

# Mount Field National Park

Marriotts Falls State Reserve  
&  
Juneau Cave State Reserve

## Management Plan

2002

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&  
Junee Cave State Reserve

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2002



**Parks and Wildlife Service**

Department of Tourism, Parks, Heritage and  
the Arts

## **Mount Field National Park, Marriotts Falls State Reserve & Junee Cave State Reserve Management Plan 2002**

This Management Plan for Mount Field National Park, Marriotts Falls State Reserve and Junee Cave State Reserve has been prepared in accordance with the requirements of Part IV of the *National Parks and Wildlife Act 1970*. The appendices to the plan provide additional information and are not part of the statutory management plan.

Unless otherwise specified, this plan adopts the interpretation of terms given in Section 3 of the *National Parks and Wildlife Act 1970*. The term 'Minister' when used in the plan means the Minister administering the Act. The term 'park' refers to the Mount Field National Park and the term 'reserves' refers to Marriotts Falls State Reserve and Junee Cave State Reserve. The term 'PWS' refers to the Parks and Wildlife Service.

In accordance with Section 23 of the *National Parks and Wildlife Act 1970*, the managing authority for the park and the reserves, in this case the Director, National Parks and Wildlife, shall carry out his or her duties in relation to the park and the reserves for the purpose of giving effect to, and in accordance with, the provisions of this management plan.

A draft of this plan was released for public comment in accordance with statutory requirements from 5 February to 5 May 2000. This plan is a modified version of that draft, having been varied to take account of public representations, the views of the National Parks and Wildlife Advisory Council and the advice to the Minister provided in the Resource Planning and Development Commission Report of May 2002.

### **Acknowledgements**

This plan has been in preparation over the past eight years. Over 1100 people or groups have contributed to its development through participation in the initial 1992/93 public submission program (120 written submissions), 1993/94 visitor survey (511 returns), 1999 visitor survey (488 returns) and the public representations to the Minister on the 2000 Draft Management Plan (22 written submissions). A number of people made representations and gave evidence at the Resource Planning and Development Commission hearings in February 2002. The time those people have given has contributed greatly to the development of this plan.

Many specialists, management staff, other government agency staff and other professionals have assisted in the preparation of this plan by providing information and comments on earlier drafts. Their time and efforts are gratefully acknowledged.

### **Approval**

This management plan was approved by His Excellency, the Governor-in-Council, on 28 October 2002 and took effect on 4 December 2002, being seven days after publication of that approval in the *Government Gazette*. Those provisions that authorise the exercise of other statutory powers (Section 7.3) are of no effect until their inclusion is approved by both Houses of Parliament.

ISBN 0 7246 6266 9

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Department of Tourism, Parks, Heritage and the Arts, 2002

Published by Parks and Wildlife Service  
Department of Tourism, Parks, Heritage and the Arts  
GPO Box 44  
Hobart, Tasmania 7001

## Summary

Mount Field National Park (15,881 ha) is one of the most popular protected areas in Tasmania. It is located near the southeastern boundary of the Tasmanian Wilderness World Heritage Area. The park protects a number of important natural ecosystems, a rich cultural heritage and encompasses a significant water catchment. Mount Field demonstrates an outstanding altitudinal range of vegetation communities ranging from tall eucalypts to native pines. The lower parts of the park include or adjoin nationally significant karst systems, while the higher parts showcase classic glacial landscapes such as U-shaped valleys, alpine lakes and tarns. The Lake Fenton/Lady Barron Creek drinking water catchment is relatively undisturbed, providing clean and low cost drinking water. Nearly 20% of Hobart's water is drawn from the catchment.

One of the two oldest national parks in Tasmania, Mount Field has provided an important recreational and educational resource for the local community and Hobart residents since the end of the nineteenth century. The nearby reserves of Marriotts Falls State Reserve and Junee Cave State Reserve are small in area but protect important scenic and natural values.

Mount Field National Park will be managed to protect its outstanding natural and cultural values and provide for a broad range of recreational activities such as bushwalking, skiing, camping, scenic driving and picnicking. High quality visitor facilities will be provided to enhance such visitor experiences. The major management strategies for the park are summarised below.

- The protection of the natural and cultural heritage values of the park and reserves from adverse human impact, unplanned fire, introduced species and diseases will continue to be of the highest priority.
- The 'rediscovery' of the park as a tourism icon will be promoted to encourage locals and visitors alike to appreciate, understand and enjoy the park's natural and cultural values, as well as the wide range of recreational opportunities it offers.
- The park will be divided into six management zones, each based on different types and degrees of use and management requirements.
- The Russell Falls Visitor Zone will provide improved day use facilities in the most heavily used part of the park. These facilities include a new visitor centre to provide information, interpretation and educational services, a park shop and kiosk, improved carparking and traffic flow, more picnicking facilities and improved short walk opportunities for visitors.
- In order to protect the water supply, a catchment management plan has been developed for the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area. Implementation of that plan means that some recreational and other activities may be restricted to protect the catchment.
- The Mt Mawson skifield will be managed to minimise environmental degradation and to provide safe, environmentally and economically sustainable services and infrastructure.
- There will be a greater emphasis on research, monitoring and evaluation to ensure that management of the park is consistent with the objectives and the long-term vision for the park.
- Most of the park, except for the Russell Falls Visitor Services Zone, will be declared a 'Fuel Stove Only Area'.
- There will be an increased emphasis on liaising with neighbouring land managers to achieve co-operative and complementary management practices for adjoining areas to protect geoconservation values (especially karst and cave) and other natural heritage values of the park and reserves.

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# 1 Overview

## 1.1 Location, Reservation and Regional Context

### 1.1.1 Location

Mount Field National Park is one of the most popular protected areas in Tasmania, currently receiving around 140,000 visitors each year. Many visitors come from the local Hobart area because of the park's accessibility (75 kilometres west of Hobart) and its range of year round recreational opportunities. The northern, more inaccessible reaches of the park lie in the Central Highlands Municipality, while the southern half of the park lies in the Derwent Valley Municipality.

Map 1 shows the regional location and access to the park and reserves.

The Lake Dobson Tourist Road is the principal vehicular access into the park and travels 16 kilometres from the park entrance to Lake Dobson, a gain in altitude of almost 1000 metres.

### 1.1.2 Reservation

Mount Field National Park presently encompasses an area of approximately 15,881 hectares. Freycinet National Park and 'National Park', as Mount Field National Park was known, were both gazetted on 29 August 1916 under the *Scenery Preservation Act 1915*, becoming Tasmania's first national parks (see Appendix 1).

Inaccuracies associated with early surveys and gazettals resulted in the park being thought until recently to cover a much larger area (17,330 hectares). The production of a registered plan for the park in 1998 enabled the area of the park to be accurately calculated for the first time, resulting in the lower figure of 15,881 hectares. At its widest points, the park stretches about 15 kilometres from north to south and about 18 kilometres from east to west.

The national park is reserved under the *National Parks and Wildlife Act 1970*. The boundaries of the park are set out on Plan Number CPR 4835 in the Central Plan Register, Department of Primary Industries, Water and Environment. The reservation and gazettal history of the park is set out in Appendix 1.

The first Europeans known to have visited Marriotts Falls were the Marriott brothers in 1880. The area

around the falls was proclaimed as a scenery reserve in 1921. It is now a State reserve under the *National Parks and Wildlife Act 1970* with an area of 121 hectares.

The first European visit to Junee Cave is thought to have occurred around 1890, and the area around the cave was later set aside as a cave reserve. It was proclaimed as a State reserve under the *National Parks and Wildlife Act 1970* in 1976, and has an area of 20 hectares.

### 1.1.3 Regional Context

Map 2 shows the tenure of land surrounding the park and reserves.

The park and reserves are surrounded almost entirely by State forest and private land. A private forestry company also owns some adjoining land. The State forests to the south, west and northwest, and in the coming years, north of the park are managed for forestry purposes.

Around the park entrance is located a fish farm, holiday accommodation, land associated with the Derwent Valley Railway and several private residential properties.

Attractions in the region include the scenery and walks of Southwest National Park in the Tasmanian Wilderness World Heritage Area (WHA), cave and waterfall reserves, historic buildings and scenic pastoral landscapes of the Derwent Valley.

Nearby, the cave systems of the Florentine Valley are extensive and include the deepest in Australia. The Tyenna River along the Gordon River Road and the lakes and impoundments of the Southwest are important destinations for anglers, boaters, day visitors and campers.

## 1.2 Importance of the Park and Reserves

As defined by the International Union for the Conservation of Nature (IUCN 1997), Mount Field National Park is similar to a Category II protected area that is managed mainly for ecosystem protection and recreation.

Although small compared with some of the Tasmanian Wilderness World Heritage Area national parks,

Mount Field National Park protects an extensive and important range of natural and cultural values.

**The park and reserves protect and encompass natural heritage values including:**

- 11 threatened plant species and over 30 species recorded as rare in Tasmania;
- a swamp gum (*Eucalyptus regnans*) and stringybark (*E. obliqua*) wet forest community that is of outstanding display value;
- the barred bandicoot (*Perameles gunnii*), a mammal listed nationally as vulnerable;
- complex karst features of high geoconservation value;
- outstanding glacial features such as K Col and the Lake Fenton blockstream;
- four invertebrates that are listed as either rare, threatened or vulnerable at the State level;
- wet sclerophyll forest communities of high conservation value;
- alpine and subalpine communities of high conservation value; and
- the Lake Fenton/Lady Barron Creek drinking water catchment, which provides 20% of the domestic water supply for Hobart.

**The park and reserves embody cultural heritage values such as:**

- one of the oldest reserves in Australia;
- known Aboriginal heritage values;
- an important part in the development of the Derwent valley region; and
- many sites and artefacts of historic cultural heritage significance such as Twilight Tarn Hut.

**The park and reserves also provide recreational, tourism and educational uses such as:**

- a large range of walking opportunities ranging from the wheelchair standard path to Russell Falls to the full day trip to Mount Field West;
- high scenic values coupled with an 'undeveloped' feel;
- an established and comfortable campground;

- a cross country and downhill skiing destination close to Hobart;
- a popular recreation area, close to Hobart, for family and group picnics;
- an easily accessible 'fagus spotting' destination;
- a popular angling destination;
- a very high biodiversity within a relatively small and accessible area;
- the infrastructure necessary to be an important educational resource, and a history of continuous use by Hobart schools and University; and
- an altitudinal range of vegetation ideal for ecological studies.

Mount Field National Park was listed on the Register of the National Estate under the *Australian Heritage Commission Act 1975* on 21 March 1978 (see Section 3.3.1).

Although the park is not in the World Heritage Area, visitors to Southwest National Park often include the park in their visit, hence it is seen as a 'gateway' for some visitors to Southwest National Park. At Mount Field, visitors can experience World Heritage Area values that are well presented and interpreted.

In this context Mount Field National Park has been identified in the Tasmanian Wilderness World Heritage Management Plan 1999 (PWS 1999) as an entry and contact point for visitors to the Southwest National Park. Management staff and infrastructure for Southwest National Park are based at Mount Field.

The park has been identified as an ideal site for interpreting the vegetation, such as tall eucalypt forests, of the World Heritage Area. Mount Field should be interpreted for visitors in its own right, but it will also provide interpretation and information for visitors to the World Heritage Area.

### **1.3 Threats to Park and Reserve Values**

There are a number of factors that detract from or have the potential to diminish park and reserve values and character. These include:

- wildfire, which may affect fire sensitive native vegetation and vulnerable animal species;
- stream siltation and volume fluctuations above Russell Falls resulting from upstream agricultural and forestry activities;

- the effect on viewfields from park lookouts of clearing, monoculture and burning on adjacent lands;
- damage to natural and cultural values from inappropriate visitor behaviour;
- introduced plants, animals and diseases which invade the ecosystem and degrade or weaken the natural environment;
- 1080 pesticide programs conducted near park and reserve boundaries; and
- developments or activities which may damage natural and cultural values or spoil the tourism and recreational character of the park and reserves.

These factors must be effectively dealt with if park values and character are to be sustained.

## **1.4 Preparation of the Management Plan**

Mount Field National Park, Marriotts Falls State Reserve and Junee Cave State Reserve are managed by PWS in accordance with the *National Parks and Wildlife Act 1970*. Under the Act, the Director is responsible for the preparation of management plans.

Since its creation in 1916, planning at Mount Field National Park has occurred on an ad hoc basis. Park managers have used the best information available at the time to manage park and reserve values and to accommodate the recreational demands of the public without significantly impacting on these values. The aim of this management plan is to provide management direction and to guide development based on a set of defined objectives.

One of the major strategic issues facing the park and reserves is ensuring protection of its values while meeting the recreational needs of visitors. Economic circumstances must also be taken into account. The plan seeks to provide simple and low-key facilities and development, relying on management strategies to cope with high visitor numbers.

The plan provides a vision for the park and reserves coupled with specific management objectives, policies and actions. A summarised account of the physical features, history, uses and management of the park and reserves is also given.

### **1.4.1 Public Consultation**

During preparation of this draft management plan, a public consultation program which called for written submissions (Department of Parks, Wildlife and

Heritage, Ranson, 1992) and a survey of visitors (DPWH 1993) was undertaken. A further visitor survey was undertaken in early 1999, and a draft management plan was made available for public comment in mid-2000. In total, over 1100 people or groups have contributed to the development of this plan.

Advice and comment have also been provided by management staff of the park and reserves and others such as the local councils, Hobart Water, neighbouring land owners and managers, the Southern Tasmanian Ski Association, tourism associations, the Friends of Mount Field, volunteers and visitors. Information has been gathered from historical surveys, specialist records and departmental files.

The time and effort of all those who contributed to the development of this plan is gratefully acknowledged.

## 2 Vision and Objectives

### 2.1 Vision Statements and Key Desired Outcomes

The vision statements (shown below in bold) give a picture of how the parks and reserves should be in the future. They have been derived from the general management objectives for national parks and reserves as set out in Schedule 4 of the *National Parks and Wildlife Act 1970*. Creating a vision for the future enables park managers to better understand how management objectives can be met, and to direct management actions accordingly. A vision for the future helps to avoid inappropriate development and management, and the 'tyranny of small decisions'. Park managers must not only deal with the present, but look beyond the short term, and manage for the benefit of future generations as much as our own.

The Key Desired Outcomes (shown below each vision statement in italics) are measurable outcomes designed to show how well the vision for the future of the park and reserves has been realised.

#### Vision Statements and Key Desired Outcomes

##### 1. **There is natural biological diversity.**

- *Populations of threatened species (such as the 11 vascular plant species listed on the Tasmanian threatened species schedule) within the park and reserves have remained stable or have increased over the term of the plan.*
- *The rare and unusual series of string bogs at Newdegate Pass have been protected from damage.*
- *The park and reserves continues to support secure populations of other native flora and fauna.*

##### 2. **The geological diversity of the park, reserves and inter-related karst systems has been conserved.**

- *A karst and cave management strategy for the park and reserves involving adjacent land managers has been prepared and adopted.*
- *The karst and cave system is being managed in accordance with the approved karst and cave management strategy.*

- *The karst and cave system is being regularly monitored and known threats are being managed within specified limits.*

- *The identified natural landscapes and sites of geoconservation significance in the park and reserves remain undisturbed.*

##### 3. **Clear, clean water flows over waterfalls and fills the lakes and streams.**

- *The Lake Fenton/Lady Barron Creek Drinking Water Catchment Area management plan has been prepared and adopted.*
- *Water quality within the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area has met or exceeded the targets identified in the catchment management plan.*
- *Water quality within the park outside of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area meets the State Policy objectives for pristine ecosystems.*

##### 4. **Sites and areas of cultural significance have been conserved.**

- *Re-development of the Russell Falls Visitor Services Zone has served to enhance and protect the identified historic cultural landscape values of the area.*
- *All known historic features have been recorded and their significance assessed.*
- *Conservation maintenance schedules have been developed for relevant historic infrastructure.*
- *Identified Aboriginal sites within the park and reserves remain undisturbed.*

##### 5. **Education is encouraged, based on the park and reserves' purposes and significance.**

- *The new Mount Field visitor centre caters for the park and reserves and the nearby World Heritage Area, and provides information and interpretation for visitors to all these areas.*

- *Visitor numbers predicted for the new visitor centre have been met or exceeded, and there are predominantly positive visitor comments about the centre.*
- *An interpretation and sign strategy for the park and reserves has been prepared and the prescriptions implemented.*
- *Interpretation of the Aboriginal heritage of the park and reserves has been developed in consultation with the Aboriginal community.*
- *Use of the park and reserves by educational groups has measurably increased over the term of the plan.*

**6. Park managers have been able to use research conducted within the park and reserves to improve management.**

- *Research conducted within the park and reserves can be demonstrated to have contributed to management of the park and reserves.*
- *Research results are available which have increased knowledge of the park and reserves.*

**7. The observant visitor can see that adverse impacts such as fire, introduced species, diseases and soil erosion have been largely excluded, and that areas have been rehabilitated where necessary.**

- *Monitoring has shown that impacts associated with the skifield and private lodges on the ecology of the Lake Dobson and Eagle Tarn areas are within specified acceptable limits.*
- *The eroded areas associated with the Lake Dobson Road and the Jeep Trail have been stabilised and revegetation of eroded sites is progressing well.*
- *The sections of the four old State Forest roads that encroach on the western and south-western boundaries of the park have been gated and rehabilitated.*
- *Monitoring has shown that frost heave or other erosion on the groomed slopes of the skifield is within specified acceptable limits.*
- *A fire management plan for the park and reserves has been prepared and targeted fire regimes achieved.*
- *'Good neighbour' agreements (to encourage cooperative and sustainable land management*

*practices to reduce erosion, siltation and prevent the spread of wildfire) with landowners surrounding the park and reserves have been negotiated and adhered to.*

- *There has been no new establishment of introduced species in the park (especially weeds, pests or pathogens such as 'high altitude' dieback disease), and the impact of pre-existing introduced species has been contained or reduced.*

**8. Tourists, recreational users and others can go to Mount Field, Marriotts Falls or Junee Cave, and derive enjoyment from their visit without having an adverse impact on natural or cultural values.**

- *Recreation and tourism opportunities and facilities identified in the management plan or in site planning have been developed in accordance with such plans.*
- *Site planning for the Russell Falls Visitor Services Zone has recognised the traditional use of the area by the local and greater Hobart communities.*
- *A walking track strategy for the park and reserves has been prepared and implemented. Trampling damage and ongoing erosion identified in the strategy has been reduced to specified limits.*
- *Visitors' comments are predominantly positive about the quality of their experience of the park and reserves and of the facilities, services and information provided.*
- *Areas of visitor complaint or dissatisfaction have been identified and, where feasible, addressed.*
- *Redevelopment of the entrance fee collection system has resulted in more effective use of entrance fee staff time and in greater opportunity for visitor/staff interaction.*

**9. Cooperative management programs with Aboriginal people in areas of significance to them, and in a manner consistent with the national park's purpose and the other national park management objectives, have been encouraged.**

- *If desired by the Aboriginal community, an appropriate cooperative management program has been established in an area of significance to the Aboriginal community.*

**10. Bushwalkers can still experience the natural, primitive and remote character of Mount Field's wilderness areas.**

- Unless provided for in the walking track management strategy, no new tracks have been created, or other developments occurred, in the Natural Zone of the park.

This management plan will be evaluated on the basis of these Key Desired Outcomes and the National Park Management Standards listed in Appendix 5.

## 2.2 Purposes and Objectives of National Parks

National parks are a class of reserved land under the *National Parks and Wildlife Act 1970*. They are large natural areas of land containing a representative or outstanding sample of major natural regions, features or scenery.

### *Purposes of National Parks*

The purposes of reservation of national parks, as set out in Schedule 3 of the *National Parks and Wildlife Act 1970*, are the protection and maintenance of the natural and cultural values of the area of land while providing for ecologically sustainable recreation consistent with conserving those values. Mount Field National Park is reserved for these purposes.

### *Objectives of National Parks*

The objectives of national parks are set out in Schedule 4 of the *National Parks and Wildlife Act 1970* (see below). All of the general objectives set out in the Act apply to Mount Field National Park. Using the National Estate threshold for wilderness (Tasmanian Public Land Use Commission, 1997, page 37), sixteen indicative areas of National Estate wilderness value were identified in Tasmania. Mount Field National Park contributed 15,400 hectares (i.e., all but 481 hectares of the park) of high quality wilderness to the comprehensive regional assessment.

Because of the complex interrelationship of factors to be considered in managing the park, the reasons these objectives apply and the manner in which the objectives will be achieved are dealt with in a number of sections of the management plan. The sections of the management plan which primarily deal with each management objective in the Act are shown in brackets below.

### **The management objectives of national parks are:**

- to conserve natural biological diversity (Sections 3.4 and 3.5);
- to conserve geological diversity (Section 3.2);
- to preserve the quality of water and protect catchments (Section 3.3);

- to conserve sites or areas of cultural significance (Section 3.6);
- to encourage education based on the purpose of reservation and the natural or cultural values of the national park, or both (Section 5.3);
- to encourage research, particularly that which furthers the purposes of reservation (Section 7.2);
- to protect the national park against, and rehabilitate the national park following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the national park's natural and cultural values and on assets within and adjacent to the national park (Section 2.5., Section 4, 5.11.1);
- to encourage and provide for tourism, recreational use and enjoyment consistent with the conservation of the national park's natural and cultural values (Section 5);
- to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives (Section 3.6.1);
- to preserve the natural, primitive and remote character of wilderness areas (Sections 2.5 and 5.9).

## 2.3 Purposes and Objectives of State Reserves

State reserves are a class of reserved land under the *National Parks and Wildlife Act 1970*. They are areas of land containing significant natural landscapes, natural features and/or sites, objects or places of significance to Aboriginal people.

### *Purposes of State Reserves*

The purposes of reservation of State reserves, as set out in Schedule 3 of the *National Parks and Wildlife Act 1970*, are the protection and maintenance of any one or more of the following:

- the natural and cultural values of the area of land;
- sites, objects or places of significance to Aboriginal people contained in that area of land;
- use of the area of land by Aboriginal people,
- while providing for ecologically sustainable recreation consistent with conserving any of the

things referred to in paragraph a), b), and c) as applicable.

Marriotts Falls State Reserve and Junee Cave State Reserve are reserved for these purposes.

### ***Objectives of State Reserves***

The objectives of State reserves are set out in the *National Parks and Wildlife Act 1970* (see below). All of the general objectives for State reserves set out in the Act apply to Marriotts Falls State Reserve and Junee Cave State Reserve. Because of the complex interrelationship of factors to be considered in managing these reserves, the reasons these objectives apply and the manner in which the objectives will be achieved are dealt with in a number of sections of the management plan. The sections of the management plan which primarily deal with each management objectives in the Act are shown in brackets below.

#### **The management objectives of State reserves are:**

- to conserve natural biological diversity (Sections 3.4 and 3.5);
- to conserve geological diversity (Section 3.2);
- to preserve the quality of water and protect catchments (Section 3.3);
- to conserve sites or areas of cultural significance (Section 3.6);
- to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives (Section 3.6.1)
- to encourage education based on the purpose of reservation and the natural or cultural values of the State reserve, or both (Section 5.3);
- to encourage research, particularly that which furthers the purposes of reservation (Section 7.2);
- to protect the State reserve against, and rehabilitate the State reserve following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the State reserve's natural and cultural values and on assets within and adjacent to the State reserve (Sections 2.5., 4, and 5.11.1);
- to encourage and provide for tourism, recreational use and enjoyment consistent with the conservation of the State reserve's natural and cultural values (Section 5).

