The provision of a café in the Lighthouse Precinct will be investigated and implemented if appropriate.

The redesign of the facility layout at The Pass and Captain Cook Carpark will be investigated and implemented if appropriate.

A rubbish recycling system throughout the Reserve will be implemented where feasible.

An additional barbecue and picnic tables will be provided at Wategos Beach picnic

Water saving devices will be installed on all Reserve facilities. The supplementation of water supplies with on site collection and storage will be investigated and implemented if feasible.

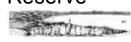
A study to determine visitor use, satisfaction and expectations in relation to the range, quantity and quality of facilities provided on the Reserve will be undertaken. This study will also include an assessment of the existing facilities to determine their consistency with the natural, cultural and recreational values of the Reserve.

Vegetation may be managed in order to maintain views from viewing platforms indicated on Map 5.

Site plans will be prepared and implemented for each visitor area.

Energy saving and recycled materials will be used where feasible in the construction of facilities.

A design theme manual will be prepared to guide development of visitor facilities.



Plan of Management

#### Visitor risk and safety 3.07

See also: 1.03 Fire management p.31

Historic cultural heritage p.47

3.05 Visitor access p.60 3.06 Visitor facilities p.63

3.10 Commercial recreation management

3.12 Vessel-based activities p.76 3.13 Beach and rock fishing p.79

### **Background Information**

The diverse range of recreational opportunities, combined with high visitation rates, rugged topography and the surrounding marine environment result in numerous visitor safety issues on the Reserve.

The Trust has an obligation and duty of care to minimise risks of injury and illness to the public within its boundaries. Risk and challenge, however, are an integral component of some activities such as hang-gliding and surfing and the risk of calculated danger is not accepted as a reason for management intervention in some circumstances. The Trust has kept itself well informed as to its duty of care and regularly reviews its activities (e.g., boat launching) with respect to relevant issues.

The pursuit of a variety of recreation activities within an area often requires management intervention. Considerable visitor safety issues have arisen from the concentration of competing uses including boat launching, surfing, and swimming at The Pass. In 1995, the Trust employed staff to co-ordinate boat launching and enforce its Code of Conduct.

Vehicle access to the Lighthouse Precinct permits visitors of varying abilities, including children and the elderly, to an area of high use and potential hazards including sheer cliffs, strong winds, sun exposure, steep inclines and significant traffic movements. The heritage values of the Precinct, however, require that the risk management measures are consistent with maintaining the historical setting of the site. Similarly, risk management measures must avoid compromising the natural character of a site.

DESIRED **OUTCOMES**  To have minimised risk to visitors and public liability. As far as practicable damage, deaths or injuries associated with recreation activities will be limited to those caused by wilful misbehaviour or unforeseeable accidents.

**FXISTING** SITUATION There is presently no comprehensive visitor safety and risk management plan for the Reserve.

Visitor safety associated with vessel launching at The Pass is actively managed to a high standard.

Risk management and safety inspections of the Reserve were made in 1992 and 1999. Both reports note the problems of balancing safety standards with aesthetics and heritage values in relation to fencing along the cliff tops. Several 'trip hazards' were noted in the Lighthouse Precinct and on walking track surfaces.

The Trust has a system for recording accidents. However, there is no system in place to regularly review and evaluate accident patterns, frequency or management responses.

Lifeguards are employed during summer holidays to patrol the Trust managed beaches at The Pass, Wategos Beach and Tallow Beach.

# GUIDELINES AND POLICIES

In relation to natural features, unusual features that call for the warning or protection of visitors will be identified and appropriate responses initiated. These include signposting, barriers, location and relocation of facilities such as tracks and lookouts, information related to visitor safety, and prohibition of some activities.

Where measures suggested to rectify safety problems cannot be carried out because of lack of immediate resources, consideration will be given to closure of the area or facility until remedial action can be taken.

Facilities provided for visitors will be designed in accordance with relevant safety standards.

### **ACTIONS**

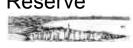
A Risk Management Strategic Plan will be prepared and implemented.

To discourage people climbing fences, the regeneration of the grassed area beyond cliff fences, with indigenous low-growing headland species, will be implemented where appropriate.

Walking track surfaces will be regularly inspected and maintained to a safe standard.

Fencing of public access areas adjacent to the cliff faces will be regularly inspected to ensure compliance with the required safety standards and heritage guidelines.

All accidents that occur on the Reserve will be recorded in a register and reported to Trust meetings.



**Plan of Management** 

# 3.08 Parking charges

See also: 3.05 Visitor access p.60

3.06 Visitor facilities p.63

3.09 Lighthouse tours p.69

3.10 Commercial recreation management p.71

### **Background Information**

There is currently no charge for public access to the Cape Byron Headland Reserve. However, facility provision and the management of impacts associated with approximately one million visits a year is becoming increasingly expensive.

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A vast majority of the management issues on the Reserve are associated with visitor impacts and a significant proportion of expenditure is associated with provision and maintenance of visitor facilities. For example, the provision and maintenance of toilet facilities on the Reserve (not including construction) is currently about \$50 000 a year. Currently these services are provided free of charge to the public.

Currently visitors are required to pay a parking fee for vehicles within the Lighthouse Precinct. The parking controls, including the fees and employment of parking officers, assist in the management of vehicle numbers to limit the impact of vehicles in the historic setting of the Precinct, to enhance visitor experience and ensure equity in the provision of vehicular access. Parking fees provide a method of collecting important data on visitor use and facilitate the collection of funds for the management of the Reserve. The revenue collected contributes to funding conservation and recreational management of the Reserve.

Car parks at The Pass, Cosy Corner, and Wategos Beach operate beyond capacity in busy periods and require vehicle management measures to maintain their recreational setting and ensure quality visitor experiences. The introduction of measures to regulate vehicle traffic and to provide equity in access within these areas, including parking fees, will be investigated.

### DESIRED **OUTCOMES**

### To have:

parking fees that reflect the cost of providing recreation opportunities, including the management of recreational impacts on the natural, cultural and recreational values throughout the Reserve, and which do not discourage access by any particular social group.

### **EXISTING** SITUATION

Parking fees apply at the Lighthouse Precinct and honesty box system when parking officers not employed.

An honesty box system for parking fees is in place at The Pass.

Annual parking permits are available.

NSW NPWS entry permits apply to vehicle parking in the Precinct.

Car parking at The Pass and Cosy Corner is currently unmanaged. These areas are beyond capacity in peak periods, and are reaching capacity more frequently in less busy times. The traffic congestion in busy times compromises visitor experience.

The recent addition of 33.4 hectares to the Reserve has increased the area of land managed by the Trust by about 50%, and has substantially increased the cost of management. However, parking fees in these additional areas are not being utilised to cover the costs of associated recreational impacts, the management of natural and cultural heritage, or the provision of facilities.

# GUIDELINES AND POLICIES

Parking fees will be collected to assist with the management of the sites and to provide income for the management of the Reserve.

Annual parking permits will be available for use throughout the Reserve.

### **ACTIONS**

Alternative public transport to the Reserve, such as a bus shuttle service will be investigated and implemented.

Parking management measures, including parking officers and fees will continue at the Lighthouse Precinct.

Parking management measures, including the use of fees, will be implemented as appropriate within the Reserve carparks.



Plan of Management

### 3.09 Lighthouse tours

See also: 2.02 Historic cultural heritage p.47

3.02 Public contact, visitor education and interpretation p.54

3.05 Visitor access p.60

3.07 Visitor risk and safety p.65

3.08 Parking charges p.67

### **Background Information**

The Cape Byron Lighthouse is the single most significant attraction for visitors to the Reserve.

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The Lighthouse was officially opened on 1 December 1901 amid enthusiastic celebrations by the people of the region. Among Australian Lighthouses the Cape Byron Lighthouse is notable for the power of its light which has a range of over 27 nautical miles, its construction using precast concrete blocks, and its position on the eastern most edge of the continent.

The Lighthouse is a significant and representative example of the so called "coastal highway lighthouses" that were erected along the NSW coastline between 1858 and 1903, providing an important navigational aid for the increasing number of ships travelling along Australia's east coast at the turn of the century.

The Lighthouse and associated buildings were designed by Charles Harding, the then architect of the Harbour and River Navigation Board. In 1977 the National Trust of Australia classified the entire lightstation in recognition of the "architectectural monumentality" of the group of buildings as well as their historic background, and the construction innovations of the concrete block technique, which "made significant first steps towards the introduction of standardised on-site and off site building elements to Australian architecture".

The last lighthouse keeper left Cape Byron in 1989 at which time the management of the Lighthouse precinct became the responsibility of the Trust. The Lighthouse itself remained the property and under the control of the Australian Maritime Safety Authority (AMSA).

In June 1997 AMSA and the State of New South Wales signed the Heads of Agreement document which facilitated the transfer of the Cape Byron Lighthouse from the Commonwealth to the State of New South Wales. The Lighthouse was initially transferred to the Department of Land & Water Conservation and later in October 1998 to the National Park and Wildlife Service.

A condition of the Heads of Agreement was a requirement of the State to lease back to AMSA the Lighthouse for its continued operation as an aid to marine navigation. The Heads of Agreement also provided that the NPWS would be granted a licence agreement by AMSA to conduct public tours in the Lighthouse.

The lease and licence agreements have a term of 25 years plus a further 25 year option. The first lease and licence period terminates on 30 June 2022.

The Cape Byron Trust has been appointed by the Minister for the Environment as the Minister's agent for the purpose of administering the tourist licence.

From July 2001 the Lighthouse has been opened to the public for organised guided tours.

The Lighthouse provides extraordinary opportunities for an interpretive facility in a unique setting. Although the operation of the Lighthouse is now automated, the building is generally in its original condition and various artefacts associated with earlier modes of operation are available and in good condition. An interpretive space will be developed in the southern room of the Lighthouse Tower with a focus on maritime heritage issues.

The Lighthouse precinct is extensively described in the NPWS Lighthouses: Conservation Management and Cultural Tourism Plan 1999.