## **2.4 Specific Park and Reserve Objectives**

To maintain the park and reserves' values, and to achieve the visions for them, specific objectives are set out below. These objectives are fundamental to the long term protection of the park and the reserves. They underpin sustainable recreational and tourism use.

These objectives are consistent with the general management objectives for national parks and State reserves. They elaborate upon and give emphasis to them in the light of the particular features, circumstances, issues and values which prevail in the park and the reserves, as described or identified in this management plan. The context makes clear to which reserve the objectives apply. Where no particular category of reserve is mentioned then the objectives apply to both of them.

- Preserve the existing recreational and tourist character of the park by encouraging day use and limiting most development to the entrance area of the park.
- Protect the Lake Fenton/Lady Barron Creek drinking water catchment, and preserve drinking water quality.
- Promote the park and reserves, particularly the entrance area and road to Lake Dobson, as a day trip destination for people from southern Tasmania.
- Continue to provide recreational opportunities, such as cross-country and downhill skiing, that complement those found in other reserves in the State.
- Improve access and opportunities for disabled and less able visitors.
- Encourage the continued use of the park and reserves by educational and research organisations.
- Increase public understanding and support for the values and goals for management of the park and reserves.
- Enhance, recognise and increase conservation and understanding of the historic heritage values of the park.
- Develop and maintain good working relations with park neighbours, and encourage their co-operation and participation in park protection programs.

## 2.5 Management Zones

The park and reserves have a history of uses that have already determined the locations and boundaries of specific activities. Although the park and reserves' vision and management objectives apply to all of the park and reserves, different conditions prevail in different areas of the park. To ensure appropriate management of these differing conditions, management zones have been designated to take account of, and protect, the natural and cultural values of the park and reserves.

The Russell Falls and Lake Dobson Visitor Services Zones have the greatest concentration of human use and require the greatest amount of management, while the remoter areas of the park require less active management.

### *Objectives - Zoning*

- Improve visitor experiences by providing a range of visitor services and opportunities consistent with the values of the park and reserves.
- Protect and enhance park and reserve values by taking account of localised features, conditions and values, and concentrating and directing visitor services development to designated locations.
- Ensure substantial areas of the park remain undisturbed.

### *Policies*

- Four management zones will apply to the park and reserves (refer to Map 3). These are:
  1. The Russell Falls Visitor Services Zone
  2. The Lake Dobson Visitor Services Zone (which includes the Mt Mawson precinct)
  3. The Recreation Zone (includes Marriotts Falls and Junee Cave State Reserves and is overlain by part of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area)
  4. The Natural Zone (includes the Karst and Cave Management Area and part of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area).
- Visitor facilities and services in each Zone will be limited to those provided for in Section 5 of this management plan.

## 2.6 Site Plans and Management Strategies

While this management plan sets the policy framework for the use, development and management of the park and reserves, more detailed plans and strategies for specific zones should be prepared in consultation with affected stakeholders, as recommended by the Resource Planning and Development Commission in their report (2000). The Minister has agreed that these should be prepared within 24 months of gazettal of this management plan.

### *Actions*

In consultation with stakeholders and within 24 months of gazettal of this plan, prepare:

- a site plan for the Russell Falls Visitor Services Zone;
- a site plan for the Lake Dobson Visitor Services Zone; and
- a Karst and Cave Management Strategy for the karst and cave system shown as an overlay on Map 3 of the Natural Zone.

## 3 Conservation

### 3.1 Topography and Climate

#### 3.1.1 Climate

Mount Field National Park, Marriotts Falls State Reserve and Junee Cave State Reserve have a cool temperate climate. The entrance area of the park has an average winter temperature of 9°C, and an average summer temperature of 22°C. In the higher altitudes of the park, over 1000 m, the mean minimum temperature in winter is 0°C and the mean maximum temperature in summer is 10°C (Gibson 1984).

Average annual rainfall from records collected at Maydena give a 34-year average of 1220 mm. There is a marked rainfall gradient of 1000 mm from west to east across the park. The alpine areas of Mt Mawson and the Rodway Range receive over 2000 mm, while the town of National Park receives about 1000 mm of rainfall each year. Most of the rainfall is in winter.

In the alpine regions of the park, much of this precipitation falls as snow between June and October. The accessibility of the park and its alpine regions make it a popular destination for winter sports, particularly downhill and cross-country skiing. Snowfall, and therefore skifield operation, has always been highly variable and over the last decade, has been insufficient to operate the skifields on numerous occasions.

The prevailing winds are from the south-west. Strong winds occasionally cause damage or loss of some of the tall eucalypt trees within the park and reserves.

#### 3.1.2 Topography

Map 4 shows the topography and drainage of the park and reserves. The park ranges in altitude from 158 metres above sea level at the entrance to 1434 metres at the highest point, Mount Field West. The treeline occurs at 1200 metres.

Russell Falls, about a 10-minute walk from the carpark, is the best known feature of the park and drops 40 metres in three tiers.

The major river and catchment systems affecting the park are the Tyenna, Broad, Humboldt and Davis Rivers, and Russell Falls and Neena Creeks. South-west of the park is the Florentine Valley, a broad limestone valley. Steep limestone karst topography is found south of Florentine Peak and west of Mount

Field West. To the west are the mountains of the fold structure province of western Tasmania.

### 3.2 Geodiversity

Geoconservation refers to the identification and conservation of geological, geomorphological and soil features, assemblages, systems and processes for their intrinsic, ecological or heritage values.

#### Objectives – Geodiversity

- Protect, maintain and monitor geodiversity and sites of geoconservation significance.
- Maintain the natural rates and magnitudes of change in earth processes.
- Minimise harmful impacts on geoconservation values.

#### Policies

- Ensure that management practices and development do not affect the integrity of geo-features or processes and in particular avoid sites of geoconservation significance.
- Assess potential impacts on geo-features, processes, and sites of geoconservation significance, when planning any development or action.

#### Actions

- Protect and interpret sites of high geoconservation value including: the escarpments and waterfalls in the lower part of the park and reserves, in particular:
  - the Lake Fenton blockstream,
  - the Rodway Range string bog,
  - the large dolerite boulder being wedged apart by eucalypt roots above the ski area,
  - K Col saddle.
- Provide interpretation on the ‘classic’ glacial features of the park such the Broad River valley.
- Liaise with the Tasmanian Geological Survey in regard to producing 1:25K digital maps. Conduct further research into the geology, geomorphology

and soils of the park and reserves to determine their sensitivities to disturbance from fire and human activity so that appropriate measures can be adopted to improve protection.

- Produce an inventory of significant geoconservation sites.

### 3.2.1 Geology

The geology of the park and reserves is summarised on Map 5. Sites of geoconservation significance are listed in Bradbury (1995).

The park and reserves lie to the west of the Derwent Graben, formed during the mid-Tertiary. Outcropping to the west of the park and reserves, and underlying it as basement rock, are strongly folded older successions of Ordovician and Siluro-Devonian sediments including the Gordon limestone and its equivalents. Jurassic dolerite is ubiquitous above about 760 metres, with Triassic and Permian sediments outcropping at lower altitudes.

Limestone karst and caves underlie much of the western and southern parts of the park and underlie the reserves. Section 3.2.4 describes the karst in more detail.

The Triassic and Jurassic rocks of the park and reserves show strong Gondwanic links with those of the Transantarctic Mountains in Antarctica. The Triassic sequence of sedimentary rocks is very uniform, non-marine in origin and contains evidence of lacustrine and fluvial conditions with basic intrusive material. The Jurassic dolerite (170 million years old) provides a firm link with Antarctica being of identical age to rocks of that continent.

Lady Barron Falls, Horseshoe Falls and Russell Falls are composed of marine Permian siltstone benches. The vertical faces of the waterfalls are composed of retreating sandstone layers (Scanlon et al 1990).

The lack of detailed understanding of the park and reserves' geology is reflected in the lack of detailed geological mapping, and represents a gap in knowledge of park and reserve values.

### 3.2.2 Geomorphology

Mount Field contains excellent examples of landforms produced by at least five glacial advances over the last two million years. The higher peaks of the park stuck out as nunataks of rock exposed above the surrounding glaciers during glacial advances.

During the last glaciation, around 20 000 years ago, the longest glacier in the area occupied the Broad River Valley for up to 12 kilometres. The terminal moraines in the Broad River Valley and the cirque walls above Lake Seal provide evidence of the extent of the ice

action. During earlier advances, glaciers spilled into the Florentine Valley down Lawrence Rivulet and towards the Tyenna River via the Humboldt Valley. In the most extensive advance, the Westfield advance, ice extended up to 10 kilometres down the Lawrence Valley from K Col (Kiernan et al 2001).

The numerous tarns on Tarn Shelf are an excellent illustration of glacial erosion. Twisted Tarn and Twilight Tarn are reminders of the glacier that flowed down from Lake Newdegate to Lake Webster. Another glacier flowed south from K Col to form Lakes Belcher and Belton, and north from K Col to form the Hayes Valley and Lake Hayes.

To the east, another glacier flowed from Mount Field East, Kangaroo Moor and Wombat Moor, terminating just below the level of the present Lake Fenton, which was dammed by extensive blockstreams. The blockstream which dams Lake Fenton is considered an outstanding example of a periglacial blockstream. These blockstreams are a feature of the slopes of Mt Monash south of the lake. Two other glaciers further east produced Lake Nicholls, Lake Rayner and Beatties Tarn.

The string bog at the northern end of the Rodway Range is probably the best example of this type of landform in Tasmania (Gibson and Kirkpatrick 1992). It is a series of small terraced ponds which appear to have been dammed by a combination of glacial debris, peat and vegetation, possibly on the steps of an underlying blockstream.

Several geomorphological sites including the escarpments and waterfalls in the lower part of the park, the Lake Fenton blockstream, the Rodway Range string bog, the large dolerite boulder being wedged apart by eucalypt roots above the ski area and K Col saddle have high educational value and should be interpreted for visitors.

### 3.2.3 Soils

In the upper park alpine humus and highly leached podzolic soils predominate with the podzols frequently occurring on deep periglacial solifluction deposits which mantle the slopes down to about 450 metres.

Alluvial floodplains in the lower park and reserves along the Tyenna River have developed on deep deposits of Quaternary alluvium and are considered to have geoconservation value due to ubiquitous disturbance of similar soils elsewhere in the State (Bradbury 1995). These soils are moderately prone to natural erosion from flooding as well as erosion resulting from human activity or grazing activities on riverbanks.

### 3.2.4 Karst

The Junee-Florentine karst covers an area of about 18,500 ha and contains more than 580 documented cave entrances, including many deep and long caves (Eberhard 1994, 1996), making it one of the most important cave systems in Australia. Niggly Cave (375 m), which is located inside the park, is probably the current deepest explored cave in Australia. Other important caves are Junee Cave (at Junee Cave State Reserve), Beginners Luck, Welcome Stranger, Frankcombes Cave, Cashions Creek Cave and Growling Swallet. Many of the caves are part of a much larger system which water tracing has shown to be linked to an underground stream network that is the source of the Junee River at Junee Cave. The western part of the park and the Junee Cave State Reserve are located within the karst catchment and contain numerous significant karst features of high geoconservation value. State forest adjacent to the park and reserves also contains significant caves and karst features, including caves linked to the Junee River system.

The Australian Karst and Cave Management Association recommended at its 1992 national conference that the Junee-Florentine karst system should be included in the park. This proposal was supported by the Australian Speleological Federation (Clarke 1997a). Eberhard (1994, 1996) produced a three-tiered sensitivity analysis of the karst catchment, allocating 4965 ha to a High Sensitivity Zone that he regarded as warranting a high level of protective management to protect significant and sensitive karst features. Much of the High Sensitivity Zone, particularly in the Junee River catchment falls inside the park and reserves while the remainder is within State forest. Eberhard's (1994) recommendations have been incorporated within Forestry Tasmania's Management Decision Classification system, which provides for different management regimes including complete or partial harvesting exclusion within Protection Zones and Special Management Zones.

The majority of caves in the area are accessible only to very experienced cavers. Junee Cave is suitable for visits by the general public. Forestry Tasmania is responsible for all roads in State Forest used for access to the cave system; some of these roads are old logging tracks that encroach into the park (see Section 4.3). This access was tightly controlled in the past by Australian Newsprint Mills, the private forestry company that held the logging concessions to the area. The end of the concession system has led to a relaxation of access restrictions and may result in increased visits to the cave systems, with possible safety problems and degradation of values. Management of the whole system should be uniform, regardless of land tenure, hence there is a need for a cooperative approach by current land managers.

### Policies

- A Karst and Cave Management Area will overlay the management zoning shown on Map 3. Additional management prescriptions as a result of this overlay may apply to these zones.
- Responsible and safe use of the caves within the park and reserves is supported. Cave users will be expected to be familiar with and actively use the Australian Speological Federation's Minimal Impact Caving Code, Code of Ethics and Safety Codes or their supercedents.
- Proposed new developments in the karst catchment will be assessed with respect to their potential impacts on the karst and associated values. The assessment will be undertaken by personnel with relevant karst expertise. It will take into account the highly cavernous nature of the karst, the spatially extensive and interconnected nature of its caves and associated aquifers, and the importance of natural processes associated with soil, water, the atmosphere and ecosystems, in maintaining the karst system.
- Joint approaches to management with adjacent landowners and land managers will be considered where caves and associated aquifers extend beneath the boundary of the park and reserves into adjacent areas.
- A Karst and Cave Management Strategy will be prepared for the karst and cave system of the park and reserves in consultation with surrounding landowners including Forestry Tasmania, caving groups and other relevant stakeholders within 24 months of gazettal of this plan, which will address the following:
  - arrangements for continued vehicle access for cavers;
  - access to individual caves;
  - monitoring requirements of cave conditions;
  - the need for cave-based works;
  - cave cleaning programs; and
  - other specific day-to-day karst and cave management requirements.
- Any cave gate or other restriction on access will be supported by signs identifying the management authority and explaining the purpose of access restrictions. Restrictions can be declared using Section 11 of the *National Parks and Reserved Land Regulations 1999*.

- Where it is determined necessary to restrict access to certain caves, protocols for access will be developed in consultation with caving groups. If the access protocols provide for ongoing visitation, membership of a recognised caving club and/or other evidence of caving ability and knowledge of minimal impact caving techniques may be used as a basis for granting access, subject to such conditions or restrictions as considered appropriate to further the management objectives of the site.
- Further documentation of the karst and cave resources of the park and reserves will be supported where this provides information relevant to management, including cave exploration, cave surveying, water tracing and other investigations, provided these activities are carried out in a responsible manner and the information gained is documented appropriately.
- The publication of information about cave locations, or other information that could promote visitation by inexperienced parties to caves that are sensitive or hazardous to the inadequately prepared, will be discouraged.
- Proposals for scientific research into the caves and karst will be assessed on a case by case basis, taking into account the potential impacts of the proposed research. The potential benefits to park and reserve management and the community, and the level of knowledge of minimal impact caving techniques of the proponents (if cave visitation is involved) will also be considered. Any proposal to remove samples from the karst will be subject to formal assessment and authorisation requirements in accordance with relevant regulations.
- Cave cleaning programs and/or the development of marked routes will be considered if monitoring indicates that this is an appropriate management response. Where practical, cave cleaning and track marking will be undertaken with the assistance of caving clubs.
- Liaise and develop joint management protocols with adjacent land managers to promote sustainable land use practices within the karst, recognising that land use impacts relevant to karst management objectives can be transferred across tenure boundaries. Effectively addressing these impacts may require joint management initiatives in some instances.
- In cooperation with caving groups, progressively classify the caves according to the Draft Tasmanian Cave Classification Scheme (Eberhard 1997). The classification will provide the basis for identifying broad management objectives for particular caves as a framework for more detailed site-specific planning if required.
- Assess the suitability of caves in the Junee-Florentine karst for commercial nature-based tourism operations, taking into account safety issues and the sensitivity of cave values to pressure from increased visitation. In the event that suitable caves are identified, license conditions for any concessions granted will provide for the protection of cave values, as determined by detailed site-based assessments. Monitoring will be undertaken to ensure that the licence conditions are effective in protecting cave values.
- Target cave visitors with information, interpretation and educational materials about karst and minimal impact caving techniques and equipment.
- Liaise with Forestry Tasmania in regard to gating the small sections of State forest roads which encroach into the park on the western and southern sides where they cross the boundary of the park (see Sections 4.3 and 5.4.1).
- Liaise with the Derwent Valley Council and Forestry Tasmania to ensure continued safe road access to Junee Cave State Reserve.

### **Actions**

- In consultation with adjacent land managers and karst/caving interest groups, develop a karst and cave management strategy for the park and reserves as a basis for systematically addressing management requirements, including access, maintenance and other issues.
- In cooperation with caving groups, monitor the condition of the caves and other karst features with an emphasis on quantifying the impacts of cave visitation, by recreational cavers and others, at the most frequented caves.
- In cooperation with caving groups, monitor vandalism at Junee Cave, notably the breakage of speleothems and graffiti in the entrance chamber. If monitoring indicates further unacceptable damage, additional measures to protect the cave will be considered.
- In consultation with the Aboriginal community, undertake a survey of caves with potential Aboriginal significance.
- Accurately locate Eastoe's (1979) 'Coral Garden' and related sites of geoconservation significance. If the sites are located inside the park, they should be protected from potentially harmful

developments, or collection by students and rockhounds.

- Liaise with Forestry Tasmania and Mineral Resources Tasmania regarding options to enhance the rate of revegetation at Junee Quarry on State forest above Junee Cave State Reserve.
- Liaise with Forestry Tasmania and Mineral Resources Tasmania regarding the operation of a gravel quarry on Westfield Road. This quarry is located within the catchment of Junee Cave and unless appropriately managed could impact the karst system inside the park and reserves. It is recommended that the special requirements of operating in this sensitive karst context should be addressed in the quarry management plan.
- Review the park and reserves boundaries as detailed in Section 7.1 and liaise with Forestry Tasmania to determine if greater protection can be afforded the karst system through boundary changes and/or joint management initiatives.

### **3.3 Natural Landscape and Water Quality**

Mount Field National Park is a dramatic and largely undisturbed natural landscape and protects a significant catchment for drinking water.

#### **3.3.1 Natural Landscape Values**

The park has been assessed as an indicative area of National Estate significance as a natural landscape (Tasmanian Public Land Use Commission, 1997). It contains 'large, relatively undisturbed areas of land with topographic and catchment integrity, where natural processes continue largely unmodified by human intervention'. It has also been assessed as having aesthetic values.

#### **Objectives – Natural Landscape**

- Protect, maintain and monitor the National Estate values of the natural landscape.
- Protect scenic values.

#### **Policy**

- Significant landscape features and attributes that contribute to National Estate value will be protected.

#### **Actions**

- Identify and protect the significant natural landscape features and attributes that contribute to the National Estate value of the park and reserves as a natural landscape.

- Identify and protect the significant natural landscape viewfields.
- Remove, relocate, or replace (where feasible), facilities whose location or design significantly impacts on natural landscape quality.
- Assess the visual impact of proposed developments on natural landscape values prior to approval of such developments.

#### **3.3.2 Water Quality Values**

In accordance with the State Policy on Water Quality Management 1997, the protected environmental values and water quality objectives must be set for all surface waters and ground waters within Tasmania. The following values within the park and reserves are established by this management plan and will be adopted as the minimum standard for water quality within the park and reserves.

#### **Objectives – Water Quality**

- Maintain or enhance water quality in the park and reserves.

#### **The protected environmental values are:**

Surface waters within Mount Field National Park that have their headwaters within the national park and surface waters within Marriotts Falls State Reserve and Junee Cave State Reserve that have their headwaters within the reserves.

#### **A: Protection of Aquatic Ecosystems**

- (i) Protection of pristine or nearly pristine ecosystems

having regard for the management objectives for national parks and State reserves outlined in Schedule 4 of the *National Parks and Wildlife Act 1970*.

#### **B: Recreational Water Quality & Aesthetics**

- (i) Primary contact water quality (where such activities are permitted under the management plan or regulations)
- (ii) Secondary contact water quality (where such activities are permitted under the management plan and regulations)
- (iii) Aesthetics water quality

#### **C: Raw Water for Drinking Water Supply (Lake Fenton catchment only)**

- (ii) Subject to coarse screening and disinfection

That is, as a minimum, the water quality shall be managed to provide water of a physical and chemical nature to support a pristine or nearly pristine aquatic ecosystem and which will allow people to safely engage in recreation activities such as swimming, kayaking, paddling or fishing in aesthetically pleasing waters (where such activities are permitted under management plans or regulations) and in the Lake Fenton catchment water quality that is acceptable for town drinking water supply.

and

Surface waters flowing through Mount Field National Park, Marriotts Falls State Reserve or Junee Cave State Reserve from State forests, un-allocated crown land or private land.

#### A: Protection of Aquatic Ecosystems

- (ii) Protection of modified (not pristine) ecosystems from which edible fish are harvested

having regard for the management objectives for national parks and State reserves outlined in Schedule 4 of the *National Parks and Wildlife Act 1970*.

#### B: Recreational Water Quality & Aesthetics

- (i) Primary contact water quality (where such activities are permitted under the management plan and regulations)
- (ii) Secondary contact water quality (where such activities are permitted under the management plan or regulations)
- (iii) Aesthetic water quality

That is, as a minimum, the water quality shall be managed to provide water of a physical and chemical nature to support a healthy, but modified aquatic ecosystem from which edible fish may be harvested; which will allow people to safely engage in recreation activities such as swimming, kayaking, paddling or fishing in aesthetically pleasing waters (where such activities are permitted under management plans and regulations).

#### Actions

- Implement the prescriptions of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Management Plan (2000) (see Section 5.8).

## 3.4 Flora

The park has long been recognised as an area with a high degree of floristic diversity relative to other Tasmanian mountains. This is a result of various influences including the park's geographic location central to both the eastern and western floras of Tasmania, the range of geological substrates present including dolerite, sandstone, and quartzite, and its altitudinal range which extends from lowland to alpine habitats. There are more than 433 higher plant species recorded in the park and reserves (see Appendix 3) of which 261 are dicots, 125 are monocots, eight are conifers, and 39 are ferns or fern allies.

The flora of the park has been quite well studied, particularly due to the park's use over many years as an educational resource by the Geography and Botany Departments of the University of Tasmania. Map 6 provides a simplified map of the major vegetation communities of the park and reserves. Extremely detailed TASVEG maps are available through Geographic Information Services Division of the Department of Primary Industries, Water and Environment in Hobart.

### 3.4.1 Vegetation Communities

In a classic study, Ogden and Powell (1979) describe the change in vegetation along an altitudinal transect from 158 metres to treeline, 1220 metres above sea level, identifying three major zones. The lower zone, from 158 m to 670 m, comprises tall open forest dominated by swamp gum *Eucalyptus regnans* and/or stringybark *E. obliqua*, with a wet understorey characterised by musk *Olearia argophylla*. The middle zone, from 670 m to 940 m, is closed rainforest or mixed forest, with the rainforest element dominated by myrtle *Nothofagus cunninghamii* and sassafras *Atherosperma moschatum* with an understorey of celery-top pine *Phyllocladus aspleniifolius*. The upper zone, from 880 m to 1220 m, is subalpine woodland dominated by the endemic Tasmanian snow gum *E. coccifera*. In common with other parts of Tasmania, species richness in the park increases with altitude.

The alpine communities found on the tops of the mountains and plateaux of the park are characterised by a mosaic of heath, herbfield, bogs and bolster moor communities. The distribution of these communities depends upon drainage, wind protection and the depth and duration of snow lie. Gibson and Kirkpatrick (1985) described the bolster heath, herbfield and fjaeldmark communities associated with areas of prolonged snow lie. Cushion plants are interspersed with pineapple grass bogs and occur on the most exposed and wettest areas of the plateaux. Sphagnum bogs are found around alpine and sub-alpine lakes and tarns.

The subalpine forests and woodlands of the park are characterised by several Tasmanian endemic conifers including: the pencil pine *Athrotaxis cupressoides* found around the higher lakes and tarns of the park; the King Billy pine *Athrotaxis selaginoides*; and several dwarf pine species including mountain plum pine *Podocarpus lawrencii*, creeping pine *Microcachrys tetragona*; cheshunt pine *Diselma archeri*; and dwarf pine *Microstrobos niphophilus*.

Some species are restricted to certain drainage basins in the park. The Broad River Valley contains the greatest diversity of communities in the park. The Tasmanian endemic cider gum, *Eucalyptus gunnii*, small fruit hakea, *Hakea microcarpa* and *Grevillea australis* appear to be restricted to the northern part of the Broad River Valley. Buttongrass *Gymnoschoenus sphaerocephalus*; bottlebrush *Callistemon viridiflorus*; *Lepyrodia tasmanica* and *Leptocarpus tenax*; are all restricted to the Broad and Humboldt River basins. Fine-leaved hop bush *Dodonaea ericifolia* is restricted to the Lake Emmett region, and sticky everlasting *Helichrysum antennarium* is virtually restricted to the Lady Barron basin. *Richea milliganii* is found in the park only in the Humboldt basin.

### 3.4.2 Species and Communities of High Conservation Value

The park's forest communities have been mapped as part of the comprehensive regional assessment for the Tasmania-Commonwealth Regional Forest Agreement (RFA) (Tasmanian Public Land Use Commission, 1997). The RFA forest communities identified in the park are: *Eucalyptus coccifera* forest; both tall and medium *Eucalyptus delegatensis* forest; *Eucalyptus obliqua* wet forest; *Eucalyptus regnans* forest; and both callidendrous and thamnisc rainforest.

The park contains indicative areas of National Estate value for old growth forest, for flora communities characteristic of their class, and for exhibiting limits of range for flora (Tasmanian Public Land Use Commission, 1997). The Comprehensive, Adequate and Representative (CAR) values of the park include the forest communities identified above, and the areas of old growth forest. Most of the park is classified as wilderness by the Regional Forest Agreement. The importance of the park for vegetation conservation means that conservation of plant communities is one of the major considerations of management.

Eleven of the vascular plant species recorded in the park are listed in Schedule 5 of the Tasmanian *Threatened Species Protection Act 1995* (see Appendix 3). Over 30 species are rare in Tasmania.

The park is particularly significant for the representation of a high diversity of wet sclerophyll forest communities, including at least eight different types. The *Eucalyptus regnans* - *E. obliqua* wet forest community that occurs along the Lady Barron Track

between the Old Farm and the falls is considered to be poorly reserved in Tasmania. The park is also an important reserve for alpine communities that occupy about 14% of its area. Included amongst the alpine assemblages of significance are a series of string bogs at Newdegate pass that are extremely rare and unusual.

The major threat to the flora of the park and reserves is inappropriate fire (see Section 4.1). Other threats include invasion by exotic species, inappropriate developments, facilities or management activities, disease and visitor impact.

### Objectives - Flora

- Protect, maintain and monitor natural flora diversity.
- Protect, maintain and monitor rare, threatened and endangered flora species.
- Protect, maintain and monitor plant communities with Comprehensive, Adequate and Representative (CAR) values, and of conservation and National Estate significance.
- Minimise harmful impacts on park and reserves indigenous flora.
- Interpret the flora of the park and reserves to visitors.

### Policies

- The following plant species and communities will be given the highest priority for conservation:
  - species occurring in the park and reserves which are listed as rare or threatened (see Appendix 3);
  - relict communities of pencil pine and fagus;
  - the alpine communities and the pencil pine, fagus and King Billy pine forests of the sub-alpine areas;
  - the pandani grove at Lake Dobson because of its special interpretation significance;
  - Tarn Shelf and associated alpine communities;
  - RFA forest communities;
  - old growth forest communities;
  - the string bogs on the Rodway Range;

- the swamp gum and stringybark *E. regnans* - *E. obliqua* wet forest community of the Lady Barron Track; and
- the hybrid *Richea* species and yellow form of the waratah *Telopea truncata* at Wherrett's Lookout.
- Adverse impacts in high conservation priority areas will be avoided or limited to those that are localised and of minimal impact.
- Only local provenance of species native to the park and the reserves will be used in rehabilitation works unless otherwise approved in a project proposal.
- Collection of flora will not be permitted without authorisation from the Director.

#### Action

- Prepare and/or implement management programs for threatened flora species or communities of conservation significance.

### 3.5 Fauna

Although no systematic survey has been undertaken, the fauna of the park has been reasonably well documented due to the park's accessibility and popularity for research and educational use. Appendix 4 provides available species lists for the park and reserves.

Although the park and reserves have a legal status which offers a high level of protection, threats to the fauna of the park and reserves include:

- fire in alpine areas and rainforest, human impact related to feeding of wildlife and undue disturbance of wildlife by people;
- poisons used in adjacent eucalypt and pine plantations; and
- disease, and predation by and competition with, exotic species for food and nesting sites.

#### 3.5.1 Mammals

The great majority of Tasmania's native terrestrial and arboreal mammals occur within the park. The diversity of habitats within the park's relatively small area is responsible for such a diversity of species. Species that are either extinct or endangered on the mainland are found in the park, such as the eastern quoll *Dasyurus viverrinus* and the eastern barred bandicoot *Perameles gunnii*.

The last Tasmanian tiger *Thylacinus cynocephalus* held in captivity at the Beaumaris Zoo in Hobart had been trapped in the Florentine Valley in 1933.

#### 3.5.2 Birds

Birds have taken advantage of the range of altitudes and habitats available, and consequently many species are found within the park and reserves. This includes 11 of the 12 Tasmanian endemic species such as the Tasmanian native hen *Gallinula mortierii*. The ecologically important, but not endemic, black currawong *Strepera versicolor*, a key disperser of fleshy fruited plants, is also present in the park and reserves.

#### 3.5.3 Reptiles and Amphibians

Several species of amphibians and reptiles occur, including the endemic Tasmanian froglet *Crinia tasmaniensis*. Skinks in the park include two endemics, the southern snow skink *Niveoscincus microlepidotus*, only found above 1000 metres, and the Tasmanian tree skink *N. pretiosus*, found in tall wet forest.

#### 3.5.4 Invertebrates

Lake Fenton is an important type locality for a number of endemic moths. Other rare invertebrates occurring in the alpine and subalpine communities of the park include the cushion plant moth *Nemotyla oribates* (Nielsen et al 1992) and the alpine day-flying pencil pine moth *Dirce aesiodora* (McQuillan and Nielsen 1989) which was taken off the Tasmanian threatened species schedule in June 2000. The caddisfly, *Diplectronea castanea*, is considered to be extinct, as it has not been recorded since 1936, despite limited searches. The mountain shrimp *Anaspides tasmaniae*, first described in 1893, is found in many alpine pools and tarns of the park.

Invertebrates of particular interest include *Plesiothele fentoni*, a trapdoor spider believed to be extinct until recently found around the edges of Lake Fenton, and the vulnerable carabid beetle *Goedetrechus parallelus*, an obligate cave dweller only known from the Junee-Florentine caves. Clarke (1997b) has provided a list of 73 cave invertebrate species in the Junee-Florentine system within the park.

Also found in the park are ancient taxa of scale insects and mealy bugs that have not yet been described at the species level in Tasmania, and whose closest relatives are found in New Zealand (Gullan and Qin 1992). The wide range of habitats in the park provide for an exceptional range of species.

#### Objectives - Fauna

- Protect, maintain and monitor rare, threatened and endangered animal species.

- Protect, maintain and monitor indigenous animals and habitat diversity.
- Minimise harmful impacts on indigenous fauna and habitats.
- Interpret the fauna of the park and reserves and provide opportunities for visitors to encounter wildlife.

#### **Policies**

- Recommendations resulting from research will be used to protect those species considered to be endangered, vulnerable, or rare.
- Animal management and control measures, including fencing, culling, biological control, removal, or relocation, will be adopted if studies show them to be warranted and practical.
- To conserve habitat for native wildlife in Russell Falls Visitor Services Zone, only those standing trees that are assessed as potentially hazardous may be removed.
- Collection of fauna will not be permitted without authorisation from the Director.

#### **Actions**

- Encourage fauna research and surveys to determine the status and management requirements of the fauna of the park and reserves, particularly in areas of high visitor use (see Section 7.2).
- Promote and explain a policy of not feeding wildlife.
- Retain some open areas in the lower part of the park to provide opportunities to view and interpret native fauna.
- Liaise with the Department of Infrastructure, Energy and Resources to investigate methods to avoid the death or injury of animals by motor vehicles. Implement the most appropriate methods.

## **3.6 Cultural Heritage**

### **3.6.1 Aboriginal Heritage**

Limited archaeological surveys in the park have shown that Aborigines used the land and waters of the park; more extensive surveys of the nearby Florentine Valley

have shown Aboriginal occupation of over 30,000 years (Cosgrove 1989).

To date there have been no systematic archaeological surveys conducted in the park and reserves. Two Aboriginal sites have been identified inside the park boundaries, located near Lake Fenton and Lake Dobson. These consist of an isolated artefact find and an artefact scatter. Evidence of Aboriginal occupation has been found outside the park in several caves near the Florentine River, dating from the Pleistocene (Goede and Murray 1977; Jones and Cosgrove 1987, Cosgrove 1989). Brown (1986), who surveyed south-east Tasmania for Aboriginal archaeological sites, did not locate any in the park. However, in light of the two known sites in the park and nearby activity, Brown suggests that the park was probably used as a hunting and foraging area.

Jones (1971) and Ryan (1981) suggested that the park and reserves fell within the territory of the Big River people, who occupied territory ranging from the Great Western Tiers to Mount Wellington. The Pangerninghe band located at the junction of the Derwent and Clyde Rivers near the present-day township of Hamilton, were the closest band to the park and reserves area.

Archaeological studies in the area in and around the park and reserves have clearly indicated an Aboriginal presence. The potential for revealing and disturbing Aboriginal heritage sites in the park and reserves is high and land management must take this into account. New legislation dealing with Aboriginal heritage management is under consideration. At present, the *Aboriginal Relics Act 1975* applies.

The Aboriginal heritage of the park and reserves has a strong and continuing significance to the Tasmanian Aboriginal community. There is potential for the Aboriginal community in conjunction with PWS to promote and interpret their heritage to the wider community and provide greater understanding of past and present Aboriginal culture in and around the park and reserves.

#### **Objectives – Aboriginal Heritage**

- In cooperation with the Tasmanian Aboriginal community:
  - identify and record sites of Aboriginal heritage;
  - protect and conserve Aboriginal heritage;
  - exclude intrusive development and activity in Aboriginal heritage areas; and
  - interpret Aboriginal heritage.

### **Policies**

- Aboriginal heritage values will be assessed and protected in accordance with this management plan and any agreed national or state charter or guidelines for Aboriginal sites.
- Aboriginal sites will not be publicised unless the site has been assessed, in conjunction with the Aboriginal community, for educational or interpretive use. Where applicable, make use of the agreed Aboriginal interpretation strategy.
- Consult with the Aboriginal community on any undertaking or development that may impinge upon Aboriginal sites.
- Report all Aboriginal sites discovered in the park to the Director, in accordance with the *Aboriginal Relics Act 1975*.
- Development will be located well away from areas of Aboriginal heritage.
- Aboriginal heritage will not be deliberately disturbed for management, development or research purposes unless the Minister determines there is no practical alternative and a permit has been issued under the *Aboriginal Relics Act 1975*.

### **Actions**

- In cooperation with the Aboriginal community, identify and record Aboriginal sites and values.
- Consult with the Aboriginal community on the management of Aboriginal heritage and values.
- In consultation with the Aboriginal community, develop interpretation of the Aboriginal heritage of the park.
- Monitor Aboriginal sites for, and protect them, from damage.
- Remove, relocate, or replace (where feasible), facilities whose location or design significantly impacts on Aboriginal sites.
- Liaise with the Aboriginal community regarding cooperative management programs for the park and reserves. If appropriate, implement such programs.

### **3.6.2 Historic Heritage**

Historical sites in the park are associated with tourism, trout fishing, skiing, road and track building and water schemes. The major historical features in the park include the Lake Fenton Hut, Twilight Tarn Hut and

associated artefacts, Lake Dobson Road historical sites, the Government Huts, waterworks at Lake Fenton, early access tracks, the Old Farm area (see Section 5.5.4), some of the recreation facilities at the entrance area of the park and logging remains.

From the 1830s, trappers and snarers worked the high country around Mount Field, coming in from Montos Marsh (now Ellendale). Bushrangers and escaped convicts were known to have hidden out in the country around Bushy Park in the 1840s, trapping and taking advantage of local farms such as Fenton Forest.

The old pack horse route used in the 1920's to reach the osmiridium mines at Adamsfield crosses the south-west boundary of the park.

Prior to 1910, the only access to the high country was by pack track from Ellendale. In 1869, the eminent botanist Baron von Mueller visited Mount Field East on a week-long collecting trek, guided by the Rayner brothers, local trappers. He described the snow gum *Eucalyptus coccifera*, the urn gum *E. urnigera*, the cider gum *E. gunnii* and cushion plants *Donatia novaezelandiae* from the meadows around Lake Fenton. The botanist Leonard Rodway also explored the area from the 1850s.

The first non-Aboriginal to encounter Russell Falls was a settler named Browning in 1856. The falls became known as Brownings Falls until about 1884 when confusion caused them to be referred to as Russell Falls, and by the turn of the century, the name was firmly established. The original Russell Falls, named for a member of an exploration party in the Derwent Valley, was actually located on the Tyenna River, which was previously known as Russell Falls River. Frodsham surveyed the area in 1884, and the Falls Reserve was proclaimed in 1885.

In 1893 the Tasmanian Tourist Association was formed to promote Tasmania's scenic wonders of Mt Wellington, Russell Falls and the Hartz Mountains. In 1899 Tasmania was the first British colony to issue scenic stamps, including ones of Russell Falls. The development of a railway network that extended to the park in the early 1900s made it a popular destination. Marriott's Guesthouse was built in 1911 at the present day entrance to the park to accommodate visitors. Sightseeing, walking and fishing were the most popular activities.

Perhaps as early as 1870, and in 1893, introduced trout species were released into the park's lakes to develop the sport fishing potential of the area.

Skiing and ice-skating became popular in the 1920s, leading to the formation of the Ski Club of Tasmania in 1926. This group built the hut at Twilight Tarn. It took a full day to reach it along the old Pack Track.

Many artefacts from this era are displayed in the Twilight Tarn Hut. In 1941 huts were also built at Lake Fenton for skiers. The opening of the Lake Dobson Road in 1937 made access much easier for winter sports, and skifield development at Mt Mawson took off after World War II.

Work was begun on the Lake Dobson Road in 1934 and largely completed in 1937, using local unemployed labour. A post, wire and rail fence was erected on the low side of the road as part of this construction program and remains of the fence can still be seen in many places. The road originally finished at Lake Fenton and a motor vehicle shed was built there in 1936.

In 1922 the Public Works Department surveyed the park as a source of fresh water for Hobart and towns between. When the road was completed, the Lake Fenton water supply scheme was undertaken, involving construction in the park of a dam wall and siphon tunnel capable of releasing eighteen million litres of water per day into the Lady Barron Creek. The water is captured in a weir lower down the mountain, just outside of the park, and piped 65 kilometres to Hobart. The scheme was opened in 1939, and the dam wall was raised in 1954. The level of the lake can be drawn down eight metres from full supply level.

Due to fears of polluting the Lake Fenton/Lady Barron Creek water supply, the road was extended to Lake Dobson. The Lake Fenton Huts were removed and rebuilt as the Government Huts closer to Lake Dobson, outside the Lake Fenton catchment. Only the original ranger's hut and toilet remain close to Lake Fenton.

Many of the huts in the park have historical and social value, including Lake Fenton Hut, Twilight Tarn, Lake Newdegate Hut and the Government Huts (see Section 5.6.7), as well as some of the private lodges, such as the Hobart Walking Club lodge and the Alpine Ski Club lodge.

#### **Objectives – Historic Heritage**

- Identify and record historic heritage in the park and reserves.
- Conserve and maintain the integrity and quality of significant historic cultural landscapes, heritage structures and vegetation and other historic heritage fabric and features.
- Protect and conserve historic heritage from damage.
- Present and interpret historic heritage.
- Exclude intrusive development and activity in historic heritage areas.

#### **Policies**

- Irrespective of management zone, conservation and management of historic heritage in the park and reserves will adhere to The Burra Charter (Australia ICOMOS 1999) and its associated guidelines.
- Conservation, use and management of historic heritage will conform with this management plan.
- Management of sites on the Tasmanian Heritage Register will be subject to the *Historic Cultural Heritage Act 1995*.
- A conservation policy statement or conservation plan, including specific assessment of significance, will be prepared before any decisions about major works, use, removal or interpretation of individual elements of historic heritage. Such statements or plans will be prepared in accordance with the principles outlined in the Burra Charter, using the methodology outlined in Kerr (1996).
- Adaptations to heritage structures, as may be provided for in a conservation policy statement or conservation plan, will be readily reversible and new services will not be apparent from outside buildings, or impact upon heritage values.
- Accurate, detailed working documentation, appropriate to the scale and significance of the works, will be prepared prior to any conservation works and to record any conservation works 'as built'.
- To avoid disturbance of historic ground features, including quarries, sub-surface remains, and archaeological deposits such as building footings, drainage channels and tracks, an archaeological assessment will be required before approval of any development or ground-breaking work in areas of heritage significance (see Section 4.5).
- A cyclical and catch up maintenance program will be developed and implemented for significant historic features.
- Assistance in management of historic huts will be sought from people with an interest in or an historical association with the park.

#### **Actions**

- Identify, record and assess the significance of all historic features.
- Identify and assess the condition of historic places.

- Make safe any dangerous structures, in keeping with their heritage significance.
- Remove any damaging uses, activities and developments that intrude upon or detract from heritage values.
- Prepare conservation policy statements or plans for all significant historic heritage features.
- Catalogue, appropriately store, or present historic artefacts to visitors. When warranted, adopt conservation measures.
- Provide suitable fire protection for all heritage structures (see Section 4.1).
- Systematically record historic heritage sites within the park on the Tasmanian Historic Place Index (THPI), as they are identified.
- Maintain a record of historic places for the purpose of management, monitoring, research, public interest and accountability.
- Identify community values associated with historic places, for the purpose of increasing opportunities for the community to engage in the conservation of these places and values.
- Conserve and promote key historic places for interaction with the general public.
- Increase awareness of historic places through off-reserve interpretation.
- Prepare conservation maintenance schedules for relevant historic infrastructure.

### 3.6.3 Historic Cultural Landscape

In the Russell Falls Visitor Services Zone, many exotic species were planted to create a European-style park landscape. The avenue of London plane trees *Platanus acerifolia* along the entrance road and the rows of poplars *Populus nigra italica* edging the oval have historic cultural landscape value. The oval itself has social value to the wider local community as a game playing area for many years.

The Crommelin Botanic Gardens were constructed in 1967 in the area north of Russell Falls Creek by the park ranger. A bridge was constructed to allow a tractor to terrace the hillside, which was then planted with species from other areas of the park. Two Huon pines, a species not found in the park, have also been planted. At the same time a return link was constructed from Russell Falls along the Botanic Gardens side of the creek. Many of the specimens planted did not survive. Maintaining such a garden is incompatible with current conservation ideas, which do

not support the use of national parks and reserves as botanic gardens, but for retention and conservation of species in their native habitat and communities. The native garden established at the Royal Botanical Gardens in Hobart is considered a more appropriate location.

#### Objectives

- Identify and maintain significant historic heritage vegetation and historic cultural landscapes.
- Revegetate or allow natural regeneration of all other disturbed areas.

#### Policies

- Relevant archaeological, historic heritage, botanical and zoological information will be used in developing historic cultural landscape management programs.
- Historic cultural landscape maintenance and renewal will be based on the researched layout of historic heritage plantings and cleared areas.
- Introduced plants of historic heritage significance will be retained and replaced when necessary to maintain continuity of the historic cultural landscape.
- Introduced plants and cultural landscapes retained for their heritage significance will be managed to prevent their invasion into indigenous plant communities.
- Assess the visual impact of proposed developments on historic cultural landscape values prior to approval of such developments.

#### Actions

- Identify, record and assess the significance of historic cultural landscapes, historic heritage vegetation and viewfields.
- Protect and maintain significant historic cultural landscapes, historic heritage vegetation and viewfields.
- Where feasible, remove, relocate, or replace facilities whose location or design significantly impacts on historic cultural landscape quality.

Specific management prescriptions for the Russell Falls Visitor Services Zone historic cultural landscape are referred to in Section 5.5.1.

## 4 Protection

### 4.1 Fire Management

Wildfire in the park and reserves has been the result of escapes from adjoining lands, a campfire escape from within the park, and lightning strikes. Protection of human life is the primary concern of wildfire response. Vegetation, neighbours, cultural heritage assets and park and reserve infrastructure also need protection from uncontrolled fire. The Tasmania Fire Service, Forestry Tasmania, and PWS all have responsibility for fire suppression in and around the park and reserves. A fire management protocol exists between the Department of Primary Industries, Water and Environment, Forestry Tasmania and the Tasmania Fire Service (Forestry Tasmania 1998) to facilitate cooperative fire suppression.

The Parks and Wildlife Service is responsible under the *Fire Service Act 1979* and the *Fire Service (Miscellaneous) Regulations 1996* for all aspects of fire management within the park and reserves, including prevention, containment and suppression. Similarly, neighbouring land managers and landholders also have a responsibility to prevent the spread of fire into the park and reserves. During a wildfire, fire behaviour and suppression necessity will determine the on-ground actions and consequently, the priorities on the day.

Fire has eliminated large areas of fire-sensitive species such as deciduous beech, pencil and King Billy pines and favoured the establishment of sclerophyllous vegetation in some alpine and subalpine areas of the park. This is particularly evident in parts of the Rodway Range and the upper Humboldt River. Other areas, such as the moorlands and wet forests, including the tall forests around Russell Falls, are fire adapted.

The public consultation program indicated broad community support for declaring the alpine and sub-alpine parts of the park 'fuel stove only', but not the day use area at the entrance to the park and the campground.

Major wildfires occurred in the Russell Falls area in the 1890s and again in 1934. In 1960 a fire allegedly lit by fishermen burnt most of the upper Humboldt Valley. In 1966, sparks from a fire outside the park started two spot fires on the Rodway Range and another, east of Lake Newdegate. The largest of these burnt the Range top and down the eastern flank to Tarn Shelf. The after effects of these fires are still evident. Many species of plants that were present before the fires have not reappeared in the areas burnt, and soils

have yet to reform. The endemic conifer species and the deciduous beech have been most affected.