### DESIRED OUTCOMES

### To have:

- guided tours and an interpretive display operating in the Lighthouse that expand upon the cultural and recreational opportunities for the public in the Reserve without impacting on the visitor experience and heritage values of the Lighthouse Precinct.
- visitor appreciation and enjoyment of the cultural heritage values of the Lighthouse enhanced.

### EXISTING SITUATION

The Lighthouse is open to the public for guided tours.

The tours are operated in accordance with the Licence between the Australian Maritime Safety Authority and the Minister for the Environment for the State of New South Wales for Tourist Access at Cape Byron Lighthouse.

Operational guidelines for public use of the Lighthouse have been developed by the Australian Maritime Safety Authority.

# GUIDELINES AND POLICIES

Interpretation of the Lighthouse will be consistent with the NPWS Lighthouses: Draft Conservation and Cultural Tourism Plan.

The operation of the Lighthouse tours will be consistent with the Trust's goal of minimising traffic within the precinct.

### **ACTIONS**

Lighthouse tours will be conducted in accordance with AMSA guidelines and fees will apply.

An interpretive facility will be established within the Lighthouse, which focuses on maritime heritage.



Plan of Management

### **Commercial recreation management** 3.10

See also: 1.01 Vegetation management p.24

3.01 General recreation management p.52

3.02 Public contact, visitor education and interpretation p.54

3.03 Sense of place p.57

Visitor risk and safety p.65 3.07 3.12 Vessel-based activities p.76 3.15

3.18

Hang-gliding p.83 Concessions, leasing and

licensing p.88

### **Background Information**

Commercial recreation includes recreation activities which are organised or conducted by a company, organisation, group or individual for which a payment is received.

The Reserve is a popular destination for those involved in a range of commercial recreation activities. The Trust has numerous licensed commercial operators providing activities on or from the Reserve, including hang-gliding, surfing lessons, sea kayaking and scuba diving.

The style of tourism represented by commercial recreation on natural lands is recognised as a major segment within a growth industry.

Commercial recreation activities help to achieve a number of objectives, including the following:

- contributing to the range of recreational opportunities available to Reserve visitors;
- increasing interpretive and educational opportunities for Reserve visitors;
- providing avenues for the encouragement of appropriate visitor behaviour;
- provide opportunities for the recovery of some costs associated with commercial use of the Reserve; and
- provide ecologically sustainable opportunities for the economic use of reserved lands, and thus contribute to the local and regional economy and employment.

The demand for nature and outdoor recreation based tourism has increased significantly in the past few years. Commercial recreation conducted within the Reserve currently provides economic benefits to the Byron Bay area by providing direct and indirect employment and enhancing the scope and attractiveness of the tourism assets.

Commercial recreation is managed in the context of the overall availability of recreational opportunities within the region and the ability of the site to sustain such a use. The extent of commercial recreation must be managed in relation to the total use of the Reserve to prevent the exclusion of other Reserve users from a setting, site, or activity. Limits to the number of commercial operators, group sizes and approved locations and the development of minimal impact and safety codes are used as a means to manage environmental and social impacts.

The Trust views that it is the responsibility of all commercial operators to take all precautionary measures necessary to ensure the safety of clients from unreasonable danger. However, the Trust has a duty of care to ensure that operators are adequately addressing the safety needs of their clients and are adequately insured.

The Trust has adopted a Commercial Recreation Policy to provide guidance for the management of commercial recreational activities on the Reserve. The policy was adopted following consultation with licence holders, industry representatives, special interest groups and the community. The policy provides:

- objectives for the management of commercial recreation in the Reserve;
- guidance on the type and style of commercial recreation activities which are considered appropriate;

- standards for operators;
- a fee structure;
- a basis for the assessment of proposals for commercial recreation; and
- guidance on the assessment of commercial recreation licences.

Following the extension of the Reserve boundaries to mean low water mark in December 1998, commercial beach activities previously managed by Council are now managed by the Trust.

# DESIRED OUTCOMES

To have a range of commercial recreation opportunities available on the Reserve, consistent with the maintenance and enhancement of the Reserve's natural and cultural values and the safety and enjoyment of other visitors.

### EXISTING SITUATION

The demand from the public and from industry to conduct outdoor recreation activities on the reserve has grown dramatically in the past few years, and this trend is likely to continue.

Commercial operators are becoming a major means by which people are introduced to outdoor activities.

Commercial recreation is primarily focused on water activities, hang-gliding and visits to the Lighthouse Precinct.

Not all commercial recreational activities are being managed without conflict between users and without threat to the environment and the integrity of the recreational settings.

Commercial recreational activities currently do not include interpretation of the Reserve's values as a significant theme.

The Trust currently has a moratorium on any further licences for commercial use on the Reserve until a Commercial Use Plan is prepared and finalised.

# GUIDELINES AND POLICIES

Commercial recreation will be managed in accordance with the Trust's Commercial Recreation Policy

The Trust will provide appropriate opportunities for commercial recreation, consistent with the protection of natural and cultural resources and the overall management of recreational opportunities.

Commercial activities will not be permitted to dominate a particular setting or unreasonably restrict or exclude the recreational opportunity of other users.

All commercial operators will require a licence and will be required to have appropriate Public Liability Cover. The licence will specify appropriate conditions.

Limits will be placed on the number of commercial operators and group sizes on the Reserve as a means of managing impacts and to ensure ecological sustainable use.

All commercial operators will be required to pay a fee for conducting their activities on public lands. The fee will reflect the number of clients and the associated cost of maintenance, facility provision and administration.

Provision of activities by commercial operators will be conditional on safe and effective operation and evidence of their ability to avoid conflict with other users.

Commercial activities will be subject to the normal provisions relating to public access and use of the Reserve.

All commercial operators will be required by their licence to comply with environmental safeguards such as containment of waste and the rehabilitation of any vegetation disturbed by their operations or by their visitors.

Commercial operators will be required to apply high standards of instruction and

leadership and where appropriate, be required to possess formal qualifications.

All commercial recreation promotional material relating to operators activities on the Reserve will be assessed as a condition of the licence to ensure that they are not misleading and consistent with the Trust policies, licence conditions or desired outcomes for Reserve management.

The training of operators and their instructors in issues relating to the local environment, Reserve management and Trust policies will be required.

All commercial recreational activities will be encouraged to have a significant educational and interpretative component, including instruction on the natural and cultural values of the Reserve and appropriate conduct in the Reserve.

Where appropriate the management of commercial recreation activities will be consistent with other land and water management agencies.

Commercial recreational operators will be required to instruct their clients on appropriate conduct in the Reserve.

All operators will be required to provide a Risk Management Plan as a condition of the licence.

**ACTIONS** 

The compatibility of commercial recreation activities with the desired outcomes of conservation and recreation management will be regularly monitored and

A formal communication mechanism will be established between the industry, Reserve management and other stakeholders.

The number of commercial recreation licences/operators and their use of the Reserve will be monitored and reviewed to ensure that commercial operations form a minor component of total use and not dominate a particular setting, site, route or activity, or unreasonably restrict or exclude the recreational opportunity of other users. Where appropriate the Trust will vary, reduce or close locations and also limit use to manage issues of impact, conflict or safety.

The Trust will undertake annually an induction/information day for all licensed operators.



**Plan of Management** 

### 3.11 Whale watching

See also: 1.06 Coastal landscape p.38

3.02 Public contact, visitor education and interpretation p.54

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3.07 Visitor risk and safety p.65

### **Background Information**

The eastern humpback whale population is estimated to have been 10,000 before the commencement of commercial whaling. By the 1960's due to the significant decrease in the number of humpback whales, the whaling industry was no longer financially viable and the east coast whaling stations at Byron Bay, Eden and Tangalooma were closed in 1962. In response to protection, the humpback population is increasing gradually (approximately 10% per year), and the current population is estimated to be around 4000.

During the whaling era the Cape was a popular destination to watch whaling ships tow whale carcasses around the headland to the processing factory in Byron Bay. Today, however the Reserve attracts thousands of visitors to celebrate the annual migration of the humpbacks to breed in the tropical waters of Harvey Bay and the Great Barrier Reef.

Cape Byron is among the best vantage points in the world for land-based observations of humpback whales. This is due to a number of factors including the Cape's proximity to a relatively narrow continental shelf which results in whales passing close by, the sheer cliffs and elevation of the Cape, its position as the eastern-most point on the coast and its proximity to the south flowing East Australia Current – humpback whales on the northward leg of their migration travel close to the Cape through the narrow gap between the coast and the current.

The Australian and New Zealand Environment and Conservation Council Guidelines for Whale Watching (2000) identify Cape Byron as an area of national special interest for cetacean based tourism, specifically as an area that provides high quality land based whale and dolphin watching. Importantly Cape Byron is the location of one of the longest running whale research programs in the southern hemisphere with annual surveys having commenced at the Cape in 1984.

The Trust has been active in promoting land-based whale watching from Cape Byron. This activity has no impact on whales and supports a profitable and sustainable local eco-tourism industry. The significance of the site for whale watching is recognised and acknowledged in the NSW Far North Coast Nature Based and Eco-tourism Plan, which states that whale watching has become part of Byron Bay's tourism image. This popular image is directly related to the successful Cape Byron Whale Watch Program.

The Trust has established the whale watch program to:

- recognise the annual migration of the humpback whales past northern NSW;
- highlight Cape Byron's value as a world class land-based whale watching site;
   and
- encourage appropriate and sustainable tourism in the region based on landbased whale watching and marine conservation.

The Trust has used the *Whale Watch Program* to promote its broader activities, to attract financial support and increase community and corporate involvement in management.

Other whale species also pass the Cape. These include orca, southern right, Bryde's and minke whales. Dolphins which live in the waters around the Cape are also a significant attraction of the Reserve.

### **DESIRED OUTCOMES**

### To have:

- opportunities for public enjoyment of whale watching from the Reserve that are consistent with the protection of the natural, cultural and recreational values of the Reserve.
- visitors and the wider community aware of the importance of the annual migration of humpback whales and support their conservation.

### **EXISTING** SITUATION

The popularity of whale watching is increasing rapidly and requires strategies to be developed to prevent further over crowding and impacts on other Reserve values.