#### *Objectives – Fire Management*

- Protect people from fire.
- Conserve natural and cultural values including:
  - geodiversity, particularly aspects that are rare or unique;
  - native plant communities and species, particularly those that are rare or threatened;
  - the habitats of native animals, particularly those that are rare or threatened;
  - wilderness quality;
  - scenic and viewfield quality;
  - Aboriginal cultural resources; and
  - historic cultural resources.
- Prevent fires burning from neighbouring land onto the park and reserves, and from the park and reserves onto neighbouring land.
- Protect park and reserve facilities and assets.

#### *Policies*

- In the event of wildfire, protection of life and non-PWS property will be afforded the highest priority.
- Fire management in the park and reserves must recognise the role of fire in conserving habitat for fauna species and communities.
- Protect from fire the following natural and cultural sites (listed in priority order):
  - relict communities of pencil pine and fagus;
  - Tarn Shelf and associated alpine communities;
  - the string bog on the Rodway Range;
  - the tall forest communities;

- the pandani grove because of its special interpretation significance; and
- Twilight Tarn Hut and Lake Fenton Hut.
- Burning to provide, maintain or protect habitat for fauna species may be undertaken.
- To protect Russell Falls Visitor Services Zone from wildfire, fuel reduction may be achieved by mechanical clearing or other means.
- The use of earth moving machinery for fire suppression in Russell Falls Visitor Services Zone will be confined to vehicle tracks and firebreaks which already exist unless necessary to protect life and property.
- Earthmoving machinery will not be used for 'off road' fire management purposes unless necessary to protect life and property in the Lake Dobson Visitor Services Zone, the Recreation Zone or the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area.
- Earthmoving machinery will not be used for fire management purposes in the Natural Zone of the park.
- Within the Russell Falls Visitor Services Zone fires may only be lit in designated fireplaces or woodstoves.
- The Lake Dobson Visitor Services Zone, the Recreation Zone, the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area and the Natural Zone, will be 'Fuel Stove Only' and open campfires will not be permitted except in an emergency.
- Within the Lake Dobson Visitor Services Zone and the Recreation Zone, fires will only be permitted in designated woodstoves or fireplaces in huts where the ability to construct a fire for warmth is considered necessary for safety reasons and where firewood can be provided.
- The use of woodstoves and fireplaces in private lodges will be subject to conditions set out in Section 5.6.6.
- Fires will be restricted or prohibited in the park and reserves when the McArthur Forest Fire Danger Index is 'high' or 'extreme', as well as during days of Total Fire Ban. Take all practical measures to inform visitors of such restrictions.
- When fire danger conditions warrant, the Director or a delegated officer may close all or some areas

of the park or the reserves by taking appropriate steps to restrict access.

### **Actions**

- Install appropriate signs and educate visitors about Fuel Stove Only Areas.
- Liaise with Tasmania Fire Service, Forestry Tasmania and other adjacent landholders to cooperatively manage and reduce the threat of wildfire in and around the park and reserves.
- In accordance with PWS policy, a fire management plan, based on the foregoing objectives and prescriptions, for the park and reserves will be prepared in consultation with relevant authorities and adjacent land managers and landowners.
- Until such time as a fire management plan for the park and reserves is prepared, the following will apply:
  - in the event of fire in the Russell Falls Visitor Services Zone, close the road and all walking tracks, and send staff to sweep tracks and evacuate walkers by the safest route;
  - in the event of a fire in or directly threatening the park other than in the Russell Falls Visitor Services Zone, close the road to upwards traffic, initiate immediate suppression response, and keep the oval area clear for helicopter operations. If the fire has the potential to threaten the Lake Dobson road then close the Lake Dobson road and send a radio equipped person to either send all vehicles down the road, or collect all vehicles at the Lake Dobson carpark; and
  - depending on the location of the fire, PWS staff will also need to do sweeps of the high altitude walking tracks in the park (e.g. Mount Field East circuit for a fire originating in the Ellendale area, Mount Field West and Tarn Shelf for a fire coming from the Florentine valley or Broad River).

## **4.2 Pests, Weeds and Diseases**

### **4.2.1 Pests**

Pests in the park and reserves include trout, feral cats, rabbits, house mice, and birds such as the superb lyrebird, kookaburra, starling, blackbird, house sparrow, European goldfinch and greenfinch. Most of these species are well established in the park and reserves and elsewhere. There are higher priorities for conservation than attempting to eradicate many of

these well-established species. However, cats and rabbits have higher potential to impact on native flora and fauna than other introduced species.

Superb lyrebirds *Menura novaehollandiae* from Toolangi, Victoria were released in the park in 1935 and 1949. The species now occurs throughout the area and well beyond the park boundaries.

The park was stocked with trout at an early date. French (1994) suggests that the first stocking and release within the park may have been in 1870 and again in 1893. Since that time, there have been repeated stocking/releases in the 1920's, 1940's, 1950's and 1960's at most of the other lakes in the park. At present no trout releases are occurring in the park and populations are maintained by natural recruitment. The use of live bait is illegal in the park and reserves. Such use risks the introduction of undesirable fauna to the park and reserves, or involves the taking of protected fauna from within the park.

#### **Objectives – Pests**

- Eradicate introduced species where this is feasible and warranted by the actual or potential impact upon natural and cultural values.
- Control and manage introduced species where eradication is not possible or warranted.

#### **Policies**

- Introduction of fauna or fish (including Tasmanian fauna or fish) not historically indigenous within the boundaries of the park or reserves will not be allowed.
- Eradication will be attempted only where non-target species are not threatened by the proposed methods, unless the threat from the introduced species is greater than the threat from eradication methods.
- Eradication, control and containment programs and priorities will be based on clear, well documented, contemporary knowledge or, where necessary, additional research.
- Except in accordance with the *National Parks and Reserved Land Regulations 1999*, animals not native to the park or reserves must not be taken into or allowed to be in or remain in the park or the reserves.
- Introduced fish will not be released in any of the park's waterways, consistent with the Inland Fishery Commission's stocking policy for national parks.

- All waters in the park and reserves are artificial lure only (see Section 5.8 in regard to fishing in the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area).

#### **Actions**

- Remove pests where practical and warranted by the actual or potential impact upon natural and cultural values.
- Investigate cost-effective methods of feral cat and rabbit control for the park and reserves, and implement as needed.

#### **4.2.2 Weeds**

Introduced species such as blackberry, holly and willow are present in the entrance area of the park, particularly along the banks of the Tyenna River and Russell Falls Creek. These species regenerate very easily and out-compete native species. Cumbungi is growing on the banks of the sewage pond at the Old Farm and may spread to other areas of the park. Weeds species also enter the park on vehicles and in gravels used for road repair. These are usually confined to the road verge and are easier to keep under control.

It is impractical to attempt to eradicate all introduced species and many pose no threat to the integrity of the park and reserves. Some introduced species have cultural heritage values (see Section 3.6.3) and if they pose no ecological threat, should be managed for heritage conservation. Some species are able to out-compete native species.

#### **Objectives**

- Eradicate weeds where this is feasible and warranted by the actual or potential impact upon natural and cultural values.
- Control and manage weeds where eradication is not possible or warranted.

#### **Policies**

- Introduced flora management will be linked with:
  - protection of natural and cultural values;
  - erosion control; and
  - revegetation works.
- Introduced flora management will accord with the provisions of the introduced plants policy (PWS 1998).

- An integrated regional approach to weed management, involving neighbouring landowners and land managers, will be supported.
- Eradication or control of weed species will only be attempted where non-target species are not threatened by the proposed methods, unless the threat from the weeds is greater than the threat from eradication methods.
- Weed eradication, control and containment actions and priorities will be based on research and planning which:
  - identifies species requiring priority control based on the threat to natural and cultural values;
  - identifies areas where introduced flora should be eradicated or controlled and where they should be retained as a means of environmental protection;
  - assesses any threat plants of heritage significance pose as environmental weeds;
  - specifies methods of removal and disposal of introduced flora;
  - identifies protocols for the use of herbicides and fertilizers;
  - prescribes the appropriate time of year for control; and
  - outlines the structure of any further research into the most effective means of control.
- No herbicides are to be used within the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area

#### **Action**

- Prevent the spread of introduced plant species retained for cultural heritage purposes.
- Remove or actively control weed species such as blackberry, holly and willow as far as practical, with particular priority given to the banks of the Tyenna River in the day use area. Ensure that erosion is minimised possibly by removing trees and shrubs over a period of time rather than all at once.
- Remove cumbungi from the sewage ponds to minimise potential for escape into other areas of the park and to improve the operation of the sewage system.
- Seek cooperation from land managers and owners responsible for land surrounding the park and reserves in participating in a coordinated approach to the control of weeds.

#### **4.2.3 Plant Diseases**

Plant diseases such as myrtle wilt *Chalara australis* and the root rot fungus *Phytophthora cinnamomi* are a potential threat to the species and communities of the park and reserves.

Myrtle wilt, a disease of myrtle *Nothofagus cunninghamii*, is evident in the mixed forest stands along the Lake Dobson Road, where myrtle is found with a eucalypt overstorey. The disease tends to develop in areas disturbed by road construction and maintenance activities.

At present there is no record of *Phytophthora* infection in the park and reserves. While sporadic occurrence along roadsides may exist, spread of the disease is not considered a primary ecological problem in either the wet forest or alpine communities. Soil temperature is generally too low for disease development. It is only after a massive wildfire event that there is risk of a more generalised infection occurring.

A cold tolerant die back disease in alpine plants has been recognised on the Central Plateau. Should an introduced pathogen be identified as causal, then management prescriptions may be required for the park to protect susceptible areas.

#### **Objectives – Plant Disease**

- Minimise the further spread of myrtle wilt disease.
- Prevent the introduction of any disease that may affect alpine and sub-alpine flora.

#### **Policies**

- Dead or infected myrtles in the park and reserves will be removed as far as practical and all care will be taken not to damage nearby uninfected trees.
- Avoid damage to roadside vegetation during road construction and maintenance activities.
- Special care will be taken in walking track construction and maintenance not to damage myrtles. Signs and route markers will not be used on myrtles. As far as practical, re-route tracks or use boardwalks where myrtle roots are exposed.
- If an introduced cold-tolerant plant pathogen is confirmed in Tasmania, then strict quarantine measures may be declared. Such measures may include restricting or precluding access and/or the transport of goods and materials into areas deemed to be at risk from the disease.

### **4.3 Soil Conservation and Erosion Control**

The alpine and sub-alpine parts of the park are most susceptible to long term erosion problems. The Lake Dobson Road (with associated quarries and gravel dumps) and the Jeep Trail require monitoring.

Use of the old forestry roads that encroach into the western and southern side of the park results in ongoing erosion and damage. Forestry Tasmania and the private forestry company only maintain their roads if they are resulting in erosion or if they are needed for commercial forestry activities.

Slope grooming is covered in Section 5.6.2.

#### ***Objectives – Soil Conservation and Erosion Control***

- Prevent erosion and rehabilitate areas damaged by human activities.
- Restore degraded areas as close as possible to their original condition and ensure they are safe, stable and not vulnerable to further degradation.

#### ***Policies***

- Erosion hazard and status assessments will be made as part of any fire management program, or where significant ground disturbance or soil exposure is proposed.
- Land rehabilitation and stabilisation will be carried out on the basis of a prior geomorphological assessment.
- Rehabilitation of alpine areas will conform with the Ben Lomond Site Disturbance, Ski Slope Grooming and Rehabilitation, Standards and Guidelines (PWS 1993), which are equally applicable to Mount Field.
- Where possible, rehabilitation programs in the park and reserves will use seed collected within the park and reserves. For large rehabilitation projects, seed collected from the park and reserves may be propagated by a PWS approved nursery (certified free of *Phytophthora* disease).

#### ***Actions***

- The sections of the old forestry roads that lie within park boundaries in the western and southern sides of the park will be closed and rehabilitated (see also Sections 3.2.4 and 5.4.1). Consult with caving groups in regard to any rehabilitation measures that may affect walking access from the park boundaries.

- Monitor erosion of soils within the park particularly along the Lake Dobson Road, on the Mt Mawson skifield and the Jeep Trail (see Section 5.6), and the walking tracks. Rehabilitate and restore damaged areas.
- Monitor Marriotts Falls and Junee Cave State Reserves for any erosion associated with forestry activities along boundaries.
- Assess the need to stabilise and rehabilitate the degraded banks of the Tyenna River and carry out works if required.
- Encourage landowners and lessees to fence paddocks for cattle and sheep, so as to prevent further bank damage in areas outside of the river reserves adjacent to the park along the Tyenna River.
- Liaise with Crown Land Services in regard to termination/non-renewal of grazing leases on river reserves adjacent to the park.

### **4.4 Visitor and Management Impacts**

Visitor impacts in the park and reserves arise through bushwalking, camping, skiing, littering, sewage nitrification, campfire lighting and firewood collection. These impacts are most apparent in areas of high visitor use, and are confined mostly to the entrance area of the park, the walking tracks and private lodges and the Mt Mawson skifield.

Management impacts in the park are the result of road maintenance and snow removal, slope grooming, trackwork and rehabilitation. Again, these are usually confined to the high use areas of the park.

#### ***Objectives – Visitor and Management Impacts***

- Protect, maintain and monitor environmental and cultural heritage values.
- Protect, maintain and monitor the tourism and recreation character of the park and reserves. (The existing tourism and recreation character is largely derived from the use of natural building materials such as wood and stone in visitor infrastructure, and the ‘undeveloped’ feel of visitor service sites).

#### ***Policies***

- The maintenance of landscape values will have priority over all developments, structures, roads and tracks in the park and reserves. Such developments, roads and tracks will be designed, located and constructed to fit into the landscape as much as possible. The prescriptions of Section 5, which govern any future development in the park and reserves, will apply.

- Radio towers or other structures for any purpose will not be installed on the summits of mountains or the skyline of the park without prior approval of the Director (except where such installation is authorised under Commonwealth Telecommunications legislation). Approval will not be considered unless all possible alternative sites outside the park have been rigorously examined and the results provided to the Director. If approval is given, any such installations will be visually unobtrusive and self-contained, and no new access roads will be permitted.
- Impacts will also be minimised through indirect measures such as education (see Section 5.3).
- Public access to areas of conservation significance may be limited if deemed necessary as a result of monitoring and research, in accordance with the provisions of Regulation 11 of the *National Parks and Reserve Land Regulations 1999*. Signs will be provided at all areas where public access is restricted explaining the reasons for the management strategy.
- Except for the entrance area campground and unless otherwise authorised, a camping limit of two weeks per site will apply to the park.
- Unless otherwise authorised, no camping will be allowed in Junee Cave State Reserve or Marriotts Falls State Reserve because of their small size and lack of suitable campsites.

#### **Action**

- Continue 'Minimal Impact' programs for visitors which emphasise proper environmental care and the 'carry it in, carry it out' approach to natural area use.

#### **4.4.1 Toilets and Wastewater Disposal**

Toilets and amenities blocks are located at points subject to high visitor use, particularly those accessible by vehicle.

Toilets and washing facilities located around the park entry area, including the Russell Falls carpark toilet, staff toilets and the campground showers and washing facilities, are connected via reticulated sewerage to a wastewater treatment lagoon located at the Old Farm. Treatment is undertaken in primary and secondary lagoons and the treated effluent is discharged to adjacent land. The treatment system has proven to be adequate for current loadings, however the secondary lagoon has become overgrown with cumbungi and requires reconstruction. Monitoring of the nearby Tyenna River is required so as to detect possible impact from effluent leaching from the ground disposal area.

Non-flushing aboveground composting dehydrating pit toilets are located at the skifield near Sitzmark Lodge. The system contains the solid matter while the liquid drains to ground disposal. Solid hazardous waste is removed off site when required using a licensed waste removal service. The Sitzmark Lodge staff toilets are sewered to a septic tank and adjacent subsurface ground disposal system.

New non-flushing aboveground composting dehydrating pit toilets have recently been installed at the Government Huts and at the Lake Dobson public shelter. Liquid waste from the toilet systems is drained to a collection tank for evaporation or off site disposal. Solid and excess liquid hazardous waste are removed off site when required using a licensed waste removal service.

#### **Objective – Toilet and Wastewater Disposal**

- To ensure that sewage treatment and disposal is undertaken in ways which minimise the health risks to visitors, minimise the environmental impacts on the park and water catchments, and meet statutory requirements and appropriate standards.

#### **Policy**

- Wherever practical, new toilets constructed in the Visitor Services Zones shall be designed to incorporate disabled and less abled access.

#### **Actions**

- Upgrade the lagoon treatment system at the Old Farm using current best practice design principles.
- Undertake regular water quality monitoring of the Tyenna River upstream and downstream of the treatment lagoons.
- Assess ongoing lagoon performance in line with any increased loading resulting from the new visitor centre and associated infrastructure. Upgrade the land disposal system as necessary.
- Monitor sewage and wastewater systems associated with park management facilities, huts, shelters, toilets and private lodges to ensure that the systems meet statutory requirements and appropriate standards, and that discharged effluent is not posing a health risk or impacting on nearby water quality and vegetation. Upgrade systems as necessary.
- Monitor areas adjacent to walker huts and shelters to determine the extent/impact of toilet litter. Provide appropriate toilet facilities where necessary.

- Provide access to existing toilets in the Visitor Services Zones for disabled and less able visitors where possible and practical.

#### 4.4.2 Firewood

In the past, firewood was supplied to a large number of open fireplaces scattered throughout the Russell Falls Visitor Services Zone, resulting in significant management costs. In recent years the number of open fireplaces has been reduced, principally to reduce the cost of firewood provision, but also to reduce environmental degradation and the possibility of fires escaping. Electric barbeques have been installed in the day use area as an alternative. As a result, firewood consumption has decreased from about 260 tonnes annually to about 50 tonnes annually in the day use area.

In the Recreation Zone, localised degradation, damage and loss of habitat due to firewood collection has been a problem for many years, particularly around Lake Newdegate and Twilight Tarn huts.

#### *Objectives – Firewood Management*

- Reduce risk of fire, environmental degradation and management costs due to firewood provision.

#### *Policy*

- Firewood will only be provided for designated fireplaces or woodstoves in the Russell Falls Visitor Services Zone.
- Firewood will only be provided for designated fireplaces or woodstoves in huts in the Lake Dobson Visitor Services Zone and the Recreation Zone.

#### *Actions*

- Investigate, and if appropriate implement, a user pays system for the provision of firewood.

### **4.5 Managing Development Works**

The ten year timeframe of this management plan raises the possibility that new development proposals and issues will emerge that have not been specifically addressed in this plan.

Development works can range from manipulative research, construction of a new track, slope grooming, installation of a toilet, to constructing new buildings or refitting existing ones, and installing or repairing services. Major developments are large in scale and often have high public interest and/or the potential for substantial impacts on the values of the park. Examples include accommodation developments and interpretation centres.

The *National Parks and Wildlife Act 1970* requires that, in managing development on reserved land, regard must be had to the resource management and planning system objectives. The legislative framework for dealing with development control continues to be refined and updated.

#### *Objectives – Managing Development*

- Avoid or minimise the impact of development works on park and reserve values.
- Protect and preserve the tourism and recreational values of the park and reserves.
- Foster public confidence in approved developments.

#### *Policies*

- All development will accord with this management plan and be in accordance with PWS procedures and guidelines.
- Assess all proposals for any development, landscape modification, research, significant change to established public access or usage, management or maintenance work involving any soil disturbance, structural disturbance, or environmental manipulation of any kind in accordance with procedures approved by the Director.
- Unless already detailed in a site plan, any major development proposal will require a comprehensive environmental effects assessment and environmental management program (covering natural, cultural, social and economic issues) which will be made available for public review prior to final consideration of the proposal. Development proposals will be assessed according to the policies listed in Section 5.11.1.
- Development will be limited to that permitted by the zoning given in this plan.
- Site plans for areas in Visitor Services Zones will:
  - review the design placement and construction of existing visitor facilities and prepare a strategy for the long term management of such facilities;
  - consider rationalisation of such facilities where conditions are sub-standard and where impacts or demand do not warrant the number or type of facilities provided;
  - define planning and design objectives and performance standards, including

environmental standards and the extent and quality of visitor and management facilities and services; and

- assess and determine the acceptable number of day and overnight visitors for the zone (as the case may be), based on the capacities of services, maintenance of environmental and heritage values, and the quality of visitor experiences.
- All development will meet applicable statutory requirements for planning and building approval and comply with relevant Australian standards.
- New private memorials or commemorative plaques will not generally be permitted in the park and reserves. However, public memorials or commemorative plaques may be permitted in the park and reserves if they commemorate events or people of the area that are of regional, state, national or international significance and are approved by the Director.
- With the approval of the Director, plaques acknowledging park and reserve infrastructure or services provided by bequests or commercial sponsorship may be attached to the infrastructure and include a company name and logo but no product advertising will be permitted on such plaques.

#### ***Actions***

- Confirm statutory requirements for planning and building approval before proceeding.
- Ensure the design, placement and construction of facilities is consistent with the scenic values of the park or reserve.
- Where major developments or changes that will significantly alter the existing use or character of a Visitor Services Zone are proposed, prepare a site plan for that zone.
- Rationalise provision of facilities where impacts or demand do not warrant the number or type of facilities provided.
- Provide visitors with on-site information about the intent and progress of any significant developments.



## 5 Tourism and Recreation

### 5.1 Understanding the Park and Reserves Visit

The park and reserves provide for a wide range of recreational and educational opportunities. The entrance area is the most heavily visited part of the park, and has an urban park atmosphere, especially on weekends. Sunday is the busiest day, with an average daily attendance of 900 people in the summer of 1999/2000.

On average, only 30% of the traffic that enters at the main gate ventures past the Russell Falls area. Use of the Lake Dobson area is greatest also during the weekend, reflecting local use.

In summer, the campground is usually full and the Government Huts are fully booked. Nonetheless, the majority of visitors to Mt Field stay for less than one day.

When there is snow, the alpine areas of the park cater for both cross country (Nordic) and downhill (alpine) skiing. However, snowfall is variable, and for the 1993, 1998 and 1999 seasons there was insufficient snow to run the tows.

The alpine area of Mt Field is also a popular spot to view the autumn colours of the fagus, Australia's only temperate deciduous tree.

During the 1970s and 1980s, it is estimated that approximately 140 000 to 180 000 people visited the park annually. With the introduction of user fees in May 1993, there was a significant fall in the number of visits made by Tasmanians, while interstate and overseas visitor numbers have been relatively unaffected. Observation by park staff suggests that local family groups were those who were deterred by user fees, given that there is a wide range of alternative free picnicking facilities available in the environs of Hobart. Historically, Tasmanians accounted for 60-75% of visits to the park. By 1999, this proportion appears to have stabilized at 50%. Since 1994, between 130 000 and 140 000 people have visited the park each year.

In a visitor survey conducted in the Russell Falls area in the summer and autumn of 1999, it was found that the majority of groups interviewed belonged to the 'Comfort Seeker' category. This group was characterized by a median duration of stay of two hours, with sightseeing and/or socializing given as the

most frequent reason for the visit. Only 16% of groups interviewed belonged to the 'Shortstop' group—those who stayed for one hour or so and who were there equally to sightsee or to have a picnic. 'Getaways' made up 14%; those who had a median duration of stay of 5 hours, and whose main reason for visiting was to go walking. There was little association between the origin of visitor and visitor category, although locals were more motivated by family/social factors than the non-locals.

What did discriminate between Tasmanians and non-Tasmanians was whether they had visited Mt Field previously. Most of the Tasmanians (most of whom were from the Hobart area) had visited before, but most non-Tasmanians were visiting the park for the first time. This has important implications for the provision of interpretation and directional signs at the park.

Most visitors were happy with the facilities and services provided, and with the activity mix available. For the local users, the opinion was that the facilities provided needed to be adequately maintained. The picnicking facilities and the section of the Russell Falls track leading to Horseshoe Falls were most frequently referred to in this context. An expansion of existing picnicking facilities would also be appreciated, particularly at peak season. As for the non-locals, opportunities for short walks and the provision of on-track interpretation were seen to be lacking.

#### *Objective – Understanding the Visit*

- Understand visitor needs and expectations, and visitation patterns to provide the basis for effective visitor management, which in turn will provide for improved quality of visitor experience.

#### *Policy*

- Visitor research will be focussed on improving the inventory and understanding of visitor numbers and characteristics, behaviour, needs and expectations, and assisting visitor management.

#### *Actions*

- Collect visitor arrival information regularly at major access points to the park and reserves.
- Conduct regular visitor surveys that measure visitor needs and satisfaction with facilities and services.

- Investigate and monitor visitor pressures on the park and reserves.

## **5.2 Promoting the Park and Reserves**

The park has been the most popular and well-known national park in Tasmania for much of its history. The more recent emphasis on other parks, and the overall increase in the size and number of national parks, has resulted in a reduced profile for Mount Field.

The majority of visitors are Tasmanian. Compared to other 'icon' parks such as Cradle Mountain, the park and reserves are ideally situated to cater for local visitors, especially family groups. Local visitation should continue to be encouraged and provided for.

The park is relatively undeveloped as a commercial tour resource. The range of facilities and recreational opportunities available year round suggest the park would be an ideal location for commercial outdoor education, adventure and ecotourism programs. Such activities could employ local people with an understanding of the values of the area, who could interpret those values for visitors. It is however essential that such activities, either individually or cumulatively, do not undermine the values they are based on.

Any kind of special event in the park and reserves, which brings a large influx of people, has the potential to impact on the natural values of the park and reserves, and the experience of other visitors. Park and reserve facilities and staff need to be able to cope with large numbers of visitors, as well as increasing numbers of visitors in the future.

### ***Objectives – Promoting the Park and Reserves***

- Increase the profile of park and reserves features and values to potential visitors.
- Encourage visits to the park, the reserves, and the region.
- Ensure that promotion of the park and reserves, and other special events conform to other management objectives of the park and reserves and do not have unacceptable environmental or social impacts.

### ***Policies***

- Major events may be staged subject to authorisation by the Director. Organised and/or competitive events will not be permitted where the impact of competitors, their support teams and/or their spectators, is liable to result in significant environmental damage or degradation.

- Events that are approved will be required to properly acknowledge PWS assistance and include information about minimal impact use of the park on promotional material. Organisers of events will be required to liaise closely with management staff prior to the event.
- Special events will not be permitted in the Natural Zone.

### ***Actions***

- Promote the park and reserves co-operatively with regional tourism groups as an essential regional destination.
- Market the park as a 'day destination national park', but encourage visitors to overnight in the area.
- Market the park as a year round, all season destination.
- Encourage increased use and appreciation of the park and reserves by people from the local region.
- Continue to develop and implement a co-ordinated framework for commercial tourism activities and encourage the industry accordingly.
- Liaise closely with Tourism Tasmania and the tourism industry to identify appropriate opportunities to increase international and interstate tourism to the park and reserves.
- Liaise with Department of Infrastructure, Energy and Resources and Tourism Tasmania to ensure that the park and reserves are included as part of the proposed Integrated Visitor Information System.
- Seek the co-operation of Tourism Tasmania to assist local and regional tourism operators obtain better pre-visit information.

## **5.3 Interpretation and Education**

There is a range of visitor information and interpretation services provided for the park, and to some extent, the reserves. The new visitor centre provides in-depth interpretation of the values of the park. Management staff provide information during business hours. Signs in the park provide information and interpretation. A 24-hour recorded phone message is usually provided in winter to inform visitors about snow and skiing conditions, weather and road conditions.

The public consultation program found that respondents felt the services available were generally

adequate, but needed improving in some areas. An increase in the number of brochures and publications was suggested. Many people were interested in obtaining more information about the natural and historical values of the park.

Respondents recognised the self-interpreting nature of the park and felt there was a good system of nature walks and walking tracks, particularly the Tall Trees Walk. Facilities along the Lake Dobson Road provide interpretation of the change in forest and plant communities, as well as history and geology.

The summer interpretation program is very popular, and demand exists to expand it to cover other times of high visitation. Despite these facilities, there is a lack of interpretation in the higher altitude areas of the park. An interpretation plan was developed for the park in 1995 (PWS 1995).

The park has a long history of educational use by both school groups and outdoor education groups. Primary school groups tend to visit the entrance area of the park for the day. Secondary school groups often stay for two or three days to bushwalk, camp, or to undertake environmental studies and to study human impact and minimal impact methods. Outdoor education courses in skiing, mountaineering and bushcraft are often held in the park.

The University of Tasmania has used the park for many years to conduct biological and geomorphological field studies and camps.

The park and reserves are a valuable educational resource and their role as such should be expanded and encouraged in the future.

#### **Objectives – Interpretation and Education**

- Encourage pre-visit awareness of the park and reserves recreational and tourism character, facilities and opportunities.
- Reveal the diversity and values of the environmental and heritage features of the park and reserves, including their karst and cave values.
- Explain the different periods of people's use of the park and reserves.
- Encourage visitors to pursue their interests and explore what the park and reserves have to offer.
- Realise the educational values of the park and reserves.
- Canvas issues to be confronted in managing the park and reserves.

- Inform visitors of park and reserve etiquette and minimal impact practices.
- Provide orientation and access information and alert visitors to risks and dangers.

#### **Policies**

- Continue to use the park as a major site for interpretation of values of the World Heritage Area.
- Provide interpretation about the historical values of the park.
- Provide information about and interpretation of the natural and cultural values of the park and reserves, including their karst and cave features.
- Explain the environmental degradation caused by firewood collection and encourage use of portable fuel stoves and gas barbecues for cooking and adequate clothing for warmth.
- Inform visitors of the sensitivity of park and reserve values to wildfire and the need for appropriate fire safety precautions.
- Inform visitors of the sensitivity of the Lake Fenton/Lady Barron Creek drinking water catchment to human activities, and the reasons for the restriction of some activities within the catchments.
- Provide information to groups on reasonable group sizes and adequate supervision levels, encourage compliance with minimal impact techniques, and encourage the use of qualified and experienced leaders.

#### **Actions**

- Provide basic point of arrival orientation information about park facilities, services and recreational opportunities at the visitor centre.
- Provide information and interpretation, environmental education resources and activities for educational and special interest groups in the visitor centre (see Section 5.5).
- Investigate, and if appropriate instigate, the provision of information in languages other than English, and in forms suitable for disabled and less able visitors (such as the visually impaired).
- Locate a display in the Russell Falls Visitor Services Zone informing visitors of the park's nature walk system.

- Provide interpretive signs on the most popular walks and tracks.
- Provide interpretive displays in selected huts and shelters in the upper areas of the park.
- Provide historical interpretation at appropriate locations, such as the old Pack Track, the Ranger's Hut at Lake Fenton, Twilight Tarn and Lake Newdegate.
- Prepare teachers' guides and kits to assist teachers at primary and secondary school levels and to encourage use of the park and reserves for educational purposes.
- Install park and reserve boundary and information signs on vehicle and walking track access points to the park, including the four old logging roads on the western and south-western boundaries.
- Provide interpretation about karst and cave values of the park, as well as minimal impact and safe caving information.
- Provide interpretation at Lake Fenton and other appropriate locations within the water Catchment Area to explain any changes in management of the area resulting from implementation of the approved Lake Fenton/Lady Barron Creek Drinking Water Catchment Plan.
- Replace the Marriotts Falls State Reserve boundary sign and re-locate it to the actual boundary of the reserve.
- Based on the Mount Field Interpretation Plan (PWS 1995), prepare and implement a new interpretation and sign strategy for the park and reserves, which addresses the foregoing.

## 5.4 Access

Managing access enables park managers to direct visitors, to provide visitor opportunities and to limit adverse impacts on the park and reserves.

### *Objectives - Access*

- Maintain, develop and promote opportunities for people, including those with disabilities, to visit the park and reserves.
- Protect park values by concentrating and limiting developed visitor arrival points to designated locations in the Visitor Services Zones.
- Direct and develop access appropriate to the Zone in which it occurs.

### 5.4.1 Vehicular Access

The Lake Dobson Tourist Road is the principal vehicle access to the park. The road traverses reserved land and is therefore under the control of the Director and subject to the *National Parks and Wildlife Act 1970* and the *National Parks and Reserved Land Regulations 1999*.

Maintenance of the Lake Dobson Road is the responsibility of the Department of Infrastructure, Energy and Resources (DIER). A 10-year maintenance contract for the road, involving the contracting firm of CSR Emoleum and Stormaway Maintenance, under the direction of DIER (see section 7.3.2) commenced in 1998. Maintenance of all of the carparks in the park, including those along the Lake Dobson Road, is the responsibility of PWS.

The road is to be maintained and managed as a tourist road with interpretation of park values. It will provide access to Lake Dobson year round, weather conditions permitting. Some sections of the road may be sealed if water quality monitoring in the Lake Fenton catchment shows this to be necessary.

The walking track to Marriotts Falls State Reserve is accessed via a public road from Tyenna.

Road access to Junee Cave State Reserve is via a public road from Maydena, which then passes through State forest before terminating at the reserve.

Vehicular access to caving areas in the Junee-Florentine has been via State forest and private forestry company roads. Some of these roads encroach into the park (see Sections 3.2.4 and 4.3).

### *Objectives – Vehicular Access*

- Provide clear, safe access to the park and reserves for visitors arriving by motorised vehicles.
- Continue to provide year round access to Lake Dobson for tourists, skiers and visitors.

### *Policies*

- Public vehicular access to the park (with the possible exception of the Old Farm area, see below) will remain a single controllable entry, at or close to its current location.
- Unless the Old Farm area is developed for camping and accommodation (see Section 5.5.4), public vehicular access to the area will continue to be limited to authorised vehicles only.
- Motorised vehicles, including oversnow vehicles, will only be permitted on vehicle tracks, unless otherwise authorised.

- Additional passing bays and line of sight improvements on the Lake Dobson Road may be undertaken as needed, and as agreed by DIER and PWS.
- To minimise environmental degradation, maintenance costs and interference with pedestrians, vehicle use of the Jeep Trail to the Mt Mawson skifields from the Lake Dobson carpark will be limited to essential trips by authorised vehicles only (see Section 5.6.5). The present locked gate will remain.
- To prevent environmental degradation, including the siltation of Lake Dobson, the use of gravel on the Jeep Trail will be minimised through regular maintenance by the PWS of all culverts and drains.

#### **Actions**

- In conjunction with DIER, Tourism Tasmania, the Derwent Valley and Central Highlands Councils and the Central Tourism Association through the Integrated Visitor Information Strategy, provide road signs and information along routes to the park and reserves to assist visitors in finding the park and reserves. Routes include the Lyell Highway, the Ellendale Road, the Gordon River Road and the Glenora Road.
- Continue to liaise with DIER and skiing representatives to clarify snow clearing operations and road maintenance and management requirements to ensure safety and access for visitors year round.
- Continue to provide visitor safety information about road conditions in the upper park. When possible, maintain a recorded telephone message in the winter months to inform the public about road conditions.
- To reduce traffic conflict, advise motorists against travelling up the Lake Dobson Road after 3 pm during the ski season.
- Monitor sedimentation of lakes due to run off from vehicle tracks and implement measures to reduce impacts on the Lake Fenton drinking water catchment, Eagle Tarn, Lake Dobson, and surrounding areas.
- Review the adequacy of car parking at the start of all walking tracks in the park and reserves.
- Clearly define limits to all carparks to prevent incremental enlargement and damage to soils and vegetation on the fringes of carparks.
- Liaise with Derwent Valley Council and Forestry Tasmania to ensure continued safe road access to Junee Cave State Reserve, and to provide speed limit signs for the safety of tourists and visitors to the area.
- The sections of the old forestry roads that lie within park boundaries in the western and southern sides of the park will be closed and rehabilitated (see Sections 3.2.4 and 4.3).

#### **5.4.2 Walking Access**

The major walking tracks and huts are shown on Map 4. There are no extended walking opportunities in the park and reserves as all of the major tracks can be done as day walks, although many walkers stay for a few nights. More remote destinations in untracked areas can be reached in a single overnight trip. The public consultation program revealed that the construction of a longer (two to three day) walk within the park was not supported, as there were many such opportunities elsewhere. Respondents felt that the park could not accommodate more tracks and that untracked areas should be retained for conservation and for self-reliant exploration. The range of tracks and opportunities was generally seen as appropriate, but the 1999 visitory survey indicated that short walk opportunities could be improved.

General track condition, walking information, and signs are all in need of upgrading. An Australian Standard (AS 2156) is currently being finalised for classification and construction of walking tracks.

The Russell Falls Nature Walk is one of the most popular in the State. It is a wide bitumened track, with low gradients, suitable for wheelchairs, prams and young children. The walk passes beneath some of the tallest trees in the world to a beautiful three-tiered waterfall, a tourism icon and one of Tasmania's outstanding scenic assets.

Self-reliant walkers and skiers generally use tracks in the higher altitude areas.

The current walking track to Marriotts Falls travels through a river reserve along the Tyenna River, cuts across two blocks of private land, travels through another river reserve along Marriotts Creek, then enters the reserve. The walking track has been upgraded in recent years, but requires further substantial works.

#### **Objectives – Walking Access**

- Provide a range of safe and enjoyable walking opportunities for visitors while minimising environmental impacts.

### **Policy**

- Track management in the park and reserves will conform with the prescriptions of Table 1 and the walking track strategy, to be prepared for the park and reserves.

### **Actions**

- Monitor walker numbers, use trends and walker attitudes and characteristics throughout the park by means of walker logbooks, surveys and pedestrian counters as appropriate.
- Prepare and implement a walking track management strategy for the park and reserves. The strategy will be consistent with the objectives and prescriptions of the Statewide Walking Tracks Strategy (Inter-agency Working Party 1997) and the prescriptions shown in Table 1. The strategy will:
  - provide a comprehensive inventory of opportunities, current patterns of usage and physical condition of the entire park and reserves track network, including the routes, walks, ski paths, historical routes, the alpine huts, camping areas, the information and sign system and the car parking arrangements;
  - include an assessment of existing and potential impacts on park and reserve values due to recreational use of walking tracks;
  - determine how to manage the track infrastructure so as to protect natural and cultural values, and provide opportunities for user enjoyment, subject to existing financial constraints; and
  - establish clear priorities and a timetable for works. It will also include cost estimates both of proposed works and future maintenance requirements.
- Ensure construction standards and classifications of walking tracks conform with Australian Standard 2156.

### **5.4.3 Bicycle Access**

Historically, there has only been minor use of the park and reserves by bicycles, but the increasing popularity of mountain biking and its management must be considered.

#### ***Policies – Bicycle Access***

- Bicycles must keep to public roads in the park and reserves, and areas as specified by park managers.

- Bicycles will not be permitted in the Lake Fenton/Lady Barron Creek drinking water catchment other than on the Lake Dobson Road.

### **5.4.4 Horse Riding**

As a general rule, horse riding is not permitted in national parks, except where there is a long and continuous history of such use. There has been interest expressed in the commercial use of the old pack horse track to Adamsfield (see Section 3.6.2), which crosses the south-west corner of the park.

#### ***Policy***

- Except for authorised use of the old pack horse track to Adamsfield, horse riding will not be permitted in the park or the reserves.

### **5.4.5 Aircraft Access**

There are no fixed wing aircraft landing grounds in the park and reserves.

#### ***Policies***

- Except in an emergency, or for management purposes, all aircraft will require authorisation by the Director to land or take off in the park and reserves as required by the *National Parks and Reserved Land Regulations 1999*.
- Overflying aircraft operators will be encouraged to comply with Fly Neighbourly Advice - Tasmanian World Heritage Area and Mount Field National Park (Airservices Australia 1999).
- Airdrops within the park and reserves will only be permitted for management or emergency purposes.

### **5.4.6 Boating Access**

Boating in the lakes of the park has traditionally been infrequent.

#### ***Policies- Boating Access***

- Except with the permission of the managing authority, no motorised watercraft will be allowed on any lake in the park.
- In order to protect water quality, no watercraft will be allowed on Lake Fenton, unless otherwise authorised.

### **5.4.7 Disabled and Less Able Access**

Wheelchair and disabled access in the park is available in the Russell Falls Visitor Services Zone at the new Visitor Centre, toilets, kiosk and Russell Falls Track. There are many kinds of disability and therefore many possibilities for improving disabled and less able access in the park that should be explored with stakeholder groups.

***Policy***

- Enhance, where feasible, disabled and less able access to a wide range of facilities in the park.

***Actions***

- Any future developments (including buildings, tracks, shelters, picnic facilities and interpretation) undertaken in the park and reserves must be undertaken in accordance with the *Anti Discrimination Act 1998*.

**Table 1 Mount Field Walking Track Management Prescriptions**

All Management Zones	Russell Falls Visitor Services Zone	Lake Dobson Visitor Services Zone	Recreation Zone	Other Areas/Zones
In general, no trackwork will be undertaken on unmarked, seldom used routes unless necessary to protect the environment. All authorised tracks will be managed to improve walking experience and safety.	Upgrade the Russell Falls walk to wheelchair standard (on both sides of Russell Falls creek) in line with its status as one of Tasmania's best scenic assets & one of the highest usage short walks in the State. This process will involve site planning and major reconstruction works.	Subject to a feasibility investigation, upgrade the Pandani Grove track to wheelchair standard and extend it into a circuit around Lake Dobson.	Protect the bolster heath communities of Newdegate Pass and the Mount Field West plateau from further walking damage.	Management of the Lake Fenton/Lady Barron Creek Water Catchment Area will be in accordance with the approved final plan. This may result in the relocation or re-routing of some tracks in the zone to protect water catchment values.
Monitor walking track and campsite impacts. Monitor any unplanned track developments and impacts.	Investigate, and if feasible, construct a new track from the Tall Trees walk, returning to the start of the Russell Falls track, so that people do not have to walk down the road or retrace their steps.	To protect sensitive alpine flora, close and rehabilitate the Southwest Lookout track and create a replacement lookout track at the top of the Rodway Tow.	Monitor and protect from damage, the string bog near the walking track on the northern end of the Rodway Range.	Re-locate and re-mark the Marriotts Falls track so that is within the river reserve along Marriotts Creek instead of crossing private land. Determine the appropriate standard of the entire track.
Discourage the publication of unmarked or unofficial tracks and routes in guidebooks and similar publications.	Most walks (except for the Russell Falls to Horseshoe Falls Link Track) will be upgraded.	Subject to a feasibility investigation, extend the Urquhart track to provide an alternative walking access to the skifield.	Investigate snow pole requirements for the main cross-country routes and install as required.	The track to top of Marriotts Falls will be upgraded within 12 months of gazettal of this management plan, or closed.
Unmarked tracks and routes will not be identified on further editions of the Park Map & Notes.	New short walks will be considered.	Upgrade the Snowgum Nature Walk from the skifield area.	Investigate camping requirements, provide additional tent sites where necessary, and restrict camping to designated sites.	Investigate the feasibility of marking out the historical route from Mt Field East to Ellendale via Davis Lookout.
A day walk map will continue to be made available.		Provide a marked route for walkers and cross-country skiers across downhill ski area.	Re-route the Beatties Tarn sidetrack and rehabilitate the old track.	
			Do not publicise the Lake Belton sidetrack.	

## 5.5 Russell Falls Visitor Services Zone

The Russell Falls Visitor Services Zone (VSZ) encompasses the entire entrance area to the park, where there are nature walks and tracks, picnic and barbecue facilities and shelters, an outdoor theatre, basic tent camping and powered camping sites. A visitor centre was opened in early 2001, incorporating interpretive displays, a park shop and kiosk, management facilities and offices. Toilets with wheelchair access are provided at the visitor centre, the day use area and the campground. The VSZ also includes the Old Farm area on the southern side of Lady Barron Creek.

The zone is the most popular and heavily used part of the park and provides orientation, information and education services and facilities, enabling large numbers of people of different interests, backgrounds and abilities, to gain an appreciation of the park.

The concentration of development and use in this zone minimises impact in more sensitive areas of the park. Any further development will be carefully planned in order to retain the low-key nature of the zone and to minimise impact on the local environment.

The visitor and recreational facilities in the Russell Falls VSZ are shown on Map 7.

### Objectives – Russell Falls VSZ

- Provide a high quality recreational and interpretive experience for park users.
- Conserve and integrate as much of the current low-key recreational facilities as possible into the redevelopment of the zone.
- Manage the entrance area as a landscape that preserves as much of the existing open spaces as possible.

### Policies

- Redevelopment and management of the zone will be governed by the prescriptions of the Russell Falls VSZ site plan (see Section 2.6).
- Camping within the Russell Falls VSZ will only be permitted at designated campsites.

### Actions

- Develop a site plan for the Russell Falls VSZ within 24 months of gazettal of this plan.

#### 5.5.1 Day Use Area

Day use facilities at the entrance to the park consist of picnic shelters, toilets, picnic tables, electric and wood-

fired barbecues and large open spaces. The public consultation program revealed that, while respondents felt facilities were generally adequate, some improvements were needed. Most felt that more picnic tables, shelters and electric barbecues were needed.

Pedestrian, parking and traffic movement problems around the entrance of the park and the Russell Falls carpark area have been resolved with the construction of the new visitor centre, bus and carparking facilities.

### Policies

- Established recreational uses such as picnicking and game playing will continue to be catered for in any redevelopment of the oval and surrounding grounds in order to protect the cultural landscape.
- Retain most of the current area of open spaces available for games and other group activities.
- Low maintenance timber and stone will be the preferred materials used in any replacement or upgrading of day use shelters.
- The avenue of London plane trees (*Platanus acerifolia*) lining the park entry road, as well as rows of poplars (*Populus nigra itallica*) edging the oval, have historic cultural landscape value and will be maintained and preserved.
- Landscaping and planting of native species will be permitted to improve drainage patterns, create some 'enclosed' picnic spaces and reduce maintenance.

### Actions

- Upgrade existing picnic shelters and provide additional shelters.
- Provide children's playground facilities that are based on interpretation themes for the park.
- Liaise with the Department of Infrastructure, Energy and Resources regarding widening and bitumening the Lake Dobson Road as far as the Tall Trees walk and expanding the Tall Trees car park/turning circle so that buses can access the walk.

#### 5.5.2 Visitor Centre

The construction of a purpose built visitor facility, long identified as the best way of providing information and services to visitors, has been completed. It incorporates PWS reception and management offices, an interpretive display, a restaurant/kiosk and park shop.