The volunteers of the Cape Byron Friends are an essential component of the Cape Byron Whale Watch Program, providing visitor contact and interpretive services.

During busy whale watching periods, the Trust has trialed the use of shuttle buses to reduce vehicle congestion and may establish their regular use in busy periods.

In order to gain a clearer view of the whales, visitors regularly climb safety barriers and sit on steep cliff edges, presenting a significant visitor safety issue.

The National Parks and Wildlife Service, Australian Whale Conservation Society and the Southern Cross University conduct whale research annually from the Reserve.

### **GUIDELINES AND POLICIES**

Well-developed interpretive programs will be a key tool for enhancing visitor enjoyment and understanding of the annual whale migration.

The Trust does not support the establishment of vessel-based whale watching activities, and will adopt, where possible, management strategies to limit vesselbased whale watching activities around the Cape.

The Trust will encourage participation in, and provide opportunities for, research of whales and dolphins.

Continued involvement of volunteers in visitor contact and interpretation activities associated with whale watching will be encouraged.

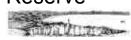
The Trust will work with other management agencies to maintain the integrity of land based whale watching from the Cape.

### **ACTIONS**

Education interpretive material relating to whales will be provided.

The Trust will continue to facilitate and encourage whale research activities. Results of the research will be compiled and made available to visitors.

Information on Whale Watching guidelines will be provided to all vessel operators licensed by the Trust.



**Plan of Management** 

### 3.12 Vessel-based activities

See also: 3.05 Visitor access p.60

3.07 Visitor risk and safety p.65

3.10 Commercial recreation management p.71

3.11 Whale watching p.74

3.14 Surfing p.81

### **Background Information**

Located on the Reserve at The Pass is a boat-launching ramp which provides the main access to the waters of Byron Bay for both commercial and recreational vessel-based activities and represents the only viable boat launching site suitable for commercial vessels between Brunswick Heads and Ballina.

The ramp provides access to Julian Rocks Aquatic Reserve, which is the focus of the regional scuba-diving industry. More than 20 000 divers a year gain access to Julian Rocks through the Cape Byron Headland Reserve, with dive boats forming the majority of vessel movements through The Pass. Additionally, commercial and recreational fishing vessels use the ramp to access the reefs of Byron Bay and the fishing grounds of the continental shelf.

The Pass is also a world-class surfing break, and is the most protected stretch of beach in Byron Bay due to its unique westerly aspect. The intensity of use at The Pass presents significant opportunity for conflict between the different user groups. The potential for conflict between the various user groups, particularly between boats and swimmers/surfers, has been recognised for some time. Community concerns have focussed on the public safety, nuisance and parking congestion relating to boat operations. The periods of greatest congestion for beach use are the summer and Easter holiday periods.

In response to conflict between user groups and threats to visitor safety, the Trust initiated an extensive consultation and mediation process and has implemented successful strategies for the management of vessel operations at The Pass.

In 1995, the Trust introduced a licensing scheme under the *Crown Lands Act 1989* (NSW), for all parties with existing commercial interests in the use of the boatramp at The Pass. The licensing of operators was introduced to manage use, reduce user conflicts, increase public safety and respond to community concerns over the launching of vessels. In addition, the Trust has employed staff to assist in the management of recreational and commercial boating activities, capped the number of vessel licences, placed limits on the number of launches that can be made by commercial operators, introduced safety standards and developed a Code of Conduct in consultation with NSW Waterways and the community.

All users of the launch facility are required to be licensed by the Trust. User groups include professional fishers, charter and dive vessel operators and amateur vessel operators.

In 1995 the six commercial operators launching from The Pass were licensed by the Trust. The historical level of use (number of launches per year) was considered in determining annual launch quotas. Three commercial operators were issued with 5+5 year licences in 1997 expiring on the 30 June 2007. Total annual launch allocation for the three operators is 4700.

The number of amateur vessel activity licences issued by the Trust is capped at 100. Of this number the Byron Bay Deep Sea Fishing Club is allocated 50 licences for issue to Club members. Amateur licences are renewed annually upon application with licences becoming available to new applicants when an existing operator does not renew.

There are currently nine commercial fishers who operate from The Pass all of who are licensed by the Trust.

The Trust has a Commercial Recreation Policy within which are specific provisions for commercial vessel operations . This policy is consistent with relevant legislation

and NPWS policies and has been prepared in consultation with user groups and NSW Waterways. The policy is based on limits to access, environmental protection, public safety, recreation management and operator standards.

The Trust, NPWS and NSW Waterways recognise the operational needs of local commercial and non-commercial boat operators as well as the social and economic aspects of tourism and recreational activities. It is also recognised that the construction of an alternative boat launch site in Byron Bay is not feasible in the short term and that effective management of the existing boat launch area at The Pass is the only practicable solution.

The management of vessel operations at The Pass is a complex issue with a number of dimensions. These include:

- location and capacity of existing vehicle/trailer parking;
- public safety aspects of vessel operations both on the water and on the beach;
- time of vessel movement (by annual/weekly/daily variables); and
- compatibility of such operations with the conservation and recreation objectives of the Reserve.

The effective management of vessel movements at The Pass requires a collaborative effort from a number of organisations. The Trust, the NPWS, NSW Waterways, NSW Fisheries and Byron Shire Council, as well as local recreation, tourism and industry groups, all share an interest in and responsibility for the management of this issue.

### **DESIRED OUTCOMFS**

### To have:

- boat launching and operation at The Pass conducted without any detrimental impact on the Reserve's natural, cultural or recreational values or the safety or enjoyment of other Reserve users.
- boat launching movements across the beach maintained at or below current levels.

### **EXISTING** SITUATION

The jurisdiction of the Trust extends down to the mean low water mark, with successful management of vessel-based activities requiring the participation of NSW Waterways and NSW Fisheries and the cooperation of all user groups.

The management arrangements currently in place at The Pass are successful in meeting management objectives. This success is indicated by: extremely high levels of compliance; extremely low incidence of user conflicts, or disapproval and positive feedback from interest groups and operators.

The Trust encourages and facilitates extensive consultation with all interest groups that use The Pass.

Dedicated parking space for boat trailers is provided adjacent to the ramp. A bollard system has been installed to adjust available parking allocation depending the relative parking requirements of different Reserve users.

All operators are licensed and required to pay licence fees to assist in management.

Commercial Vessel Activity Licences expire on 30 June 2007.

Commercial fishers and amateur operators are licensed annually.

### **GUIDELINES AND POLICIES**

All operators launching from The Pass are required to be licensed.

No additional commercial licences will be issued by the Trust.

The Trust will continue to provide access for commercial and recreational vessel based activities subject to a review prior to 2007.

Continued boat launching at The Pass will be conditional upon the managed risk being deemed acceptable.

Maintaining the historic pattern and level of use provides an appropriate means of balancing the competing demands in relation to existing uses, access, safety, parking, business planning for operators and the management of the Reserve's natural and cultural values.

The Trust will limit the number of daily commercial vessel movements and in consultation with licensed operators seek to reduce the current launching quota.

Consistent with the Australian and New Zealand Environment and Conservation Council guidelines for Whale Watching 2000, the Trust will not approve access to commercial vessel-based whale watching activities that may compromise land-based whale watching from the Cape. These guidelines identify Cape Byron as an area of national special interest for cetacean-based tourism and state that as the area provides such high quality land based whale watching, boat based cetacean watching in the area could be discouraged especially given the increasing levels of whale watching activities out of numerous ports the length of the NSW coast.

There will be no increase in the number of licensed amateur vessel operators.

The Trust will continue to provide access for commercial fishers.

Temporary short term licences may be issued by the Trust where access to the boat launch is required by operators for occasional special events.

Conditions of use will be placed on operators to:

- ensure sustainability of recreational and environmental resource,
- limit risk and improve visitor safety; and
- ensure the Trust receives an equitable financial return consistent with the rights and opportunities awarded, and the cost of providing these.

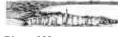
All vessel operators will be required to have public risk liability cover appropriately indemnifying the Trust.

The Trust in consultation with other authorities will implement management strategies that assist in the management of adjacent lands and waters.

There will be no increase in the size/area of the vessel and trailer parking area.

### **ACTIONS**

The Commercial Boat Policy will be reviewed in consultation with users and the community to determine the continued use of The Pass boat launching by commercial operators beyond 30 June 2007.



### Plan of Management

#### 3.13 Beach and rock fishing

See also: 1.02 Fauna management p.28

3.05 Visitor access p.60

3.07 Visitor risk and safety p.65

### **Background Information**

The Reserve provides access to several popular beach and rock fishing locations.

Professional fishers utilise:

- an ocean beach haul fishery for sea mullet and bait fish such as pilchards; and
- a small bait fishery for beach worms.

Access to the beach haul fishery on Tallow Beach is by way of a management track at Cosy Corner. Clarkes Beach is accessed at The Pass boat ramp. Impacts associated with vehicle access to beach fisheries are minimal.

Recreational fishers access various areas within the Reserve and target a number of species. Popular areas include:

- ocean beaches and rock platforms targeting species which include tailor, dart, whiting, bream and jew;
- sandy beaches to collect beach worms and pippies;
- offshore areas to fish for bottom and pelagic species; and
- offshore areas for spear fishing mainly pelagic species, although bottom and rocky platform species are targeted in shallow water.

Fishing from rocky platforms is inherently dangerous. An unpredictable ocean combined with steep cliffs used to access many of the preferred fishing locations within the Reserve makes this sport particularly hazardous. Fences discourage visitors from steep cliffs faces. Rock fishing 'below the Cape' has been practised for generations and is a popular activity.

The addition of the intertidal zone to the Reserve brings new management issues and responsibilities for the Trust. Responsibility for this zone is shared with New South Wales Fisheries who manage intertidal fisheries to the high water mark under the Fisheries Management Act 1997.

### **EXISTING** SITUATION

NSW Fisheries is responsible for research, management and enforcement of all fisheries in NSW. A range of statewide management regulations apply to fishers within the Reserve. These include restrictions on fishing gear, the specification of minimum sizes, bag limits, closures and the protection of some species.