### 5.5.3 Campground

The campground in the Russell Falls VSZ provides tent and caravan sites with and without power, and a group campsite. Toilets, showers, hot water, basins, a washing machine, drier and clothesline are provided in an ablutions block. There is no kitchen facility, but there is one large shelter with two electric barbecues and a sink with hot water. An outdoor theatre is also located in the campground. Communal fireplaces and firewood are provided near the campground. The campground is operated on a first come-first served basis, and fees are paid at the self-registration booth at the entrance to the campground. The park shop and kiosk in the visitor centre provide basic food supplies and sundries for campers and visitors.

While most visitors who use the campground are happy with the facilities and appreciate the ambience provided by the trees and river, the ongoing problems of flooding, soil compaction and the danger of falling tree limbs make relocation of the campground inevitable. In addition, degradation and erosion of the riverbank and the local environment are of concern.

#### *Policy*

- The communal fireplaces adjacent to the existing campground area may be retained.

#### *Actions*

- To avoid the current safety and environmental problems and make available more area for day use investigate, and if appropriate develop, a new campground, preferably privately funded and operated, either outside of the park or at the Old Farm area.
- If funding for a new campground cannot be secured, relocate the existing campground towards the oval area, away from existing tree hazards.

### 5.5.4 Old Farm Area

The Old Farm area, on the southern side of Lady Barron Creek, was previously used for growing hops and was added to the park in 1977. The management workshop and associated facilities have been relocated to the Old Farm area.

The park has previously been identified as a site with potential for developing tourism accommodation. Within the park, the Old Farm area is the preferred site, with low resultant impact on natural and cultural heritage values of the park, proximity to infrastructure and services and a good network of short, easy walking tracks.

#### *Policies*

- Any additional management costs (such as upgrading infrastructure) that are incurred as a result of any commercial development will be borne by the developer.

#### *Actions*

- Develop a strategy to manage revegetation, wildlife and open spaces in the Old Farm area.

## **5.6 Lake Dobson Visitor Services Zone**

The Lake Dobson Visitor Services Zone (VSZ) encompasses the area around Lake Dobson, the Government Huts, the Jeep Trail, the private ski lodges and the Mount Mawson skifield.

Lake Dobson is the starting point for many of the park's walks, is a popular destination for vehicle-based visitors, and provides access to the Mount Mawson skifield. The zone provides low-key day and overnight visitor facilities in sensitive sub-alpine and alpine environments.

The existing visitor and recreational facilities in the Lake Dobson VSZ are shown on Map 8.

#### *Objectives – Lake Dobson VSZ*

- Provide a limited range of low-key visitor opportunities for bushwalking, nature study and winter recreational activities such as skiing, snowboarding, cross-country skiing and snowplay, while protecting and conserving natural and cultural values.
- Consistent with the foregoing, provide a basic level of visitor services based on the existing recreational and tourism character.

#### *Policies*

- Cater for visitors during all seasons of the year.
- All development works in the Lake Dobson VSZ will be undertaken in accordance with Section 4.5.
- All skifield development works will adhere to the site disturbance, ski slope grooming and rehabilitation guidelines developed for Ben Lomond (PWS 1993) which are equally applicable to Mount Field.
- Fuel bunding for liquid fuel storage in this zone must meet Australian Standard AS1940.
- In general, camping will not be permitted due to the environmental sensitivity and nature of this

zone; however, snow camping in snow caves or igloos will be allowed when snow conditions are suitable.

- No new commercial or private accommodation will be developed in the zone. Any proposal to upgrade or develop accommodation based on existing facilities will follow the processes outlined in Sections 4.5 and 5.11.

#### **Action**

- Prepare a site plan for the Lake Dobson VSZ which considers year round recreational use and facilities for visitors to the zone within 24 months of gazettal of this plan.
- Develop timeframes with stakeholders for the installation of fuel bunding to meet AS1940.

#### **5.6.1 Lake Dobson Facilities**

The public shelter at Lake Dobson is open year round. A new toilet facility adjoining the public shelter has recently been constructed and the shelter upgraded. The Pandani Grove Nature Walk has been upgraded and is one of Tasmania's 60 Great Short Walks. There are no camping facilities or outdoor picnic facilities provided at Lake Dobson. Most use of the area occurs during summer, although on good snow days in winter the Lake Dobson carpark is used to capacity by skiers and snow fanciers.

#### **Policy**

- The public shelter and toilet facilities at Lake Dobson will be available for use by visitors year round.

#### **Actions**

- Investigate and implement options for improving the thermal efficiency and use of the public shelter.
- Clearly define the limits of the Lake Dobson carpark to prevent damage to alpine soils and vegetation on the fringes of the carpark.

#### **5.6.2 Skiing**

Skiing has been popular at Mount Field since the 1920's (see Section 3.6.2). The downhill (alpine) skiing area is about five hectares on the slopes of Mount Mawson. Limited slope grooming to increase the area suitable for downhill skiing has occurred, but the extensively boulder strewn nature of the terrain, coupled with the fragile soils and vegetation, makes it unlikely that any significant increase in area can be made. Snowfall is variable (often Mount Field will have snow when Ben Lomond does not), and these factors combine to make the skifield a marginal operation.

There have been proposals over the years to develop the skifield further, including construction of a chairlift from the Lake Dobson carpark to the skifield. Management of the downhill skifield must take the following into account:

- the environmental sensitivity of the area;
- the divergent interests of stakeholders;
- the aesthetic and environmental issues associated with ski infrastructure during the 8 to 12 months of the year when there is no snow;
- maintaining existing infrastructure to meet safety and environmental standards; and
- the high cost of new infrastructure.

The Southern Tasmania Ski Association (STSA) (see Section 5.6.6) has operated the skifield for their members and the benefit of the public for many years. The low-key, club-run, family orientation of the facility is part of the area's unique attractiveness. The PWS is committed to supporting, in principle, the continuation of a low-key skiing operation on Mount Mawson. If the downhill skifield is to continue to operate, new approaches to management will be necessary.

Mount Field is also one of the most popular cross-country (Nordic) skiing locations in the State. Cross-country skiers will often start from the downhill skifields and ski across the frozen lakes of Tarn Shelf to Lake Newdegate, or over Newdegate Pass and back via the Rodway Range, or even out to Mount Field West. Respondents to the public consultation program felt that cross-country maps and ski route marking could make the activity more accessible.

#### **Objective – Skiing**

- Provide opportunities for winter recreational activities such as downhill and cross-country skiing, snowboarding and snowplay while minimising environmental and aesthetic impacts of such activities.
- Continue downhill skiing at Mount Mawson as a family and club-oriented activity.

#### **Policies**

- A site management plan will be prepared for the Mount Mawson skifield (as part of the Lake Dobson Visitor Services Zone Site Plan) in consultation with the skifield operators and other relevant stakeholders within 24 months of gazettal of this management plan that will address the following:

- the basic design, location and replacement facilities for those currently housed in Sitzmark Lodge;
  - the criteria for the maintenance, condition of, replacement or removal of all skifield infrastructure, including snow fencing and ski tows;
  - signs, materials, equipment and facilities on Mount Mawson;
  - slope grooming, snow fencing, rehabilitation and revegetation of damaged areas;
  - the level of provision and location of skifield facilities, including first aid facilities, belt issue facility, ski hire facility and kiosk concession;
  - an environmental monitoring program for the skifield and associated infrastructure;
  - the responsibilities of the skifield operator and PWS in the management of the Mount Mawson skifield;
  - the provision of snow condition reports;
  - day-to-day management of downhill skiing activities and services; and
  - other issues deemed necessary for resolution through the site management planning process.
- To ensure public safety, the downhill skifield will not be open to the public unless there is a Mount Mawson Ski Patrol Policy approved by PWS in place.
  - Ski hire equipment will meet industry standards.

#### **Actions**

- Prepare a Mount Mawson skifield site management plan (as part of the Lake Dobson VSZ Site Plan) in consultation with the skifield operators and other relevant stakeholders, within 24 months of gazettal of this plan.
- Ensure a current skifield lease for the Mount Mawson skifield is in operation.
- Telephone-based reporting of road conditions will be provided when it is safe to do so and when there is sufficient qualified staff to undertake the road inspection.

#### **5.6.3 Skifield Infrastructure**

There are two rope tows and one wire cable beginners' tow on Mount Mawson. The Rodway ski tow is located a further kilometre away at the start of the Rodway Range and is used by expert skiers when the snow cover is good. The STSA owns the Mawson, University and Rodway ski tows, associated facilities and the belt issue hut. The tows are classified as Class 1 devices in accordance with Australian Standard AS3533.

The beginners' tow is owned and operated by a concessionaire, who also owned the ski hire equipment and operated the kiosk at Sitzmark Lodge (see Section 5.6.4). There currently is no concession arrangement for a kiosk, ski hire or beginners tow (December 2001).

Ski patrol has historically been the responsibility of STSA. At one time, PWS provided the midweek ski patroller, but has since withdrawn provision of these services.

Provision of a public downhill ski facility on Mount Mawson is aided by reasonable cooperation between the STSA and the concessionaire. Problems have arisen from time to time in the past due to a lack of coordination in operating hours.

Most respondents to the public consultation program felt that there should be no new ski tows. Many respondents also felt that the Rodway tow should be removed because of low usage, aesthetic impacts and environmental concerns. However, ski enthusiasts felt that it is the best ski run in the State and the tow should be retained.

#### **Objective – Skifield Infrastructure**

- Provide for downhill skiing while minimising the impact of skifield infrastructure on year round environmental and aesthetic values.

#### **Policies**

- Slope grooming will be undertaken in accordance with the Ben Lomond National Park Skifield Development Area Site Disturbance, Ski Slope Grooming and Rehabilitation Standards and Guidelines (PWS 1993).
- All ski tows on the mountain will be retained provided they are maintained in a conditions which meets statutory requirements.

#### **Actions**

- Prepare a Mount Mawson skifield site management plan (as part of the Lake Dobson VSZ Site Plan) in consultation with the skifield

operators and other relevant stakeholders, within 24 months of gazettal of this plan.

#### 5.6.4 Sitzmark Lodge

Sitzmark Lodge was built as a private lodge in the 1960s. The building was erected using volunteer labour and second hand materials. Woolley (1996) reported that the building has significant structural deficiencies requiring major expenditure to remedy. In addition the building has fire safety, septic disposal, thermal and functional problems. Currently the building houses the ski hire and kiosk concession, a first aid room and a public shelter for the skifield in winter. The top floor of the building has also been used for accommodation by kiosk operators, ski patrol and park staff in winter.

Public consultation has indicated that the public shelter section of Sitzmark Lodge should be open year round, although the current mix and disposition of uses of the structure make this impossible.

##### *Objective – Sitzmark Lodge*

- Provide a low-key, thermally efficient year round public shelter in the vicinity of the current lodge for all visitors to the area.

##### *Policies*

- Replace the existing public shelter (Sitzmark Lodge).
- The new public shelter will be open year round.
- The new public shelter will not be used for accommodation purposes (accommodation for ski patrol members to be provided by the skifield operators and/or any concessionaire).
- The skifield operator will be responsible for first aid and ski patrol services to patrons on the Mount Mawson skifield during periods of ski tow operation.

##### *Actions*

- Demolish Sitzmark Lodge and replace with a low-key, thermally efficient, heated public shelter which has, as a minimum, space for first aid facilities. The location and nature of any other facilities to be located within the shelter are to be negotiated between PWS and the skifield operator during development of the Mount Mawson skifield site management plan (as part of the Lake Dobson VSZ Site Plan).

#### 5.6.5 Winter Access

The Lake Dobson State Tourist Road is open year round, weather permitting, providing winter access to

the alpine region of the park (see Section 5.4.1). The road terminates at the Lake Dobson carpark.

All skiers, including cross country skiers, must walk or ski up the Jeep Trail from the Lake Dobson carpark to reach the skifield, a trip of about 30 minutes each way. The Jeep Trail is not suitable for public vehicular access. Oversnow vehicles have been used to transport supplies to Sitzmark and the ski lodges from Lake Dobson, but not passengers. The STSA was granted permission in 1994 to run a passenger service using oversnow vehicles, as long as it could obtain the appropriate public transport licences and insurance. An important requirement of the permission to operate such a service is that it must be available for accident emergency transport.

##### *Objective – Winter Access*

- Provide access to the alpine areas of the park for the pursuit of winter recreational opportunities and for enjoyment and appreciation of seasonal change in the park.

##### *Policies*

- To prevent churning of the snow surface and to avoid conflict with skiers and walkers, the use of vehicles will be minimised when the trail is covered with snow. Vehicle movements will be restricted to emergency vehicles, or for essential winter supplies for kiosk or lodges, undertaken only in early morning or evening.
- Subject to an annual licence, each club and the concessionaire may operate one oversnow vehicle on authorised vehicle tracks only for supplying private lodges and emergencies. Use will be minimised as indicated above. Such vehicles must be registered and maintained in good operating condition in case they are needed for an emergency. Clubs and the concessionaire will be encouraged to share vehicles.
- Proposals for oversnow transport for the public from the Lake Dobson carpark to the skifield will be considered, as long as it requires no upgrading or widening of the present Jeep Trail and does not adversely affect snow cover on the Jeep Trail. Proposals will need to resolve any conflict between such vehicles and walkers and skiers using the Jeep Trail.

##### *Actions*

- Encourage walkers to use the Urquhart walking track, on the west side of Lake Dobson (see Map 8) to reach the skifields, to reduce conflict between skiers (especially those coming down) and walkers on the Jeep Trail.

- Undertake regular maintenance of the Jeep Trail (see also Section 5.4.1).
- Rehabilitate the old dozer track where it cuts through the Jeep Trail. Rehabilitation shall be conducted in a manner which minimises environmental impact while enabling continued use of the Jeep Trail for skiing and associated activities.

### 5.6.6 Private Lodges

There are eight private lodges in the Lake Dobson Visitor Services Zone. Just below the skifield on Mt Mawson itself, are the old and new University Ski Club lodges, the Oldina Ski Club lodge and the Mt Mawson Ski Club lodge. The Alpine Ski Club lodge is located on Eagle Tarn, and the Hobart Walking Club, the Wellington Ski Club, and the Ski Club of Tasmania lodges are located on, or near Lake Dobson. Together the clubs make up the Southern Tasmania Ski Association (STSA).

The lodges have varying licence conditions. Most are annual licences issued under the *National Parks and Wildlife Act 1970*.

Actual or potential environmental impacts that need to be managed include: wildfire caused by escaped fires, kindling and firewood collection, unauthorised constructions and access routes; vegetation dieback and water pollution resulting from lodge toilets, waste water facilities, and fuel storages. Public liability issues also need to be resolved. All of the lodges use oil, gas or wood heaters. Water supply to the lodges is provided by roof water in tanks or piped water from springs. Cooking and lighting are either by LP gas or generators.

As pointed out by public comment on the draft management plan, most of these issues can be dealt with in the licence conditions for the private lodges.

#### **Objectives – Private Lodges**

- Ensure that the operation of private lodges complies with all applicable statutory health, safety and other standards.
- Minimise the environmental and aesthetic impacts of the operation of private lodges.

#### **Policies**

- Leases and licences for all private lodges on Mount Mawson will be renegotiated, between lodge operators and PWS within 12 months of gazettal of this plan. New licences will address the following:
  - all work (internal and external) associated with the lodges;

- environmental monitoring and inspections conditions;
- maintenance of access tracks to private lodges;
- transfer of licences; and
- other issues deemed necessary.

- All licences will have a provision that PWS will have first option on any transfer of licence.
- Any commercial use of private lodges will require a licence and be in accordance with Section 5.11. Commercial use or development may also require local government planning approval.
- No additional private lodges will be permitted within the park.
- No increase in the size of private lodges will be permitted unless necessary to meet statutory requirements.
- Renewal of licences will be subject to the private lodge operator satisfactorily meeting all of their licence conditions. In the event of a licence being cancelled or not renewed, the former licence holder will have 12 months in which to meet the required conditions, otherwise the private lodge will be removed and the site rehabilitated.
- The preferred heating source for private lodges is gas.
- Private lodges may be assessed for historic cultural significance. Any consequent management requirements will be included in licence agreements.
- Use of the Jeep Trail by vehicles associated with private lodges during winter months will be limited to essential maintenance, supply or transport of disabled or less able members and will be minimised when there is snow cover (see Section 5.6.5).

#### **Actions**

- All private lodges on Mount Mawson will have valid licences.
- Monitor vegetation, water quality and any other environmental indicators around private lodges and modify licence conditions as necessary.

- Private lodge operators will be required to develop a strategy and timetable showing how they will meet State and local government standards on wastewater and effluent.

### 5.6.7 The Government Huts

The Government Huts were originally built near Lake Fenton as temporary accommodation for workers in the 1930s. They were relocated closer to Lake Dobson in the 1950s to protect the Lake Fenton water catchment. They now provide low cost, basic accommodation for visitors and small groups. The facility comprises three small vertical board huts accommodating six persons each, and a large (12-person) hut 'Telopea', currently only available for day use. The complex includes a new toilet facility as well as a woodshed. Cabin facilities are minimal, consisting of bunks with mattresses, cold water and sink, wood stove and firewood, table and benches. The complex also contains a redundant toilet block (a structure built in the 1960's, which has been assessed as having no cultural heritage significance).

The huts are deemed to have cultural heritage significance (see Section 5.6.2). The facility has provided, and continues to provide, year round basic accommodation for the public, educational and outdoor recreational groups for over 50 years.

The Government Huts have always been popular with Tasmanian visitors, especially in winter, and the public consultation program found that most people wanted the huts retained as low cost family accommodation with minimal upgrading and maintenance.

#### *Objective – Government Huts*

- To provide rustic low cost accommodation to the public and educational groups, while conserving the natural and cultural heritage values of the site.

#### *Policies*

- The Government Huts will be conserved according to the Burra Charter and its associated guidelines (Australia ICOMOS 1999). Conservation work may entail some replacement of elements of fabric, but this will be kept to a minimum.
- Use and maintenance of the Government Huts will be governed by a conservation plan.
- Other uses or improvements of the Government Huts may be considered provided they are consistent with a conservation plan.
- The Government Huts will be retained as low-cost family or group accommodation.

- Continue to make 'Telopea' available for use by community and educational groups, and upgrade it to a standard that allows its use for group overnight accommodation.

#### *Actions*

- Develop a conservation plan for the Government Huts.
- The Government Huts will be required to meet the same minimum accommodation and environmental standards as those required for the ski lodges in the park.
- If allowed by a conservation plan, upgrade 'Telopea' the largest of the Government Huts (currently restricted to day use only) to make it available for overnight accommodation and encourage greater use.
- Improve the thermal efficiency of the Government Huts consistent with maintaining their historic integrity. Fit the huts with good quality heating and provide a fuel source.
- On-site interpretation of the Government Huts may be provided to explain their significance and to encourage visitors to conserve them.
- Demolish the 1960's toilet block and rehabilitate the site, unless an alternative use for the building can be found.

## 5.7 The Recreation Zone

The Recreation Zone is essentially a corridor for recreational travel and access that extends for much of the length of the Lake Dobson Tourist Road. The Recreation Zone also includes most of the alpine walking tracks and huts.

Although visitors are expected to be self-reliant, the nature of the park is such that most of the walks, including overnight walks, are accessible to a wide range of visitors of various ages and abilities, requiring only a modest level of experience and fitness to appreciate the values of the park. Huts in the park are discussed in Section 5.10.

The Recreation Zone is shown on Map 3 and includes Junee Cave State Reserve and Marriotts Falls State Reserve.

#### *Objectives – Recreation Zone*

- Protect and conserve natural and cultural values.
- Provide for low impact, low density, non-intrusive recreational use and enjoyment of the area, principally for bushwalking.

### **Policies**

- New recreation development will be limited to asset maintenance and essential replacement of existing structures and facilities. Relocation may be desirable in some circumstances. All redundant structures will be assessed for removal.
- Interpretation will be limited within this zone. Generally it will be confined to specific activity nodes such as walkers huts.
- In order to reduce environmental impacts on the park and social impacts on other users, groups will be encouraged to comply with current PWS controls on commercial group sizes.
- The provision of standing camps or buildings for commercial accommodation purposes will not be permitted in this zone.
- Rubbish bins will not be provided and visitors will be required to remove their rubbish.
- Camping may be directed away from specified areas to protect natural and cultural values.

## **5.8 Lake Fenton/Lady Barron Creek Drinking Water Catchment Area**

This area encompasses the Lake Fenton catchment and that part of the Lady Barron Creek catchment upstream of the Hobart Water weir. The Lake Fenton catchment is bounded to the west by Wombat Moor, Boronia Moor, and Kangaroo Moor, and to the east by the slopes of Mt Monash, Mt Crooke and Mount Field East. Drainage channels on Wombat Moor divert additional water into Lake Fenton.

The history of the Lake Fenton water scheme appears in Section 3.6.2. The scheme is managed by Hobart Water, and aside from providing the city of Hobart with 20% of its drinking water supply, the scheme provides the park and all of the villages between it and New Norfolk with water. The water is chlorinated at a small plant in the park at the Old Farm.

Recreational and other activities can result in pollution risks to the quality of the raw water obtained from the catchment. These risks include:

- increased levels of pathogenic organisms resulting from poor management of human and animal wastes;
- pollution caused by organic waste disposal, fuel and/or chemical spills; and
- increased turbidity caused by erosion, roadworks and construction activities.

To minimise such pollution risks, the water from the catchments is directly protected through:

- the restriction of some human activities within the catchments; and
- chlorination of the water supply.

Such protection ensures that the quality of water remains high and that expensive treatment of the raw water supply is not needed. Hobart Water particularly values the Lake Fenton/Lady Barron Creek drinking water catchment because the water it provides is low in cost and high in quality.

The current visitor and recreational facilities in the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area are shown on Map 9.

### **Objectives – Drinking Water Catchment Area**

- Manage the collection and supply of water from the zone while protecting and conserving natural and cultural values.
- Protect the catchment so as to provide for a sustainably safe, adequate and reliable water supply for the community.
- Allow such recreational activities within the zone that do not compromise water quality standards, or natural and cultural values.

### **Policies**

- Management of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area will be governed by the prescriptions of the Lake Fenton/Lady Barron Creek Drinking Water Catchment Management Plan (2000). The draft plan was prepared jointly by Hobart Water, the Department of Infrastructure, Energy and Resources, Forestry Tasmania and the Department of Primary Industries, Water and Environment. Preparation of the draft plan involved consultation with the Derwent Valley Council, the Derwent Valley community and other interested parties. The Plan has been approved by the Director, National Parks and Wildlife.
- Signs will conform with PWS sign policies.
- The advice of Hobart Water will be sought regarding any activity or development with the potential to impact upon water quality in the zone.
- Vehicles collecting toilet wastes from within or beyond the zone must have empty toilet waste containers when they initially enter the zone.
- Skifield concession operators and private lodge operators (see section 5.6) will be encouraged to

minimise the use and transport of liquid fuels, so as to reduce the likelihood of fuel spillage during transport through the zone.

- Camping will be prohibited within the zone.
- Swimming will not be permitted in the zone.
- The Inland Fisheries Service has agreed that fishing is banned in Lake Fenton and in Lady Barron Creek upstream of Hobart Water weir to assist in minimising human impacts on the catchment.
- Maintenance of the Lake Fenton Hut will be governed by a conservation plan and interpretation of the hut's historic values will be provided in any interpretation signs provided in the area.