Intertidal invertebrates that are collected subject for bait are not protected under the National Parks and Wildlife Act.

Professional fishers, bait collectors and beach haulers are provided with vehicle access to the Reserve's beaches.

Rock fishers currently gain access down the Reserve's cliffs.

The carrying of spears through the Reserve is prohibited under the National Parks and Wildlife Act.

### **DESIRED OUTCOMES**

### To have:

access to professional fishers which is consistent with the natural and recreational values of the Reserve.

- a diverse range of recreational fishing opportunities which are ecologically and socially sustainable.
- fishing activities undertaken on the Reserve should be consistent with visitor safety.

# GUIDELINES AND POLICIES

Fishing is acceptable within the Reserve.

A permit system allowing vehicular access on beaches and tracks for professional fishers will be investigated and implemented, where appropriate.

Visitors will be notified of the safety issues associated with rock fishing.

All professional fishers accessing the Reserve will be required to have public liability cover.

### **ACTIONS**

Vehicular access to beaches will be available only to commercial fishers licensed by NSW Fisheries and those holding a licence from the Trust to launch at The Pass.



**Plan of Management** 

#### **Surfing** 3.14

See also: 1.01 Vegetation management p.24

3.07 Visitor risk and safety p.65

3.10 Commercial recreation management p.71

3.12 Vessel-based activities p.76

### **Background Information**

The Reserve has a historic association with Australian surfing. The long northerly surf break at The Pass is one of Australia's best-known and popular surfing breaks along the eastern seaboard. Wategos Beach provides surfing opportunities for longboarders, beginners and families while Tallow Beach caters for all levels and types of surfing.

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Surfing is an extremely popular pursuit for both locals and visitors to the Reserve. It popularity has led to the establishment of a number of local surf schools. Following the extension of the Reserve boundaries to mean low water mark in December 1998, the management and licensing of commercial surfing activities was transferred from Council to the Trust. In 2001, the Trust licensed five commercial surf schools.

In 1995, the Trust established the Trust Surfing Committee. The Committee provides a forum to discuss issues relating to the use of Reserve beaches, and representatives include the Trust, Byron Bay Malibu Club, Byron Bay Boardriders, Surfing Far North Coast and the Surfrider Foundation.

Community-based and professional surfing competitions are occasionally held on Reserve beaches. These events are generally supported by the Trust and they are consistent with the community access objectives of the Trust. Surfing competitions may result in concentrations of spectators and surfers on the beach which may compromise the recreational setting of the beach for other users.

Byron Bay Malibu Club, Byron Bay Boardriders Club and Surfing Far North Coast are all licensed by the Trust to conduct surfing contests on the Reserve. The licences list the responsibilities of the club and the conditions which apply to the use of the Reserve's beaches.

DESIRED **OUTCOMES** 

To support surfing in waters adjacent to the Reserve while maintaining natural, cultural and aesthetic values.

**EXISTING** SITUATION

Surfing on the Reserve's beaches at The Pass, Wategos and Tallows is one of the most popular recreational pursuits undertaken by visitors to the Reserve.

Surf schools constitute one of the largest commercial recreation activities on the Reserve.

Commercial surf schools and surfing competitions impact to some degree on the recreational values of the Reserve.

Surf schools operate under the Commercial Recreation Policy of the Trust, which includes specific provisions for the management of surf school operations including the issuing of licences and the development of environmental, visitor safety and operational standards.

The high concentrations of people associated with surfing competitions may result in considerable damage to dunal vegetation.

Amateur boardriding clubs including the Byron Bay Malibu Club and Byron Bay Boardriders are licensed to conduct club contests on the Reserve.

Some conflict still occurs between surfers and boats launching through The Pass.

# GUIDELINES AND POLICIES

The Trust will limit the number of surf school licences and the number of participants in a class on the Reserve at any one time.

All surfing clubs are required to be licensed for undertaking club activities.

The Trust will limit the number of professional and amateur contests held on the Reserve. These activities will be required to be licensed. Licence fees will be charged for professional surfing contests.

The activities of surf school operators and contest organisers, including training and equipment storage will not be allowed to be conducted on sensitive dunal areas.

The Trust will encourage the continuation of the Trust Surfing Committee as a forum.

Commercial surf schools will not be permitted to dominate a particular beach or unreasonably restrict or exclude the recreational opportunity of other users.

The importance of the Reserve's beaches for surfing is recognised and appropriate use encouraged.

### **ACTIONS**

Guidelines will be established for surf contests.

The commercial surf school activities policy will be reviewed, in consultation with licensed surfing industry representatives and the community.

Boardrider Club activities will be encouraged to promote the values of the Reserve and their management.

Boardrider Club members will be encouraged to participate in community management programs on the Reserve.



Plan of Management

#### Hang-gliding 3.15

See also: 1.01 Vegetation management p.24

1.06 Coastal landscape p.38

3.05 Visitor access p.60

3.07 Visitor risk and safety p.65

3.10 Commercial recreation management p.71

### **Background Information**

The Reserve provides several hang-gliding opportunities due to the prevailing winds and tall and extensive cliff faces. It has been a popular launch site since the mid 1970's.

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A hang-gliding launching platform is located on Tallow Ridge and an unmodified launch site is on the eastern cliff face, adjacent to the Assistant Lightkeeper's Quarters. These sites are operated and supervised by the Byron Bay Hang-Gliding Club (Club). The Club has a licence agreement with the Trust which lists the responsibilities of the Club and the conditions which apply to the use of launch facilities and the Reserve.

Commercial hang-gliding schools are operated by instructors endorsed by the Club. The Trust has established individual licensing arrangements for commercial hanggliding schools which operate under the Trust's Commercial Recreation Policy.

Hang-gliding is administered by the Hang-Gliding Federation of Australia through state associations. The association's safety procedures have been developed to a high standard, resulting in a greatly improved safety record.

Impacts associated with hang-gliding include erosion and trampling around launching and landing sites, visual impact for some visitors, although this can be both positive and negative, conflict with other users (especially during landings), and parking.

The pursuit of hang-gliding within the Reserve presents several management issues. These include: damage to vegetation associated with take off, landing and pack-up sites, and the retrieval of wayward gliders from the forested canopy. An issue which the Trust may need to address in the future is the continued utility of the Tallow Ridge launching site as the littoral rainforest regenerates above the existing level of the launching platform.

DESIRED **OUTCOMES**  To have hang-gliding conducted on the Reserve without impacting on the Reserve's natural or cultural values or affecting the safety and enjoyment of visitors.

**EXISTING** SITUATION Limited area is available for carparking and unloading of hanggliders.

Littoral rainforest surrounding the platform is encroaching on the hangglider ramp.

There are currently no guidelines in place to minimise vegetation damage associated with hang-glider retrieval.

Use of the east face launch site results in management issues relating to visitor safety and access.

The licence agreement between the Byron Bay Hang-Gliding Club and the Trust limits the number of commercial operators to four.

# GUIDELINES AND POLICIES

The Trust will provide opportunity for hang-gliding on the Reserve.

No expansion or significant upgrade of the hang-glider launching platform will be permitted.

The Byron Bay Hang-gliding Club is responsible for monitoring amateur and commercial hangglider activities.

Commercial operations will be managed through the Trust's Commercial Recreation Policy.

### **ACTIONS**

Options for the continued use and maintenance of the launching platform while minimising damage to the adjacent littoral rainforest will be investigated and implemented.

Guidelines for the minimisation of vegetation disturbance during hang-glider retrieval operations will be developed.

The use of the east face for hang-glider launching will be reviewed in consultation with the Club.

Hang-gliding club members will be encouraged to participate in community management programs on the Reserve.

Interpretive information will be provided on hang-gliding on the Reserve.



**Plan of Management** 

#### Visitor accommodation 3.16

See also: 2.02 Historic cultural heritage p.47

3.01 General recreation p.52

3.02 Public contact, visitor education and interpretation p54.

### **Background Information**

The accommodation offered on the Reserve provides the Trust with revenue and a unique opportunity for visitors to enjoy the natural and cultural heritage values of the Reserve in a way that is not possible during a day visit.

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Accommodation within the Reserve includes the two cottages of the Assistant Lightkeeper's Quarters in the Lighthouse Precinct and the Clarkes Beach cottage.

The Assistant Lightkeeper's Quarters have been used for accommodation since 1989. Strict heritage requirements ensure that the management of the cottages is consistent with the maintenance of the cultural heritage values of the building.

Clarkes Beach Cottage was recently renovated by the Trust and included the installation of a composting toilet and an artificial wetland for the treatment of wastewater.

Two other residential buildings are located on the Reserve. These buildings, and Clarkes Beach Cottage, are former permissive occupancies granted by the Lands Department. The permissive occupancies ceased upon the death of the registered holder or on the prior vacation of the premises. The dwellings reverted to the ownership of the Crown upon the termination of the permissive occupancies.

The cottages are referred to by the name of the former permissive occupancy holders. A lease on one of these buildings, Parkers Cottage has been granted to the Arakwal Aboriginal Corporation. The Trust is currently reviewing its options with respect to the building on the beachside of Lighthouse Road (Mildenhall Cottage), and has had the site appraised by an architect and engineer for the purpose of providing low key visitor accommodation.

One other residential building is located within the boundaries of the Reserve and is subject to a current permissive occupancy.

The Trust currently leases the cafe at The Pass and it is not envisaged that this building could provide any future accommodation opportunities.

The Trust does not provide camping facilities on the Reserve due to limitations of space and associated management issues. Fully serviced camping and caravan areas are provided adjacent to the Reserve at Clarkes Beach Caravan Park.

**DESIRED OUTCOMES**  To provide a range of accommodation opportunities that are consistent with the natural, cultural and recreational values of the Reserve.

**EXISTING** SITUATION

The building located on Lighthouse Road above Clarkes Beach on the Reserve provides an ideal site for low key visitor accommodation. The existing building is structurally unsound and requires redevelopment.

The provision of holiday accommodation at the Lighthouse Keeper's Quarters and Clarkes Beach Cottage is very popular with visitors resulting in over 85% occupancy throughout the year.

Parker's Cottage has been leased to the Arakwal Aboriginal Corporation for a period of three year wih the option for a further two three year terms. This arrangement is an outcome of the Indigenous Land Use Agreement between the State of NSW and the Arakwal People of Byron Bay.

# GUIDELINES AND POLICIES

No provisions for camping in the Reserve will be made.

Buildings used for accommodation purposes that are identified as having special historic value will also be managed as historic places.

Cottages on the Reserve will be used for low key tourist accommodation.

The Trust will investigate the redevelopment of the building on the beachside of Lighthouse Road for the purpose of low key visitor accommodation. Any proposal will be consistent with the traditional scale and character of the area and will be paced on public exhibit for comment.

### **ACTIONS**

Holiday tourist accommodation in the Assistant Lighthouse Keeper's Cottages and at Clarkes Beach Cottage will be promoted.

The Trust will investigate and implement the redevelopment of the building on the beachside of Lighthouse Road for the purpose of low key visitor accommodation.

Holiday tourist accommodation will be provided within Parkers Cottage when available and the permissive occupancy when it is transferred to the Reserve.



### **Plan of Management**

#### **Education and research** 3.17

See also: 3.02 Public contact, visitor education and interpretation p. 54

### **Background Information**

The Reserve is an important educational resource for schools, universities and colleges. Research within the Reserve will provide data which is of value in refining the effectiveness of the Trust's management.

Research activities may include: surveys of the distribution of plants and animals; the development of methods for weed management; collection of data on public visitation; and assessment of the impact of such visitation on natural and cultural resources.

Research activities on the Reserve will meet the following objectives:

- to provide information on specific management issues;
- to extend the existing knowledge of the natural and cultural features of the Reserve; and
- to provide data on user needs, to monitor the impact of these needs and to predict circumstances where impacts may exceed acceptable limits.

Studies which have previously been undertaken within the Reserve include flora and fauna surveys, cultural heritage assessments, visitor use surveys and weed management trials.

### DESIRED **OUTCOMES**

To encourage research to provide meaningful data on which to base management decisions.

### **EXISTING** SITUATION

Information on the nature, extent and location of research conducted within the Reserve is limited. The development of an inventory of existing sites will help prioritise and locate future research efforts.

### **GUIDELINES AND POLICIFS**

Research proposals will be assessed according to the extent of the activities, the time involved, the amount of disruption or damage caused to the natural, cultural and recreational resources of the area and the likely impact on visitors.

The use of areas during research activities will be monitored to ensure minimal impact practices are being observed.

Research structures and long term markers must be placed in locations that will minimise their visual impact and be removed upon completion of the research.

### **ACTIONS**

An inventory of existing research projects and the nature and date of research previously conducted on the Reserve will be prepared.

A comprehensive assessment of research opportunities and needs associated with the Reserve will be undertaken.

Identified research opportunities will be compiled into a prospectus detailing the nature and scope of priority research areas and distributed to appropriate research bodies.



**Plan of Management** 

### 3.18 Concessions, leasing and licensing

See also: 1.01 Vegetation management p.24

3.08 Parking charges p.67

3.10 Commercial recreation management p.71

4.01 Reserve neighbours p.92

### **Background Information**

The Reserve is used for a diversity of special purposes and interests by community groups, commercial operators, government agencies and individuals. Special purpose activities and interests may be commercial, non-commercial, non-profit or charity and are considered to require a concession, leasing or licensing agreement. Any person, company, contractor, business, charity, group, school, training body, government agency or club conducting retail, informative, sightseeing, adventure, educative or personal development activities, courses, tours, transport or events within the Reserve or based on a resource managed by the Trust, needs to be licensed by the Trust.

Additional licence agreements are required for any permanent physical occupation on the Reserve such as utility easements and property boundary encroachments.

Licences vary in term from one day (e.g. commercial photography), to five years (e.g. dive boat operators). Activities and interests currently authorised by the Trust include:

- Lease of buildings for commercial premises (e.g. The Pass Cafe)
- Coach parking
- · Commercial filming and photography
- Mobile traders (e.g. ice cream vendors)
- Commercial recreation (See 3.10 Commercial recreation management)
- Special events (e.g. Winter Whales Swim)
- Alien Tenure (e.g. utility easements and residential/commercial encroachments)
- Functions (e.g. wedding ceremonies)
- Amateur club activities (e.g. Boardrider, Hang-gliding and Deep Sea Fishing Clubs)

Licence agreements are an important tool in the management of the Reserve as they:

- allow for regulation of activity types and numbers;
- provide guidance to operators for minimising impact(s) on the Reserve;
- ensure that there is a financial return to the community from the specialpurpose use of a public asset;
- provide a mechanism for monitoring activities undertaken on the Reserve; and
- ensure the conservation values of the Reserve are maintained.

DESIRED OUTCOMES To have all special purpose use of the Reserve managed under an appropriate licence agreement.

EXISTING SITUATION Special purpose activities or interests undertaken on the Reserve are covered by licence agreements.

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Fees for licensing of special purpose activities and interests on the Reserve have been reviewed and records are well maintained. The Trust has adopted a policy to withdraw an operator's licence when fees remain unpaid.

Arrangements for easements and utilities within and adjacent to the Reserve do not adequately protect the Reserve.

The Pass Cafe is under a 10 year lease that expires in 2004

The encroachment of Rae's at Wategos is under a 10 year lease that expires in 2005.

A residential encroachment at Wategos is under an occupation licence that can be reviewed at any time.

### **GUIDELINES AND POLICIFS**

All special purpose activities and interests on the Reserve require formal agreements.

The granting of licence and lease agreements will be consistent with the management objectives outlined in this Plan and in accordance with relevant policy.

All commercial concessions, licences and leases will be granted in accordance with public sector/NPWS policy.

Appropriate fees will be charged for non-commercial activities to contribute to administrative and management costs. The Trust may waive fees for non-profit activities and charities, where activities are of significant benefit to the local community.

All lessees, licensees and commercial operators will be required by their lease or licence to comply with environmental safeguards.

The granting of licence and lease agreements may be granted via tendering, expression of interest or upon direct application.

All vegetation management activities undertaken by supply authorities will be subject to an environmental impact assessment, except for emergency maintenance activities.

New works, facilities or operations proposed by any organisation or individual will not be permitted unless they are consistent with the purposes of the Reserve or this Plan.

The encroachment of Rae's at Wategos will not be expanded.

### **ACTIONS**

A commercial use strategy will be prepared to identify and implement appropriate commercial opportunities.

A business plan will be prepared for the Trust's commercial activities.

A policy on encroachments will be developed and adopted by the Trust.

The fee structure for all special purpose activities and interests will be reviewed. Fees will where appropriate provide for commercial return and reflect ecological, cultural, social and administrative costs.

All arrangements for existing easements and utilities will be reviewed. Prescriptions for the operation and maintenance of utilities and easements will be formulated in consultation with relevant authorities to ensure the protection and maintenance of the Reserve's values. These arrangements may include specific maintenance procedures, security bonds and relocation/realignment of easements away from sensitive values.

A maintenance agreement will be developed between the Trust and all utility suppliers (eg. power/water), which ensures the protection of the Reserve's vegetation and other values.

# **Strategy 4**Complementary management of adjacent areas

The Trust recognises that the maintenance of the Reserve requires the involvement of the whole community.

Management issues affecting the Reserve extend well beyond its boundaries. For example, the Reserve shares a long and intricate boundary with adjoining neighbours, most of whom have very different objectives for the management of their land.

On an even broader scale, the Reserve is simply one element within a mosaic of land uses within the region's coastal zone. The coastal zone is subject to management by a range of organisations, both government and non-government, who manage their lands in a diversity of ways to suit a variety of purposes.

The activities of land managers should be coordinated through an integrated approach to planning. This approach requires the development of partnership arrangements between the community, landowners, government agencies and specific interest groups.

The Trust has developed a strong relationship with the community and other land management agencies and regards this partnership as a significant factor in achieving results.

This Trust proposes to increase its involvement in integrated coastal planning, management and the conservation of adjacent areas and will seek to build and extend its partnerships with the community and other agencies.



Plan of Management

#### 4.01 Reserve neighbours

See also: 1.01 Vegetation management p. 24

1.03 Fire management p.31

1.06 Coastal landscape p.38

1.07 Catchment management and water quality p.40

3.04 Community participation p.58

3.05 Visitor access p.60

4.02 Conservation of adjacent areas p.94

### **Background Information**

Neighbours are a special group of stakeholders whose activities may impact in both a positive and negative way on the Reserve. The Trust manages the Reserve for the conservation of natural, cultural and recreational values. Neighbours may manage their land with a range of objectives in mind, such as creating an urban garden landscape or providing restaurant facilities.

Some neighbours have a common boundary with the Reserve. These include private landholders and leaseholders, government agencies with land management responsibilities and utility authorities. Dealing effectively with local issues may need the support and involvement of neighbours, some of whom may not share a common boundary with the Reserve.

The building, maintaining and enhancing of constructive relationships with neighbours is critical if the Trust is to achieve its conservation objectives detailed in this Plan.

Problems posed by activities on adjacent lands include introduced plant and animal encroachments onto the Reserve, clearing of Reserve vegetation due to unclear boundary definition, informal access and developmental pressures affecting views, water quality and reduction of habitat.

### **DESIRED OUTCOMES**

To have the management of all neighbouring lands consistent with the conservation objectives of the Reserve.

### **EXISTING** SITUATION

The Reserve boundary around the residential area of Wategos Beach and along public roads is poorly defined.

Neighbouring lands contribute weeds into the Reserve through direct dumping of garden litter or seed dispersal from mature parent plants occurring adjacent to the Reserve.

The Trust has ongoing consultation with the Wategos Progress Association.

Two urban areas, Wategos Beach and Lighthouse Road, share boundaries with the Reserve. There is also one permissive occupancy at Clarkes Beach and two encroachments on the Reserve which are under licence agreements.