#### **Actions**

- In conjunction with Hobart Water, Forestry Tasmania, Department of Infrastructure, Energy and Resources, Inland Fisheries Service and other interests, implement the approved catchment management plan for the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area.
- Provide interpretation at Lake Fenton and other appropriate locations within the water catchment area to explain any changes in management of the area resulting from implementation of the approved Lake Fenton/Lady Barron Creek Drinking Water Catchment Management Plan (2000).
- Liaise with the Department of Infrastructure Energy and Resources regarding road maintenance works to reduce the run-off of silt from the Lake Dobson road.
- Incorporate silt retention techniques, weed control measures and site rehabilitation practices in all new developments and in existing drainage works as appropriate.
- Investigate whether it is appropriate for Hobart Water staff to be given training and appointed as authorised officers under the *National Parks and Wildlife Act 1970* in order to enforce the provisions of the *National Parks and Wildlife Act 1970*, the *National Parks and Reserved Land Regulations 1999*, and this management plan within the Lake Fenton/Lady Barron Creek Drinking Water Catchment Area. If appropriate, train and authorise such staff.
- Undertake an assessment of the historical significance of other huts, hut platforms, fencelines, and artefacts of the Lake Fenton water scheme.

## **5.9 The Natural Zone**

All of the remoter areas of the park outside of the Visitor Services Zones and the Recreation Zone are included in the Natural Zone.

The Natural Zone is shown on Map 3. It includes the Karst and Cave Management Area (see Sections 2.5 and 3.2.4).

#### **Objectives – Natural Zone**

- Protect and conserve natural and cultural values.
- Preserve the zone in an undisturbed condition.
- Allow limited 'minimal impact' recreational use consistent with the above objectives.

#### **Policies**

- Interpretation materials may be provided only where necessary to protect natural and cultural values.
- The Natural Zone will continue to be made available for self-reliant recreation by visitors exploring the area on foot or on skis.
- Camping may be directed away from specified areas to protect natural and cultural values.
- No visitor buildings or similar facilities will be provided in the zone.
- Temporary standing camps, equipment caches, or similar accommodation provisions will not be permitted in the zone.
- No new tracks or routes will be developed, except for marking cross-country routes if deemed necessary.
- A management strategy will be developed for the Karst and Cave Management Area (see Section 3.2.4).

#### **Actions**

- Educate visitors about appropriate minimal impact behaviour and practices.
- Monitor user impacts.

## **5.10 Huts**

Over the years a network of huts (see Map 4) has been established along the skiing and walking routes of the

park. These huts have a variety of uses including day, overnight and emergency shelter, and as 'living' museums with cultural heritage values. The huts are in varying states of repair. Most are equipped with stoves or fireplaces, but few have toilets. Localised environmental degradation due to firewood collection and the littering of faecal waste and toilet paper around huts is increasing.

Conservation plans have been prepared for Lake Fenton Hut and Twilight Tarn Hut (management of the Lake Fenton Hut is covered under Section 5.8).

To date there has been considerable uncertainty about what level of service should be offered at each hut with emergency shelter, first aid, recreational shelter, heating, toilets, and interpretation being the principal considerations, along with the consequent costs and maintenance responsibilities of providing those services.

#### **Objective - Huts**

- Maintain a system of huts in the park to provide emergency shelter and reduce visitor impacts at selected locations.

#### **Policy**

- Maintain a high level of service, particularly for emergency purposes, at selected huts.

#### **Actions**

- Undertake an annual monitoring and maintenance program for all huts.
- Make all huts as thermally efficient as possible consistent with their construction technique and the maintenance of their social and cultural heritage values.
- Maintain K-Col hut as an essential emergency shelter, with the provision of an efficient heating source.
- Manage Lake Newdegate historic hut as an emergency shelter and interpret its cultural heritage values. Provide designated campsites nearby and a toilet if required.
- Implement the conservation plan for Twilight Tarn Hut. Upgrade the toilet. Provide on-site interpretation at Twilight Tarn historic hut to explain its significance and to encourage visitors to look after the hut.
- Provide on site interpretation at the Lake Fenton Ranger Hut to explain its significance and to encourage care for the hut and the surrounding water catchment (see Section 5.8).

- Insulate the Lake Nicholls and Lake Belcher huts and remove the wood heaters to reduce the impacts of firewood collection in these sensitive areas.

## **5.11 Tourism and Recreation Operations, Leases and Licences**

Under Sections 25B and 26 of the *National Parks and Wildlife Act 1970*, leases and licences to provide services within the park and reserves may be permitted with the discretion of the Minister. Leases and licences are generally given to promote tourism, recreation, education or scientific study, or to assist in the management of the park and reserves.

#### **Objectives – Leases and Licences**

- Encourage the provision of appropriate privately operated services to improve the quality and range of recreational experiences in the park and reserves.
- Manage and control uses and activities not undertaken by the managing authority so as to ensure that public safety, and park and reserve values are not compromised.
- Ensure there is recovery of the costs arising from leased, licensed or permitted uses.
- Provide economic benefit to the community.

#### **5.11.1 Assessing Development Proposals**

##### **Policies**

- New tourism and recreational development proposals may only be considered in the Russell Falls and Lake Dobson Visitor Services Zones, according to the provisions of Sections 5.5 and 5.6.
- Proposals will be assessed according to the procedures outlined in section 4.5.
- Proposals to develop tourism and recreational opportunities, facilities or services will only be considered if they:
  - are based on the features and values of the park and reserves;
  - ensure that the viability, diversity and values of environmental features and processes are not damaged;
  - adopt environmentally sustainable operating practices and use environmentally "best practice" goods and technologies;

- behave and operate in a manner compatible with protection of Aboriginal and historic heritage features and values;
  - explain the principles of minimal impact on environmental and heritage values to clients;
  - avoid impact on the legitimate enjoyment and experience by others of the park and reserve features and values; and
  - contribute to any external costs (for example road or sewerage upgrading) resulting from the proposal.
- Tourism and recreation development proposals will conform with and support realisation of this management plan, site plans and any other PWS policies or strategies, and be sustainably achievable within the realistic capacity of management resources.
  - All proposals to develop tourism and recreational opportunities in the park and reserves will adopt tourism industry environmental 'best practice' methods for:
    - sewage treatment;
    - stormwater management;
    - water supply;
    - energy generation and conservation;
    - vehicle storage and maintenance;
    - machinery installation and maintenance;
    - fuel delivery and storage; and
    - storage and disposal of solid and liquid waste and hazardous goods.
  - Depending on the proposal, additional assessment guidelines and criteria may need to be satisfied.
  - Development will complement existing facilities and services, foster visitor appreciation and understanding of the park's features and values, and provide efficient high quality service to the public.
  - Where possible any sale within the park and reserves of souvenirs and memorabilia will be focussed on Tasmanian made merchandise directly related to the park's features and values.
  - Tourism and recreation development proposals will provide a clearly demonstrated benefit to the Tasmanian community.
  - All commercial development proposals will submit a detailed business and financial plan showing at least a three-year projection of operations, demonstrating financial capacity while according with this management plan.
- Any financial, infrastructure, managing authority services, or environmental resource subsidy of a tourism or recreation proposal will be made explicit and public.
  - Tourism and recreation in the park and reserves will directly and identifiably make a contribution to research, conservation or management of the park.
- Actions**
- Develop and disseminate assessment guidelines and criteria for tourism and recreation proposals, including requirements and codes of sustainable environmental practices and behaviour.
  - Develop programs and mechanisms for tourism and recreation development to contribute to research, conservation and management of the park and reserves.
  - Ensure all applicable statutory requirements and approvals are met or obtained.
- 5.11.2 Managing Concessions**
- A Commercial Visitor Service licence or lease can be granted to authorise a trade, business or occupation carried out by the private sector within an area managed by the PWS. The purpose of the Commercial Visitor Service licence system is to:
- encourage the involvement of the private sector in the development of recreation and tourism opportunities;
  - meet visitor service demand and enable wider visitor enjoyment in a manner compatible with the purpose for which the land is managed; and
  - provide visitor services which are ecologically sustainable in the longer term.
- Policies**
- Wherever possible, infrastructure required to support visitor services will be developed outside the park and reserves.
  - The Director may impose restrictions on the sale of litter-generating goods from concession outlets.
  - Any advertising or promotion of a concession in the park and reserves will require the approval of the Director in accordance with Regulation 4(4b) of the *National Parks and Reserved Land Regulations 1999*.
  - Concession operations will be subject to monitoring and regular inspections. Failure to

operate appropriately will be dealt with rigorously in accordance with the concession agreement.

- Concessionaires will comply with all requirements of the current and future PWS Concessions - Policy and Procedures manual.

The only regular tour operation occurring within the park and reserves has been a mini-bus run from the Park Shop to the Lake Dobson Carpark. There are numerous licences to run bus-based groups into the park as part of larger tour itineraries, but they are used irregularly.

The park and reserves are an ideal location for low-key tour operations, especially those oriented toward families and groups. Such operations will generally not require further built infrastructure.

#### ***Policies***

- Licence conditions will include minimal impact requirements, authorised routes and locations of camps.
- Operators will conform with and promote high standards of safety, environmental care and interpretation of the park and reserves.

### **5.11.3 Leases, Licences and Authorisations**

#### ***Policies***

- Subject to the *National Parks and Wildlife Act 1970* and this management plan, leases and licences to provide services within the park or reserves may be issued for tourism, recreation, or education purposes.
- All leases, licences and authorisations will be consistent with the goals, objectives, and prescriptions of this management plan.
- Authorisation to conduct infrequent, organised events or activities within the park or reserves, of not more than one-week duration, may be issued by the Director. Where Section 25B of the *National Parks and Wildlife Act 1970* applies, a business licence will be required.
- Leases, licences and authorisations may be issued for any zone in the park or, in the reserves, provided that they conform with the objectives and prescriptions for that zone or reserve.
- Compliance with the terms and conditions of leases, licences and authorisations will be monitored and reviewed prior to any renewal.

## 6 Involving the Community

### 6.1 Community Support

Community support for the park and reserves is vital. Numerous community groups and organisations make regular use of the park and reserves, as do local residents.

'Friends of Mount Field National Park' groups have been established in the past, but disbanded. A new group has been established through the WILDCARE program.

Volunteers, often from the local area, have been used to assist in park and reserve management.

#### *Objectives – Community Support*

- Develop community appreciation of, and support for, park and reserve values.
- Promote a positive image of the park and reserves and their contribution to the community.
- Encourage community involvement in park and reserve management.

#### *Policies*

- Consult relevant people, communities and groups when their interests may be affected by management decisions.
- Volunteers will be encouraged when suitable, planned and programmed works and adequate supervision are available.

#### *Actions*

- Develop mechanisms and opportunities for consulting with people interested in management of the park and reserves.
- Develop management partnerships with communities and groups that wish to be involved in the management of the park and reserves, such as the Australian Cave and Karst Management Association, the Southern Tasmania Caverneers and the Southern Tasmania Ski Association.
- Encourage community involvement through the Service's 'WildCARE' program.

### 6.2 Working with Neighbours

Commercial forest management has been the principal land use to the north, west and south-west of the park and reserves since the 1930s. Most of this land is State forest. In recent years, some areas have been developed for eucalypt and pine plantations, and native forest thinning has been undertaken.

Public consultation conducted by Forestry Tasmania and PWS over the years has indicated concern about forestry activities on neighbouring lands, including:

- the risk of escaped fires;
- the need for firebreaks or buffer zones;
- the risk of introduction of weeds;
- the effects of the use of biological controls and pesticides, particularly 1080;
- the need for wildlife corridors between the park and the World Heritage Area (three to four km distant); and
- the need for viewfield management of forestry activities near the park and reserve boundaries.

An in-principle agreement was developed between Australian Newsprint Mills (the private forestry company at the time), Forestry Tasmania and PWS regarding the protection of the Neena Creek catchment, which flows into Russell Falls, one of the major scenic attractions in the State. PWS must ensure that subsequent private forestry companies operating on land adjacent to the park and reserves are aware of and committed to continuing this 'good neighbour' agreement.

Limited agricultural activities take place on private freehold land adjacent to the park and reserves, consisting mostly of grazing and small crop farming.

The trout and salmon farm near the entrance to the park was built as a commercial venture in 1978. The farm produces high quality export products for overseas markets.

The practice of dumping wastes from quarry operations near sinkholes in State forest has the potential to damage the karst system that underlies the Florentine Valley and the park and reserves (see Section 3.2).

### **Objectives – Working with Neighbours**

- Take account of concerns of neighbours in managing the park and reserves.
- Encourage conservation and sound management practices on lands adjoining the park and reserves.
- Enlist co-operation of neighbours in conserving park and reserve values.

### **Policies**

- Ongoing consultation and liaison will be undertaken between Forestry Tasmania, Hobart Water, the local private forestry company, private landowners and PWS regarding the park and reserves and management of the surrounding lands.
- Land management practices that require off-reserve or cross tenure implementation to protect natural and cultural values will be developed co-operatively with neighbours.

### **Actions**

- Regularly liaise and develop good working relations with neighbouring land managers and private landowners on management issues and projects of common interest. Consult neighbouring private landowners and land managers when their interests may be affected by PWS actions.
- Liaise with neighbouring land managers and private landowners regarding any developments outside the park and reserves that may impact on the scenic, natural and/or cultural values of the park and reserves; e.g., forestry activities and associated quarrying and roading, 1080 poisoning programs, water supply and sewage treatment works, subdivisions on park and reserve boundaries, etc.
- Maintain, review and implement as necessary the in-principle agreement between Forestry Tasmania, PWS and the private forestry company regarding management and protection of the Neena Creek catchment. Liaise with Forestry Tasmania and neighbouring private landowners to address siltation or chemical contamination resulting from human or natural causes.
- Improve the ecological integrity of park and reserve boundaries by encouraging the development of 'good neighbour' agreements. These agreements would provide for consultation on a range of issues such as:

- the establishment of visual and ecological buffer zones;
- the use of special logging techniques for coupes adjacent to the park and reserves to protect scenic values; and
- the use of chemicals and poisons for crop or plantation protection.
- Encourage Forestry Tasmania to maintain wildlife corridors between the park and the World Heritage Area.
- Liaise with local government to ensure consistency, as far as possible, between this plan, site plans and municipal planning schemes.

## 7 Other Issues

### 7.1 Boundaries

The boundaries of the park and reserves were established before the need to consider ecological factors was widely recognised. Appropriate boundaries would normally follow natural edges such as catchments and ridgelines. Many important features cross over park or reserve boundaries and extend into adjoining land tenures. Examples of these include:

- the Russell Falls - Neena Creek catchment (especially important as one of the State's tourism icons);
- High Sensitivity Zones of the Junee-Growling Swallet karst systems (Eberhard 1994 & 1996) that extend beyond the western and southern boundaries of the park. Some significant karst features were excised from the park when sections of the western and southern park boundaries were changed in 1950 to provide tall timber for harvesting - see Appendix 1);
- the Lady Barron Creek catchment (which is part of the Lake Fenton/Lady Barron Creek drinking water catchment);
- Junee Cave and Marriotts Falls State Reserves, that are close to, but separated from the park; and
- the Mt Lord massif and areas of the upper Broad River catchment north of the park, that have high conservation values.

Even small boundary changes (such as linking the park and reserves) could result in significant improvements to the ecological integrity of the park and reserves. Complimentary land management practices and prescriptions by Forestry Tasmania (Forestry Tasmania 1998) however, will mitigate some of the boundary problems.

An examination of the appropriate boundaries for the World Heritage Area (Department of Parks Wildlife & Heritage 1990) considered that Mount Field National Park should be added as a non-contiguous area because it contains values which contribute to the features and values of the existing World Heritage Area. The report notes that the existing boundaries of Mount Field National Park are not natural or appropriate.

The *Tasmanian Regional Forest Agreement 1997* has, as one of its intended outcomes, the security of land

tenure for conservation and production uses during the 20-year period of the agreement. Under the *Tasmanian Regional Forest Agreement 1997*, there are limited situations under which a formal reserve can be extended, particularly where such extensions would encroach into State forests used for wood production. Most of the park and reserves are surrounded by forest with high wood production and nature conservation values.

#### *Objective - Boundaries*

- To explore options with Forestry Tasmania for improving conservation and management outcomes by identifying appropriate and achievable boundary modifications, consistent with the *Tasmanian Regional Forest Agreement 1997*.

#### *Actions*

- Within the first five years of this plan, review the boundaries of the park and reserves with Forestry Tasmania and neighbouring landholders and jointly identify possible and appropriate boundaries. Criteria and a timeframe for the boundary review to be developed within 12 months of gazettal of this plan.
- Investigate the possibility of adding Mount Field National Park to the Tasmanian Wilderness World Heritage Area as a non-contiguous area.
- Until such time as any boundary modifications are achieved, liaise with neighbours to protect values outside and inside the park and reserves (see Section 6.2).
- Update the in-principle agreement for the management of the Russell Falls - Neena Creek catchment.

### 7.2 Research

Research is essential to identifying, understanding and conserving the natural and cultural values of the park and reserves, and sustainably managing human use.

#### *Objectives*

- Provide a sound basis of knowledge for managing the parks and reserves to achieve the management objectives.

- Assist in resolving complex or controversial management issues.
  - Improve overall park management approaches and practices.
  - Enhance knowledge of the natural and cultural values of the park and reserves, and related management issues.
  - Improve upon knowledge and management of visitors and their behaviour.
  - To assess impacts (including long term cumulative changes) associated with development and other use of the park or reserves.
  - To avoid putting at risk significant natural or cultural values of the park and reserves.
  - Provide for use of the park or reserves as a scientific reference area.
- determining appropriate management and control measures;
  - monitoring of the environmental impacts of activities undertaken in the park and reserves under lease, licence or other authorisation;
  - monitoring of the treatment and disposal of all wastes generated by human activity in the park and reserves; and
  - water quality monitoring to ensure human activities within or external to the park and reserves are not impacting upon park and reserve values, particularly at Russell Falls, Lake Dobson and Lake Fenton.
- All proposed research which has the potential to impact on the park or reserves or their values (including environmental, heritage or aesthetic values) will require written approval of detailed study proposals and methods before research begins, and be subject to this management plan.

#### **Policies**

- Research which addresses the above objectives and/or the following topics will be encouraged:
  - inventory and understanding of the environmental features and processes of the park or reserves, or management of them;
  - inventory and understanding of Aboriginal and historic heritage and archaeological features of the park or reserves, or their management;
  - inventory and understanding of visitor numbers and characteristics, behaviour, needs and expectations, or their management;
  - impacts and changes (including long-term cumulative changes) associated with human use and development of the park and reserves;
  - research into the ecological effects of fire on soils, vegetation and habitat, possibly involving the establishment of permanent vegetation plots as study sites within the park and reserves;
  - fire ecology research giving priority to the Tarn Shelf and Lake Belcher areas;
  - more detailed surface geological mapping of the park and reserves;
  - monitoring and research on the distribution, numbers and control of feral animals, weeds and diseases, particularly research directed at
- Authorisation for the collection of research material within the park or reserves will not be granted where the managing authority determines that it is possible and appropriate to collect the material outside the park or reserves.
- The approval of the Tasmanian Aboriginal community will be required for any research involving Aboriginal heritage.
- Approval from the Director of the Inland Fisheries Service is required to collect freshwater fish and aquatic invertebrates from any waters of the park.

#### **Actions**

- Identify critical gaps in information required for management and other potential research or monitoring projects that could assist management of the park and reserves.
- Approach and encourage researchers and research institutions (and where applicable community groups or schools) to undertake research or monitoring in the above fields.

### **7.3 Statutory Powers**

Section 24(1) of the *National Parks and Wildlife Act 1970* provides that no statutory powers (within the meaning of the Act) may be exercised in a national park or state reserve unless authorised by a management plan. Such provision requires the approval of both Houses of Parliament. The following authorities are authorised to exercise their statutory powers in the park and reserves.

### 7.3.1 Hobart Water

Hobart Water is authorised to exercise any statutory power under the *Water Management Act 1999* within the park in connection with the bulk supply works comprising Lake Fenton Reservoir and dam and the pipeline from Lady Barron Creek. This authority is given subject to the following conditions.

- Other than routine maintenance, works and operations may only be undertaken after consultation and agreement with the Director.
- Materials and machinery are to be thoroughly clean before being brought into the park to ensure they are not carrying disease or exotic species. Earth moving equipment may be required to be inspected by PWS before use.

### 7.3.2 Department of Infrastructure, Energy and Resources

The Minister administering the *Roads and Jetties Act 1935* is authorised to exercise any statutory power under that Act in relation to the Lake Dobson Road, through the Department of Infrastructure, Energy and Resources, subject to the following conditions.

- Unless otherwise agreed, the long-term management agreements reached between the Department of Infrastructure, Energy and Resources and PWS in 1993 to improve public safety and ensure environmental protection on the Lake Dobson Road will be followed. These management agreements will be reviewed every five years.
- Where it is necessary for the Department of Infrastructure, Energy and Resources to do roadworks in environmentally or culturally sensitive sections of the road, or to remove fallen trees or windfall, such work must be carried out in accordance with the requirements of the Director.
- Reconstruction or realignment of the Lake Dobson Tourist Road will be undertaken only after consultation and agreement between the Secretary of the Department of Infrastructure, Energy and Resources, and the Director, and in accordance with the terms of such agreement.
- No new quarries for road materials for the purposes of maintenance and upgrading the Lake Dobson Tourist Road will be opened in the park. Existing quarries will be assessed by PWS and either approved for continued use as gravel storage areas or else closed and rehabilitated. Road materials will be derived from quarries outside of the park, which are certified free from disease and exotic species.

- The gravel storage site on Wombat Moor 13.3 kilometres up the Lake Dobson Tourist Road is the only one to be retained for use in winter months and its use must be approved by PWS. The boundaries of the site will be defined by PWS and redundant sections rehabilitated.
- The objective of future roadworks and maintenance of the Lake Dobson Road will be to avoid causing turbidity in the water entering and within Lake Fenton or Lady Barron Creek, and to avoid disturbance to historic roadside features such as hut platforms, the old pack track near Lake Fenton or the remains of the fenceline following the road.
- The Department of Infrastructure, Energy and Resources must maintain the road to a standard which permits safe two wheel drive use, except for when snow conditions necessitate closing or restricting the use of the road to four wheel drive or chained vehicles.
- The gravel spoil that has built up along the road must be removed where it impedes proper surface drainage.

### 7.3.3 Inland Fisheries Service

The Service is authorised to exercise any statutory power under the *Inland Fisheries Act 1995*, provided the agreement of the Director has been obtained prior to works or activities commencing, subject to the following conditions:

- Further release or stocking of trout in the lakes or watercourses of the park and reserves will not be permitted.
- Any fishing licence, brochure or sign concerning fishing in the park and reserves will state the following:
  - artificial lures only are to be used;
  - consistent with the *National Parks and Reserved Land Regulations 1999*, the use of live bait will not be permitted; and
  - the taking of fish from Lake Fenton is not permitted.

## 7.4 Administration

Day-to-day management of the park and reserves is carried out by staff based at the Mount Field Office of the Parks and Wildlife Service. For management purposes, the Parks and Wildlife Service has divided Tasmania into six districts. Mount Field is part of the Southern District.

Field staff attached to the office have day-to-day management responsibility for: Mount Field National Park; much of Southwest National Park; Marriotts Falls State Reserve; Junee Cave State Reserve; Adamsfield Conservation Area; Wayatinah Lagoon Conservation Area; Mt Bethune Conservation Area; Strickland Conservation Area; Sharpes Falls Reserve, and numerous other Crown reserves. In addition, Mount Field staff have responsibilities for 'off-reserve' nature conservation, cultural heritage and Crown Land management issues.