Public roads share an extensive boundary with the Reserve and presents numerous management challenges for the Trust, including the disturbance of vegetation by road maintenance activities, erosion caused by concentrated runoff and some visitor access and safety issues.

Several easements for utility services cross the Reserve, including electricity supply, sewer mains and pumping stations, telephone lines, water mains and a reservoir.

The Arakwal National Park occupies the coastal lands to the south of the Reserve, adjoining the southern boundary. The management of these lands by the NPWS will complement the conservation of the Reserve's natural, cultural and recreational values.

### **GUIDELINES AND POLICIES**

The Trust will consult with neighbours and local groups who share common boundaries to ensure that they are advised of proposed management initiatives or activities which may affect them.

The Trust will participate in joint management programs and initiatives with neighbours.

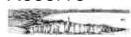
### **ACTIONS**

Encroachments on the Reserve may be required to be removed. Any encroachments that are permitted to remain must be licensed.

The scope, nature and extent of all issues associated with adjoining land uses will be assessed.

A Neighbours Program will be developed to address identified issues. As part of the Neighbours Program, a consultation process will be developed to improve the resolution of management issues.

An assessment of access roads to the Reserve through the public road system will be undertaken with Byron Shire Council to determine joint management issues and responses associated with the maintenance of vegetation integrity, water quality, visitor safety, and general provision of access.



**Plan of Management** 

### 4.02 Conservation of adjacent areas

See also: 1.01 Vegetation management p.24

1.02 Fauna management p.28

1.06 Coastal landscape p.38

3.02 Public contact, visitor education and interpretation p.54

4.01 Reserve neighbours p.92

### **Background Information**

The Reserve is an integral component of a larger system of land uses and the long-term viability of many of the Reserve's values is dependent on the conservation of land outside of the Reserve. A holistic approach to resource management is required which recognises the importance of conserving areas beyond the Reserve boundary.

Cape Byron is a component of a once continuous mosaic of coastal vegetation communities. Rapid land use changes over the past 150 years have resulted in the fragmentation of this coastal vegetation complex into a series of isolated remnants. However, varying degrees of connectivity still occur between these remnants, and it is this connectivity that is essential in maintaining individual species, their populations and larger ecological units.

Input by the Trust into the strategic management of biodiversity, landscape and recreation values has significant and complementary benefit for the conservation of the Reserve.

The management of adjacent areas for the benefit of the Reserve requires the active participation of the Trust in the development of integrated strategies.

Council, the Department of Land and Water Conservation and the NPWS are currently developing the Byron Shire Coastline Management Plan for public lands along the Shire's coastline. The Trust has participated in preparation this Plan through representation on the Coastline Management Committee.

DESIRED OUTCOMES To have established an integrated and coordinated approach to natural and recreational resource management within the immediate environment of Cape Byron.

### EXISTING SITUATION

The representation of the NPWS and the Department of Land and Water Conservation on the Trust provides an opportunity for developing coordinated management approaches between the Trust and these agencies.

The Trust currently has representation on the:

- Cape Byron Consultative Committee
- Coastline Management Committee
- New Years Eve Safety Committee
- Activities on Crown Reserves Committee
- Byron Bushfire Management Committee

The Trust is recognised as a leading natural resource management agency in Byron Bay.

The Trust has extensive experience in coordinating management activities on adjacent lands in conjunction with resource management agencies and specific interest groups.

The Trust has extensive experience in facilitating and coordinating community consultation and community involvement in resource management activities.

### **GUIDELINES AND POLICIES**

The Trust has adopted the principle of sustainable integrated coastal planning for the Reserve in line with the NSW Government Coastal Policy and seeks to have this principle adopted for the surrounding coastal zone.

The Trust will seek to influence land use decisions in areas near the Reserve where existing or proposed land uses are likely to compromise Trust objectives.

The Trust will encourage and assist neighbours to obtain information that will assist in property planning and ecologically sustainable land management, including opportunities to learn about bush regeneration and wastewater management.

### **ACTIONS**

The assessment of the conservation values of privately owned land adjacent to the Reserve will be undertaken with prior consent. Where lands are found to be of significant conservation value, supplementary methods of land conservation will be investigated and encouraged where appropriate.

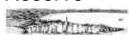
The Trust and the Arakwal National Park Committee of Management will liaise and work together to ensure that conservation management is consistent across the two parks.

Neighbours will be encouraged and assisted to obtain information that will assist in property planning and ecologically sustainable land management, including opportunities to learn about bush regeneration and wastewater management.

Relevant management agencies will be requested to formally notify the Trust of all developments and planning activities associated with adjacent areas.

The proposed additions of lands with significant vegetation or recreation opportunities at Wategos and Clarkes Beach area will be pursued.

The Trust will seek to participate in and provide input into local and regional planning exercises, and seek to gain representation on relevant coastal planning and management committees, including the management committee for the Arakwal National Park.



**Plan of Management** 

### 4.03 Participation in the local community

See also: 3.04 Community participation p.58 3.17 Education and research p.87

### **Background Information**

The Trust is an integral part of the Shire's community. The Trust is a significant local employer which generates revenue for the local economy and is a major host and supporter of community events and programs.

The Trust is dedicated to supporting programs which will benefit and enhance the vitality of the community.

The Trust has initiated an extensive community-link program which includes special events, fundraisers, charitable activities and education awareness programs.

The involvement of the Trust in the local community includes:

- encouraging the use of the Reserve as a venue for community events e.g. Winter Whales swim, community surfing competitions and club activities;
- hosting special events e.g. whale watch weekend, New Years breakfast, music concerts and film festivals;
- hosting community events and community education programs e.g. 'Special Places' Aboriginal cultural heritage seminars and 'Kids on the Coast'.
- support of community events e.g. Byron 'New Year's Eve 2000' and the North Coast Women's Festival;
- donation of raffle prizes to local community groups;
- annual donations to the Westpac Rescue Helicopter and Seabird Rescue unit;
- commitment of staff to assist in regional fire fighting campaigns, whale strandings and other local incident management activities;
- active partnerships with organisations e.g. Southern Cross University; and
- provision of special visitor services to community groups e.g. ranger talks to school and senior citizen groups.

An important aspect of the Trust's involvement in the community, is its relationship with the Arakwal Aboriginal Corporation. The Trust provides assistance and support for the Corporation for cultural and natural resource management on both Reserve and adjacent areas. Activities include assistance and encouragement for training and the employment of Arakwal people in the management of public lands.

Further support of the local community is given by a preference for local suppliers of goods and services, although the Trust has no official policy in this regard.

DESIRED OUTCOMES

To have a diverse range of community-link activities, events and programs which benefit the local community.

EXISTING SITUATION The Trust currently undertakes a diversity of community-link programs.

The Trust has no policy on preferred suppliers of products and services.

The Trust actively assists and supports the development and implementation of opportunities for the involvement of the Arakwal Aboriginal Corporation.

### **GUIDELINES AND POLICIES**

The Trust will continue to support community activities, events and programs, and where appropriate broaden the range of this support.

The Trust will encourage the use of the Reserve as a venue for community events and activities.

Where appropriate, the Trust will seek to use suppliers of goods and services that are locally based, environmentally and socially responsible, and are committed to community support and development.

The Trust will avoid supporting businesses engaged in poor social and environmental practices.

The Trust will continue to support the Arakwal Aboriginal Corporation in its endeavours to develop and implement meaningful participation in the cultural and natural resource management.

### **ACTIONS**

Further opportunities for community links and support will be investigated and promoted.

Local community activities, events and programs will be promoted.

The actions in this plan provide the framework for management consistent with anticipated availability of resources and anticipated community trends.

The priority ratings outlined in the plan implementation table on the following pages (Table 4) are subject to the availability of necessary staff and funds, and may require modification if special circumstances arise.

Codes used to define priorities in the following implementation table:

H (High) Action completed within 2 years.M (Medium) Action completed within 5 years.

L (Low) Action commenced within 4 ye ars and completed within life of plan.

O (Ongoing) Action undertaken every 2 years, with the first undertaking within 3 years.

C (Commenced) Action has commenced.

Table 4. Plan Implementation

REF.	PROPOSED ACTION	PRIORITY
	1.01 Vegetation management	
1.01.01	<ul> <li>Update the 1991 Priority Weed Plan, identify environmental and noxious weeds, prioritise target weed species and mixed species infestations on their potential for ecological impacts and prioritise activities for regeneration programs;</li> <li>address visitor impacts, fire ecology and neighbour activities in relation to the management of vegetation on the Reserve;</li> <li>map significant vegetation values to guide Reserve planning;</li> <li>revise and update vegetation assessment and mapping of the recent Reserve additions; and</li> <li>undertake surveys of species of conservation to determine distribution and ecological requirements and prioritise communities that are vulnerable to impacts of fire, weeds and human visitation.</li> </ul>	π
1.01.02	Regeneration and weed management programs will be undertaken for environmental and noxious weeds which have a high potential for ecological impact or are in visually prominent areas.	0
1.01.03	Measures used to manage exotic plant species will be periodically reviewed to determine their effectiveness and environmental impact.	М
1.01.04	Bush regeneration activities will be entered into a geographic information system.	0
1.01.05	The condition of vegetation communities will be periodically evaluated and monitored.	C/H
1.01.06	The cause and methods of treatment of fungal associated dieback will continue to be investigated.	0
1.01.07	Pandanus will be inspected for dieback and a pest control plan developed.	0
1.01.08	Locations of threatened plant species will be added to the NSW Wildlife Atlas.	0
1.01.09	Maintenance agreements outlining vegetation management procedures will be developed in conjunction with utility suppliers with interests within or adjacent to the Reserve.	L
1.01.10	The relocation of utility easements outside significant vegetation communities will be investigated and implemented where appropriate.	Н
1.01.11	Dunal vegetation threatened by recreation activity, such as at Clarkes Beach, will be protected by way of fencing or similar means as appropriate.	н
1.01.12	Interpretative signage will be provided to restrict access and inform visitors of significant vegetation and restoration programs on the Reserve.	C/M

REF.	PROPOSED ACTION	PRIORITY
1.01.13	Community education material will be developed to provide information relating to weed management on the Reserve and on neighbouring properties.	Н
1.01.14	The Trust will seek the co-operation of Byron Shire Council, land management authorities and neighbours to retain native vegetation and to implement complementary weed management programs in adjacent bushland or in areas contributing to the spread of weed species into the Reserve.	0
	1.02 Fauna management	
1.02.01	Research will be encouraged into the habitat requirements, status and distribution of significant fauna species within the Reserve and threatening processes.	C/H
1.02.02	Further research into poorly understood species and communities will be encouraged including intertidal and cliff face communities.	М
1.02.03	The management and protection of wildlife corridors will be encouraged.	0
1.02.04	Research will be encouraged into the habitat requirements, status and distribution of introduced fauna in the Reserve. Methods to manage these species will be investigated and implemented where appropriate.	М
1.02.05	The goat herd will be removed from the Reserve by relocation.	C/H
1.02.06	Surveys will be undertaken targeting threatened fauna and the locations of threatened fauna species will be added to the NSW Wildlife Atlas.	0
1.02.07	Interpretative material will be produced to foster an appreciation and understanding of the conservation, cultural importance and management of wildlife.	М
1.02.08	Material to educate the community on the impact of domestic animals on wildlife will be developed.	Н
	1.03 Fire management	
1.03.01	A Fire Management Plan will be prepared for the Reserve.	Н
1.03.02	A fire management track will be established along the currently disused vehicle access between Tallow Beach Road and Lee Lane, in accordance with the proposed Fire Management Plan.	М
1.03.03	Manual fuel reduction may be undertaken in high-risk areas in accordance with the proposed Fire Management Plan, to reduce the risk of high intensity fires and improve the capacity of firefighters to safely manage wildfires.	0
1.03.04	Records of fire occurrences will be entered into a geographical information system, with particular emphasis on mapping and recording the extent, frequency, seasonality and intensity of fire.	0
1.03.05	Research into appropriate fire regimes and practices for management of native species will be encouraged, including ecological prescription burns and alternatives to burning, such as litter reduction, and simulated disturbance.	М
1.03.06	Information will be provided to neighbours about fire management and protection measures and neighbours will be encouraged to become involved in co-operative fuel management works where appropriate.	Н
	1.04 Geology and landform evolution	
1.04.01	Interpretive material will be produced to foster an appreciation of geomorphological processes.	М
1.04.02	A monitoring system for tracking shoreline fluctuations and trends within the Reserve will be established.	М

REF.	PROPOSED ACTION	PRIORITY
	1.05 Land rehabilitation	
1.05.01	Erosion management and stabilisation work will be undertaken along the Reserve walking track and road system.	C/O
1.05.02	The stabilisation of the Lover's Cove dune-blowout and The Pass Midden revegetation works will continue.	C/O
	1.06 Coastal landscape	
1.06.01	A landscape assessment of areas on and adjacent to the Reserve will be encouraged to identify significant or representative elements of the landscape.	Н
1.06.02	Byron Shire Council will be requested to formally notify the Trust of advertised Development Applications that may affect lands visible form the Reserve.	Н
1.06.03	Byron Shire Council will be requested to reduce the visual impact of the Wategos water supply reservoir.	L
1.06.04	Authorities will be encouraged to reduce the visual impact of highly visible impacts within and outside the Reserve if they detract from the view from high-use vantage points.	0
1.06.05	The replacement of overhead powerlines adjacent to and within the Reserve, with underground services, will be implemented where appropriate.	М
1.06.06	Interpretative material will be developed to foster an appreciation and understanding of the conservation, cultural importance and management of the landscapes of the Reserve and surrounding lands.	М
	1.07 Catchment management and water quality	
1.07.01	Septic systems will be maintained for optimum performance and where feasible will be connected to Byron Shire Council's sewage system.	Н
1.07.02	Stormwater management measures will be implemented on the Reserve, particularly at the Lighthouse Precinct and the Reserve roads and Carparks.	Н
1.07.03	The Precinct toilet facilities will be connected to Byron Shire Council's sewage system.	Н
1.07.04	A program for the inspection and maintenance of the Reserve's wastewater (including stormwater) facilities will be developed to minimise risks to environmental quality and visitor safety.	М
1.07.05	Liaison with Byron Shire Council will be undertaken to ensure that the operation and maintenance of sewer rising mains and pumps in the Reserve does not result in environmental or health impacts.	Н
1.07.06	Encourage Byron Shire Council to address stormwater management through stormwater Management Plans for the adjoining residential areas.	М
	1.08 Noise pollution	
1.08.01	Investigations will be undertaken to assess the noise emitted by various activities to determine whether further action to manage noise emissions is required.	М
1.08.02	Liaison will occur with vessel operators to determine potential methods for reducing noise generation at The Pass.	L
1.08.03	Liaison will occur with the Civil Aviation Authority and local flight operators to investigate the designation of appropriate areas within the airspace above the Reserve as 'sensitive areas' and associated overflight restrictions will be implemented where appropriate.	L

REF.	PROPOSED ACTION	PRIORITY
	2.01 Aboriginal cultural heritage	
2.01.01	Significant Aboriginal cultural heritage will be mapped to guide Reserve planning.	Н
2.01.02	A conservation and management strategy will be developed in consultation with Arakwal Aboriginal Corporation, for the continuing management of Aboriginal cultural heritage resources.	М
2.01.03	A Memorandum of Understanding between the Trust and the Arakwal Aboriginal Corporation will be developed to facilitate opportunities for employment, training and participation in the administration and affairs of the Reserve.	Н
2.01.04	An assessment of the Aboriginal cultural heritage significance of the recent additions to the Reserve will be undertaken and encouraged.	М
2.01.05	Further research into the pre-European environments, Aboriginal resource uses, and spiritual and cultural associations of the Reserve and the adjacent coastal areas will be encouraged.	М
2.01.06	Sites of Aboriginal significance will be regularly inspected and restoration works consistent with the conservation and management strategy will be undertaken where required. The Arakwal Aboriginal Corporation will be encouraged to participate in these inspections.	0
2.01.07	The mitigation of coastal processes acting on the midden will be investigated and implemented where appropriate in consultation with the Arakwal Aboriginal Corporation.	C/H
2.01.08	Pedestrian access will continue to be regulated and vegetation cover maintained at The Pass midden.	C/O
2.01.09	Names and locations which have an Arakwal name will be investigated and used with the agreement of the Arakwal Aboriginal Corporation.	Н
2.01.10	In consultation with the Arakwal Aboriginal Corporation interpretive material on the Aboriginal resource use and the mythological, ceremonial and cultural significance of the Reserve will be developed, including the development of the Arakwal Interpretive Room in the Lighthouse Visitor Information Centre.	Н
2.01.11	The development and implementation of education and information programs will continue to be resourced by the Trust with ongoing participation of the Arakwal Aboriginal Corporation in recognition of the Arakwal People as traditional owners of the Reserve.	C/O
	2.02 Historic cultural heritage	
2.02.01	Significant historic cultural resources will be entered into a geographic information system to guide reserve planning.	Н
2.02.02	An assessment of the historical cultural heritage significance of the recent additions to the Reserve will be encouraged.	Н
2.02.03	Site management guidelines and a works schedule for the maintenance of all historic heritage features will be developed and implemented.	М
2.02.04	A system will be developed to catalogue and conserve all artefacts found on the Reserve.	Н
2.02.05	The Lightkeeper's Quarters and associated buildings in the Lighthouse Precinct will be used as interpretive space and for appropriate commercial activities.	Н
2.02.06	Documentation on the cultural heritage of the Reserve will be consolidated.	0

REF.	PROPOSED ACTION	PRIORITY
	3.01 General recreation management	
3.01.01	A Recreation Management Strategy will be developed and implemented.	Н
3.01.02	Indicators by which changes in recreation settings can be measured over time will be identified and standards to be maintained will be established.	М
3.01.03	A regular program to monitor recreation setting conditions and adjust management to maintain the desired standards will be developed and implemented.	М
3.01.04	Pre-visit information will be made available regarding the recreation opportunities and experiences available in the Reserve.	Н
3.01.05	Liaison with State and local government agencies and private enterprise will occur to coordinate recreation management within Byron Shire and the region.	М
	3.02 Public contact, visitor education and interpretation	
3.02.01	A website will be developed and maintained.	Н
3.02.02	Information panels will be provided at the Lighthouse Precinct, Captain Cook Carpark, The Pass, Wategos and Cosy Corner.	Н
3.02.03	A self-guided interpretive sign system for the Reserve walking tracks will be developed.	М
3.02.04	A Public Contact and Interpretive Strategy will be developed that provides a framework for coordinating the messages to be communicated and strategies and actions to be undertaken across the Reserve. The plan will also provide for the ongoing maintenance and review of service, program and facility provision to ensure consistency with objectives.	Н
3.02.05	Guidelines will be developed to ensure merchandise provided in the Visitor Information Centre is consistent with, and promotes the conservation of natural and cultural heritage values of the Reserve.	Н
3.02.06	A formal public report register will be developed and the comments received will be reviewed and appropriate management responses taken.	0
3.02.07	The Trust will seek to be involved in providing an interpretive component in the proposed Arakwal Cultural Centre.	0
3.02.08	An Interpretive Plan will be developed and implemented.	Н
3.02.09	The use of multilingual signs will be investigated and implemented where necessary.	М
3.02.10	The production of a saleable brochure for the Reserve will be investigated and implemented if feasible.	М
3.02.11	The Trust will participate where appropriate in local Tourism Boards and Forums.	0
3.02.12	The maritime history of Cape Byron including information on the shipwrecks off the Byron Shire coastline will be interpreted.	L
	3.03 Sense of place	
3.03.01	The Trust will promote the Reserve's unique sense of place and character.	0
	3.04 Community participation	
3.04.01	Additional opportunities for volunteer participation in Reserve management activities will be	Н
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REF.	PROPOSED ACTION	PRIORITY
	investigated and implemented.	
3.04.02	Extensive and meaningful community consultation will continue to be undertaken to allow all stakeholders to participate in the development and review of policy and management decisions.	C/O
3.04.03	Local community days will be held to encourage community involvement and provide information to neighbours and the surrounding community on specific Reserve management issues.	М
	3.05 Visitor access	
3.05.01	Cosy Corner Car park will be improved for drainage, traffic flow, visual amenity and environmental protection, while maintaining current capacity.	C/H
3.05.02	A walking track to Cosy Corner Carpark from Lighthouse Road will be provided with a link to the Tallow Ridge Track at Lee Lane to be investigated and implemented if appropriate.	Н
3.05.03	A walking track/boardwalk and cycleway to connect Captain Cook Carpark to The Pass will be constructed.	Н
3.05.04	The walking track surface between Tallow Ridge to Lee Lane will be upgraded.	М
3.05.05	The redesign of Captain Cook Carpark will be investigated and implemented if feasible.	М
3.05.06	The walking track from Captain Cook Carpark to the beach will be redesigned and constructed.	L
3.05.07	The installation of traffic calming devices along Lighthouse and Tallow Beach Roads, such as flat- topped speed humps, speed limit signs and signs warning of other road users will be investigated and implemented where appropriate.	М
3.05.08	Appropriate traffic control techniques will be applied to address informal Car parking issues along Tallow Beach and Lighthouse Roads and their associated Carparks .	
3.05.09	A walking track will be provided adjacent to the road at Wategos Beach, subject to the approval of Byron Shire Council.	
3.05.10	Access to Wategos Beach will be improved.	М
3.05.11	Methods to discourage private vehicle access to the Reserve, such as parking fees and fee incentives to use public transport, especially during peak holiday periods will be implemented.	Н
3.05.12	Fee incentives will be implemented to encourage use of smaller coaches to the Lighthouse Precinct.	Н
3.05.13	Alternative transport options to the Lighthouse and other locations on the Reserve will be investigated and trailed and, if successful, implemented. Transport options will consider disabled access and look at facilities for carrying surfboards and bicycles.	Н
3.05.14	The informal walking track between Palm Valley Drive and the Cape Byron Walking Track will be formalised to control erosion. All other informal walking tracks will closed and revegetated.	Н
3.05.15	The condition of Reserve roads and walking tracks, and their impact on adjacent values and will be regularly assessed and maintenance implemented as required.	0
3.05.16	Disabled access will be provided to a representative range of the opportunities within the Reserve.	Н
3.05.17	Byron Shire Council rangers will be provided with the authority to issue infringement notices on the Reserve in accordance with National Parks and Wildlife (Land Management) Regulation 1995.	Н
3.05.18	Management tracks will be maintained and gated to prevent illegal access.	Н
3.05.19	The Reserve brochure will be upgraded to provide information including Reserve location, accessibility and facilities, and maps showing access roads and walking tracks.	М

REF.	PROPOSED ACTION	PRIORITY
3.05.20	The potential for the ownership or care, control and maintenance of the Council Road to the Lighthouse from Lighthouse Road will be investigated.	М
	3.06 Visitor facilities	
3.06.01	The future use of the existing café building at The Pass for office accommodation, visitor information and shop will be investigated and implemented if feasible.	М
3.06.02	The provision of a café in the Lighthouse Precinct will be investigated and implemented if appropriate.	М
3.06.03	The redesign of the facility layout at The Pass and Captain Cook Carpark will be investigated and implemented if appropriate.	М
3.06.04	A rubbish recycling system throughout the Reserve will be implemented where feasible.	Н
3.06.05	An additional barbecue and picnic table will be provided at Wategos Beach picnic area.	Н
3.06.06	Water saving devices will be installed on all Reserve facilities. The supplementation of water supplies with on site collection and storage will be investigated and implemented if feasible.	М
3.06.07	A study to determine visitor use, satisfaction and expectations in relation to the range, quantity and quality of facilities provided on the Reserve will be undertaken. This study will also include an assessment of the existing facilities to determine their consistency with the natural, cultural and recreational values of the Reserve.	М
3.06.08	Vegetation may be managed in order to maintain views from viewing platforms indicated or Map 5.	М
3.06.09	Site plans will be prepared and implemented for each visitor area.	М
3.06.10	Energy saving and recycled materials will be used where feasible in the construction of facilities.	0
3.06.11	A design theme manual will be prepared to guide development of visitor facilities.	М
	3.07 Visitor risk and safety	
3.07.01	A Risk Management Strategic Plan will be prepared and implemented.	Н
3.07.02	To discourage people climbing fences, the regeneration of the grassed area beyond cliff fences, with indigenous low-growing headland species, will be investigated and implemented where appropriate.	0
3.07.03	Walking track surfaces will be regularly inspected and maintained to a safe standard.	0
3.07.04	Fencing of public access areas adjacent to the cliff faces will be regularly inspected to ensure compliance with the required safety standards and heritage guidelines.	0
3.07.05	All accidents that occur on the Reserve will be recorded in a register and reported to Trust meetings	C/O
	3.08 Parking charges	
3.08.01	Alternative public transport to the Reserve, such as a bus shuttle service will be investigated and implemented.	Н
3.08.02	Park management measures, including parking officers and fees will continue at the Lighthouse Precinct.	C/O
3.08.03	Parking management measures, including the use of fees, will be implemented as appropriate within the Reserve carparks.	Н

REF.	PROPOSED ACTION	PRIORITY
	3.09 Lighthouse tours	
3.09.01	Lighthouse tours will be conducted in accordance with AMSA guidelines and fees will apply.	Н
3.09.02	An interpretive facility will be established within the Lighthouse, which focuses on the historic heritage of the Reserve.	Н
	3.10 Commercial recreation management	
3.10.01	The compatibility of commercial recreation activities with the desired outcomes of conservation and recreation management will be regularly monitored and assessed.	0
3.10.02	A formal communication mechanism will be established between the industry, Reserve management and other stakeholders.	Н
3.10.03	The number of commercial recreation licences/operators and their use of the Reserve will be monitored and reviewed to ensure that commercial operations form a minor component of total use and not dominate a particular setting, site, route or activity, or unreasonably restrict or exclude the recreational opportunity of other users. Where appropriate the Trust will vary, reduce or close locations and also limit use to manage issues of impact, conflict or safety.	0
3.10.04	The Trust will undertake annually an induction/information day for all licensed operators.	0
	3.11 Whale watching	
3.11.01	Education interpretive material relating to whales will be provided.	Н
3.11.02	The Trust will continue to facilitate and encourage whale research activities. Results of the research will be compiled and made available to visitors.	C/O
3.11.03	Information on Whale Watching Guidelines will be provided to all vessel operators licensed by the Trust.	Н
	3.12 Vessel-based activities	
3.12.01	The Commercial Boat Policy will be reviewed in consultation with users and the community to determine the continued use of The Pass boat launching by commercial operators beyond 30 June 2007.	L
	3.13 Beach and rock fishing	
3.13.01	Vehicular access to beaches will be available only to commercial fishers licensed by NSW Fisheries and those holding a licence from the Trust to launch at The Pass.	Н
	3.14 Surfing	
3.14.01	Guidelines will be established for surf contests.	М
3.14.02	The commercial surf school activities policy will be reviewed annually, in consultation with licensed surfing industry representatives and the community.	0
3.14.03	Boardrider Club activities will be encouraged to promote the values of the Reserve and their management.	L
3.14.04	Boardrider Club members will be encouraged to participate in community management programs on the Reserve.	М
	3.15 Hang-gliding	
3.15.01	Options for the continued use and maintenance of the launching platform while minimising damage to the adjacent littoral rainforest will be investigated and implemented.	Н

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REF.	PROPOSED ACTION	PRIORITY
4.01.02	The scope, nature and extent of all issues associated with adjoining land uses will be assessed.	М
4.01.03	A Neighbours Program will be developed to address identified issues. As part of the Neighbours Program, a consultation process will be developed to improve the resolution of management issues.	М
4.01.04	An assessment of access roads to the Reserve through the public road system will be undertaken with Byron Shire Council to determine joint management issues and responses associated with the maintenance of vegetation integrity, water quality, visitor safety, and general provision of access.	М
	4.02 Conservation of adjacent areas	
4.02.01	The assessment of the conservation values of privately owned land adjacent to the Reserve will be undertaken with prior consent. Where lands are found to be of significant conservation value, supplementary methods of land conservation will be investigated and encouraged where appropriate.	М
4.02.02	The Trust and the Arakwal National Park Committee of Management will liaise and work together to ensure that conservation management is consistent across the two parks.	М
4.02.03	Neighbours will be encouraged and assisted to obtain information that will assist in property planning and ecologically sustainable land management, including opportunities to learn about bush regeneration and wastewater management.	Н
4.02.04	Relevant management agencies will be requested to formally notify the Trust of all developments and planning activities associated with adjacent areas.	Н
4.02.05	The proposed addition of lands with significant vegetation or recreation opportunities at Wategos and Clarkes Beach area will be pursued.	Н
4.02.06	The Trust will seek to participate in and provide input into local and regional planning exercises, and seek to gain representation on relevant coastal planning and management committees, including the management committee for the Arakwal National Park.	Н
	4.03 Participation in the local community	
4.03.01	Further opportunities for community links and support will be investigated and promoted.	Н
4.03.02	Local community activities, events and programs will be promoted.	C/O

### References

- Australian Committee for IUCN, 1996, Australian Natural Heritage Charter for the conservation of places of natural heritage significance: standards and principles, Australian Heritage Commission, Sydney.
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- DUAP 1988, State Environmental Planning Policy No. 26: Littoral Rainforests, Sheet 5, Byron Bay areas 27, 27A and 27B, Department of Urban Affairs and Planning, Sydney.
- IUCN 1980, IUCN World Conservation Strategy, Publ. World Conservation Union 1980
- Murray, A. 1991, Cape Byron Headland Reserve rare and endangered plants preliminary survey. A report to the Cape Byron Trust.
- NSW PWD 1978, Byron Bay Hastings Point Erosion Study. Report No. PWD78026, Department of Public Works, Sydney.
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