The office and workshop facilities are located in the lower part of the park in the visitor centre and at the Old Farm, respectively.

Funding for the park and reserves comes from a number of sources. Most of the day to day funding for the park and reserves comes from consolidated revenue funds of the State Treasury. Other sources include entrance fee collections, donations and specific grants from the Federal Government.

#### 7.4.1 Implementation

The Director, being the managing authority under Section 22 of the *National Parks and Wildlife Act 1970*, is responsible for carrying out the prescriptions of this management plan.

##### *Policies*

- The prescriptions of this plan are subject to the provision of funding and other resources sufficient to meet them, and may be prioritised by the Director, at the Director's discretion, according to resource availability.
- To coordinate development, protection and conservation work, a works program will be developed.

The works program will identify:

- all development and other works planned;
  - scientific studies required;
  - those responsible for each stage of implementation;
  - the anticipated costs;
  - the staff requirements; and
  - ongoing maintenance and monitoring requirements.
- The works program will conform with the management plan and other plans such as site plans, conservation plans, etc.

##### *Actions*

- Review the works program annually and revise if necessary.

- Annually evaluate the outcomes of management against the objectives of the management plan.

#### 7.4.2 Search and Rescue, First Aid

Tasmania Police and the State Emergency Service have primary responsibility for all search and rescue within the park and reserves.

##### *Policies*

- Promote visitor safety through educational and interpretive material that outlines fire safety procedures and proper preparation for bushwalking, camping, caving and skiing in the park and reserves.
- Resources for the park and reserves will be maintained at a level sufficient to provide a reasonable response to emergency situations.

##### *Action*

- Cooperate with Tasmania Police and the State Emergency Services in search and rescue operations.

#### 7.4.3 Law Enforcement

##### *Policies*

- Within the park and reserves, authorised staff of the Parks and Wildlife Service will be responsible for enforcing the provisions of the *National Parks and Wildlife Act 1970*, the *National Parks and Reserved Land Regulations 1999*, the *Wildlife Regulations 1999*, the *Aboriginal Relics Act 1975*, the *Aboriginal Relics Regulations 1978*, and any other Acts for which staff may be authorised.
- The provisions of the *Inland Fisheries Act 1995* and its regulations will be policed by staff of the Inland Fisheries Service.
- Other law enforcement is the responsibility of Tasmania Police.

## 7.5 Monitoring and Evaluation

Monitoring and evaluation can help increase managers' effectiveness in achieving management objectives by providing feedback about the on-ground results or outcomes of management. This feedback helps reveal where management is working well (and hence achieving desired outcomes), and conversely where management needs to be adjusted in order to better achieve the desired outcomes. In developing monitoring programs for the park and reserves, it often helps to ask: 'How would we know if things were going well?' and perhaps just as importantly, 'How

would we know if things were going badly?' The answers to these questions often suggest the sorts of performance indicators that should be monitored to provide evidence about the effectiveness of park and reserve management.

#### **Objectives – Monitoring and Evaluation**

- Assess the effectiveness of management under this plan in achieving the management objectives.
- Provide feedback that will assist the progressive improvement of park and reserve management.

#### **Policies**

- Evaluation of the performance of park and reserve management will be based on the extent of achievement of the Key Desired Outcomes identified in Section 2.1, together with the draft National Park Management Standards (Appendix 5).
- Monitoring programs will be planned and implemented to evaluate the effectiveness of park and reserve management under this plan in achieving the management objectives. Highest priority will be given to monitoring performance indicators that provide evidence about:
  - the level of achievement of the Key Desired Outcomes for the management plan and/or the draft National Park Management Standards;
  - perceived threats, pressures or risks to the natural or cultural values of the park and reserves, or to the achievement of the management objectives;
  - the condition of significant values of the park and reserves;
  - rehabilitation of degraded values; and
  - major cost elements of the management plan.
- Evaluations of the performance of park and reserve management will be conducted at least twice during the 10-year term of the management plan, normally at the five and nine year points. An evaluation may be undertaken sooner should this be considered necessary, and especially in the event that early results indicate that the desired outcomes are not being achieved.
- Where appropriate, the performance of management for several national parks and reserves may be undertaken concurrently through the one evaluation process (for example, in the case of several small or geographically linked parks and reserves).

- Evaluations will be undertaken, and the findings and recommendations reported in line with PWS policy on Evaluation of Park Management and State of the Park reporting.

#### **Actions**

- Within the first three years of the term of this management plan, commence the necessary monitoring programs to document the current (baseline) state of the park and reserves with regard to the following performance indicators:
  - threatened flora species (the 11 threatened vascular plant species);
  - the string bogs at Newdegate pass;
  - threatened fauna species;
  - other native flora and fauna populations;
  - sites identified in the karst and cave management strategy;
  - identified natural landscapes and sites of geoconservation significance;
  - water quality monitoring within the catchments of the park;
  - historic cultural landscape values of the Russell Falls Visitor Services Zone;
  - identified Aboriginal sites;
  - visitor numbers and comments about the new visitor centre;
  - use of the park and reserves by educational groups;
  - the skifield, ski infrastructure and private lodges on the ecology of Lake Dobson and Eagle Tarn;
  - erosion associated with the Lake Dobson road and the Jeep Trail;
  - frost heave or erosion on groomed slopes in the skifield;
  - new introduced species (alpine areas of the park for 'high altitude' dieback) and impact of existing introduced species;
  - number and nature of visitor comments/complaints at the park and reserves;

- location of tracks or routes in the Natural Zone (using aerial photography).
- At the 5-year point in the term of this management plan, conduct an evaluation of the performance of management according to PWS policy on monitoring and evaluation.
- Exhibit a summary display of the findings of the most recent evaluation at the park Visitor Centre or other suitable venue (and where appropriate, on the World Wide Web) to inform the public of the work undertaken by PWS and to raise public awareness about the management issues the park and reserves face.
- Conduct a second evaluation at the 9-year point in the term of this plan, prior to the revision of the plan. Take into account the suggested improvements in the previous evaluation. Report the findings and recommendations of the evaluation as required, and undertake any necessary follow-up actions.
- Should the management plan not be revised at the 10-year point, continue to undertake evaluations at 5-yearly intervals.

## **7.6 Plan Revision**

### *Policies*

- The management plan may only be varied in accordance with the procedures set out in Sections 19 and 20 of the *National Parks and Wildlife Act 1970*.
- Take into account the findings and recommendations of evaluations of park and reserves management performance to guide and progressively improve ongoing management of the park and reserves.

### *Action*

- Review the plan ten years after gazettal of its approval by the Governor, or sooner if research, monitoring, or other circumstances show this to be needed.

## Glossary

**Biodiversity (biological diversity)** means the variety of life forms: the different plants, animals and micro-organisms, the genes they contain, and the ecosystems they form. It is usually considered at four levels: genetic diversity, species diversity, ecosystem diversity and community diversity.

**Catchment** means an area from which water flows into a stream or reservoir.

**Conservation** means all the processes and actions of looking after a place so as to retain its significance, always including protection, maintenance and monitoring.

**Earth processes** means the interactions, changes and evolutionary development of geodiversity over time.

**Geodiversity** means the range or diversity of geological (bedrock), geomorphological (landform) and soil features, assemblages, systems and processes which exist naturally.

**Indigenous species** means a species that occurs at a place within its historically known natural range and that forms part of the natural biodiversity of a place.

**Introduced species** means a translocated or alien species occurring at a place outside its historically known natural range as a result of intentional or accidental dispersal by human activities.

**Karst** is defined as terrain with distinctive characteristics of relief (such as caves and cavities) and drainage that arise primarily from the fact that the rock is highly soluble in natural waters, relative to other rocks.

**Natural integrity** means the degree to which a natural system retains its condition and natural rate of change in terms of size, biodiversity, geodiversity and habitat.

**Natural landscape** means large, relatively undisturbed area with topographic and catchment integrity where natural processes continue largely unmodified by human intervention.

**Protection** means taking care of a place by maintenance and by managing impacts to ensure that significance is retained.

**Threatened species** means a species listed in the Schedules of the *Threatened Species Protection Act 1995*.

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## Appendix 1 Reservation and Gazettal History

*“By this reservation a typical example of Tasmanian forest will be retained in its natural state, in order that generations yet unborn may see for themselves what virgin Tasmania was like... It is also to serve as a sanctuary for the flora and fauna, so as to guard against total extinction in some cases...”*

*Again, the park will be a scenic and pleasure resort not only for Tasmanians themselves, but for the countless thousands of tourists who will visit our island as time goes on, and its charms become more widely known and appreciated. In this respect it may truly be said that the park will be a thing of beauty and joy forever.”*

*Sir Francis Newdegate, Governor  
Mount Field National Park opening ceremony, 1917*

The first reserve in Tasmania to protect a natural area was created in March 1885 when the 300 acre (121 ha) Russell Falls Reserve was proclaimed under the *Waste Lands Act 1863*. This reservation came only 13 years after the creation of Yellowstone National Park, the world’s first national park. The Falls reserve was created for the protection of scenery, and came into effect largely due to the enthusiasm of Louis Shoobridge and his family, hop growers at Bushy Park.

According to Lord (1918) attempts were made to secure a sanctuary for the flora and fauna of Tasmania, but had not been successful. Freycinet Peninsula was proclaimed a Game Reserve in 1905, but because it was accessible from the sea and had no permanent ranger, the fauna continued to be hunted. Mr. William Crooke organised meetings and deputation’s to the Government and formed the National Park Association to support the plan for a National Park at Mount Field. The government of the day offered 500 acres near Russell Falls, but this did not satisfy the Association. Following a change of government, the new Minister for Lands agreed to the reservation of 27,000 acres (10,890ha) which included most of the Mount Field Range, Russell and Lady Barron Falls, and several lakes and tarns.

The park was gazetted simultaneously with Freycinet National Park on 29 August 1916 under the *Scenery Preservation Act 1915*. They became the first national parks in Tasmania. Mount Field National Park was Appendix 1 (continued)

named for Barron Field, an early (1819) judge of the New South Wales Supreme Court and a keen amateur naturalist. A National Park Board was appointed in 1917 to administer the park with Clive Lord as Secretary, a position he held until his death in 1933. A local resident, Bill Belcher, was appointed the park’s first ranger in 1917 and worked in the park for almost 17 years.

There have been many changes and additions to the area of the park since 1885. A block of land at the entrance to the park east of the Tyenna River was donated by the Marriott family in the 1920’s as a Scenic Reserve. This land became a State reserve under the *National Parks and Wildlife Act 1970*, but is now included within the boundaries of the park. This land is used as an extension of the day use area, as a staging site for special events in the park, and as a place to leave cars of visitors who have brought their dogs with them.

The most significant change was as a result of the *National Park and Florentine Valley Act 1950* which altered the boundaries of Mount Field National Park, *“for the purpose of increasing a concession granted by the Florentine Valley Paper Industry Act 1935, to validate the reservation of that Park, to amend that Act for other purposes and to provide for matters consequential thereto.”*

In spite of active opposition by the National Parks Board to the excision of 1490 ha of the tallest swamp gums (*Eucalyptus regnans*) in the park for woodpulp and sawlogs, in exchange for 1640 ha of mixed forest, the bill went through Parliament.

Following a fire in 1966, the then Scenery Preservation Board agreed to a proposal by Australian Newsprint Mills (ANM) to salvage fire-killed timber from four areas within the Western and Southern boundaries of the park. Roding, logging and regeneration by ANM of the four areas occurred between 1968 and 1974. In 1975, 40 hectares of former hop fields (now known as the Old Farm) adjacent to Lady Barron Creek were acquired from H. Jones and Company.

Gazettal Date	Legislation	Total Area *	Notes
10-03-1885	<i>Wastelands Act 1863</i>	121 ha	300 acres proclaimed as a Falls Reserve
09-03-1915	<i>Crown Lands Act 1911</i>	10 931 ha	27 000 acres proclaimed as the National Park Reserve; included

*Mount Field National Park, Marriotts Falls State Reserve & Junee Cave State Reserve  
Management Plan 2002*

			previous 121 ha
29-08-1916	<i>Crown Lands Act 1911</i>		revoked previous proclamation
29-08-1916	<i>Scenery Preservation Act 1915</i>	10 931 ha	re-proclaimed as a Scenic Reserve, known as National Park Reserve
18-02-1919	<i>Scenery Preservation Act 1915</i>	15 583 ha	added 4652 ha (11 490 acres) to National Park Reserve
10-06-1930	<i>Scenery Preservation Act 1915</i>	16 690 ha	added 1377 ha (3400 acres) around Mt Lord to National Park
29-05-1940	<i>Scenery Preservation Act 1915</i>	17 028 ha	added 68 ha (168 ac)
03-05-1950	<i>Lands Resumption Act 1910</i>		10 ha compulsorily acquired
26-06-1950	<i>Scenery Preservation Act 1915</i>	17 038 ha	10 ha added to National Park Scenic Reserve
14-12-1950	<i>National Park and Florentine Valley Act 1950 (No. 71)</i>	17 188 ha	excised 3680 acres (1490 ha) from the western boundary, added 4050 acres (1640 ha) to southern boundary
27-02-1957	<i>Scenery Preservation Act 1915</i>	17 189 ha	1 ha added at entrance to park
01-11-71	<i>National Parks &amp; Wildlife Act 1970</i>		came into effect, resulting in Mount Field becoming a State reserve
18-05-77	<i>National Parks &amp; Wildlife Act 1970</i>	17 234 ha	added 45 ha known as the Old Farm to the park
26-09-90	<i>National Parks &amp; Wildlife Act 1970</i>	17 242 ha	added 8 ha near Russell Falls

\* Until the production of a registered plan for the park in September 1998, it was thought that the total area of the park was 17,242 hectares. Computer calculation revealed the true area of the park to be 15,881 hectares. The difference between the two figures can be explained in terms of inaccuracies associated with early surveys and gazettals.

## Appendix 2 Sharpes Falls Reserve

Sharpes Falls Reserve is an area of Crown land that was set aside as a falls reserve, but never officially proclaimed. The 20 hectares of land for the 'reserve' was donated by the Sharpe family some time prior to 1909.

The falls are about 20m high and surrounded by tall, wet eucalypt forest. Several large old tree stumps above the falls attest to a history of selective logging.

As part of the reserved land classification changes brought about by the Regional Forest Agreement, the area will become a public reserve under the *Crown Lands Act 1976*. As the land is not reserved under the *National Parks and Wildlife Act 1970*, it is not part of the statutory plan. However, the following 'prescriptions for management' indicate the PWS management intentions for the area.

### Access

The development of pine plantations around most of the 'reserve' has obliterated the start of the old track and made the reserve difficult to find. Inside the 'reserve', the original walking track formation is still apparent, but overgrown and hard to follow.

### Boundaries

The 'reserve' is surrounded by State Forest on three sides and by private property on its southern boundary. A firebreak has been constructed almost all the way around the 'reserve' and pine plantations established.

### Threats

Wildfire spreading from the surrounding State Forest or private land.  
Siltation resulting from forestry activities upstream of the 'reserve'.

### Objectives

- Protect and conserve the natural and cultural values of the 'reserve'.
- Allow basic walking access to the falls.

### Actions

- Monitor and research visitation to the 'reserve'.
- Investigate the demand for, and feasibility of, re-opening the walking track to the falls.
- Liaise with Forestry Tasmania and the neighbouring private landowner on access and boundary issues.

- Conduct an assessment of the natural and cultural values of Sharpes Falls, and if warranted, reserve the area under the *National Parks and Wildlife Act 1970*.

### Appendix 3 Recorded Plants at Mount Field National Park

r1 = Rare at state level having a distribution of less than 100 square kilometres (FAC 1994).

r2 = Rare at state level occurring in fewer than 20 10X10 km AMG grid squares (FAC 1994).

r3 = Rare at state level but having small populations widely distributed (FAC 1994).

4, 5 = Vulnerable or rare species protected under the *Threatened Species Protection Act 1995*, listed on Schedule 4 or 5.

T = within Australia, only occurs in Tasmania.

En = Endemic.

Vu = Listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*.

Taxonomic nomenclature follows Buchanan (1999).

#### DICOTYLEDONS

Apiaceae	<i>Actinotus bellidioides</i>		<i>Olearia pinifolia</i>	EN
	<i>Actinotus moorei</i>	EN	<i>Olearia stellulata</i>	
	<i>Actinotus suffocata</i>	T	<i>Olearia tasmanica</i>	EN
	<i>Diplaspis cordifolia</i>	EN	<i>Ozothamnus antennaria</i>	
	<i>Diplaspis hydrocotyle</i>		<i>Ozothamnus ericifolius</i>	
	<i>Hydrocotyle hirta</i>		<i>Ozothamnus expansifolius</i>	r2 EN
	<i>Hydrocotyle sibthorpioides</i>		<i>Ozothamnus hookeri</i>	
	<i>Lilaeopsis polyantha</i>		<i>Ozothamnus ledifolius</i>	
	<i>Oreomyrrhis ciliata</i>		<i>Ozothamnus rodwayi</i>	
	<i>Oreomyrrhis eriopoda</i>		v. <i>oreophilus</i>	r2
Asteraceae	<i>Abrotanella forsteroides</i>	EN	<i>Pseudognaphalium luteo-album</i>	
	<i>Abrotanella scapigera</i>	EN	<i>Pterygopappus lawrencii</i>	EN
	<i>Bedfordia salicina</i>	EN	<i>Senecio gunnii</i>	
	<i>Brachyscome spathulata</i>		<i>Senecio lautus</i>	
	<i>Brachyscome tenuiscapa</i>		<i>Senecio leptocarpus</i>	EN
	<i>Bracteantha subundulata</i>		<i>Senecio linearifolius</i>	
	<i>Cassinia aculeata</i>		<i>Senecio pectinatus</i>	
	<i>Celmisia asteliifolia</i>		<i>Seneci pectinatus</i>	
	<i>Celmisia saxifraga</i>	EN	v. <i>pectinatus</i>	
	<i>Centipeda minima</i>		v. <i>ochroleuca</i>	
	<i>Cotula alpina</i>		Brassicaceae	
	<i>Cotula filicula</i>		<i>Cardamine gunnii</i>	
	<i>Craspedia alpina</i>		<i>Cardamine tenuifolia</i>	
	<i>Craspedia glauca</i>		<i>Cheesmania radicata</i>	r2
	<i>Erigeron pappocromus</i>		<i>Rorippa dictyosperma</i>	
	<i>Erigeron stellatus</i>	EN	Campanulaceae	
	<i>Ewartia catipes</i>	EN	<i>Isotoma fluviatilis</i>	
	<i>Ewartia meredithiae</i>	EN	<i>Lobelia gibbosa</i>	
	<i>Ewartia planchonii</i>	EN	<i>Pratia pedunculata</i>	
	<i>Euchiton collinus</i>		<i>Wahlenbergia saxicola</i>	EN
	<i>Euchiton involucratus</i>		Clusiaceae	
	<i>Euchiton sp.</i>	r2 5	<i>Hypericum japonicum</i>	
	<i>Euchiton traversii</i>		Cunoniaceae	
	<i>Euchiton umbricola</i>		<i>Anodopetalum biglandulosum</i>	EN
	<i>Helichrysum backhousii</i>		<i>Bauera rubioides</i>	
	v. <i>backhousii</i>		Donatiaceae	
	v. <i>oreophilum</i>	r2	<i>Donatia novae-zelandiae</i>	T
	<i>Helichrysum pumilum</i>		Droseraceae	
	<i>Helichrysum rutidolepis</i>		<i>Drosera arcturi</i>	
	<i>Helichrysum scorpioides</i>		<i>Drosera binata</i>	
	<i>Lagenifera stipitata</i>		<i>Drosera peltata</i>	
	<i>Leontodon taraxacoides</i>		<i>Drosera pygmaea</i>	
	<i>Leptinella filicula</i>		<i>Drosera spatulata</i>	
	<i>Microseris lanceolata</i>		Elaeocarpaceae	
	<i>Olearia algida</i>		<i>Aristotelia peduncularis</i>	EN
	<i>Olearia argophylla</i>		Elatinaceae	
	<i>Olearia ericoides</i>	r2 EN	<i>Elatine gratioloides</i>	
	<i>Olearia erubescens</i>		Epacridaceae	
	<i>Olearia ledifolia</i>	EN	<i>Archeria comberi</i>	EN
	<i>Olearia myrsinoides</i>		<i>Archeria serpyllifolia</i>	EN
	<i>Olearia obcordata</i>	EN	<i>Cyathodes dealbata</i>	EN
	<i>Olearia persoonioides</i>	EN	<i>Cyathodes glauca</i>	EN
	<i>Olearia phlogopappa</i>		<i>Cyathodes juniperina</i>	
			<i>Cyathodes parvifolia</i>	EN
			<i>Cyathodes straminea</i>	EN
			<i>Dracophyllum milliganii</i>	EN
			<i>Dracophyllum minimum</i>	EN
			<i>Epacris gunnii</i>	EN
			<i>Epacris impressa</i>	
			<i>Epacris lanuginosa</i>	
			<i>Epacris serpyllifolia</i>	
			<i>Leucopogon hookeri</i>	
			<i>Leucopogon montanus</i>	

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	<i>Monotoca empetrifolia</i>	EN		<i>Eucalyptus coccifera</i>	EN
	<i>Monotoca glauca</i>			<i>Eucalyptus dalrympleana</i>	
	<i>Monotoca linifolia</i>			<i>Eucalyptus delegatensis</i>	EN
	<i>spp. linifolia</i>	r2		<i>Eucalyptus gunnii</i>	EN
	<i>Monotoca linifolia</i>			<i>Eucalyptus johnstonii</i>	
	<i>spp. algida</i>	r2		<i>Eucalyptus obliqua</i>	
	<i>Monotoca scoparia</i>			<i>Eucalyptus regnans</i>	
	<i>Monotoca submutica</i>			<i>Eucalyptus subcrenulata</i>	EN
	<i>v. autumnalis</i>	r2, 5, EN		<i>Eucalyptus urnigera</i>	EN
	<i>Pentachondra pumila</i>			<i>Eucalyptus vernicosa</i>	EN
	<i>Planocarpa petiolaris</i>	EN		<i>Leptospermum glaucescens</i>	EN
	<i>Prionotes cerinthoides</i>	EN		<i>Leptospermum lanigerum</i>	
	<i>Richea acerosa</i>	EN		<i>Leptospermum nitidum</i>	EN
	<i>Richea curtisiae</i>	EN		<i>Leptospermum rupestre</i>	
	<i>Richea gunnii</i>			<i>Leptospermum scoparium</i>	
	<i>Richea milliganii</i>	EN		<i>Melaleuca squamea</i>	
	<i>Richea pandanifolia</i>	EN		<i>Melaleuca squarrosa</i>	
	<i>Richea procera</i>	EN	Oleaceae	<i>Notelaea ligustrina</i>	
	<i>Richea scoparia</i>	EN	Onagraceae	<i>Epilobium billardierianum</i>	
	<i>Richea sprengelioides</i>	EN		<i>Epilobium gunnianum</i>	
	<i>Sprengelia incarnata</i>			<i>Epilobium hirtigerum</i>	
	<i>Trochocarpa cunninghamii</i>	EN		<i>Epilobium perpusillum</i>	r2 EN
	<i>Trochocarpa gunnii</i>	EN		<i>Epilobium sarmentaceum</i>	
	<i>Trochocarpa thymifolia</i>	EN		<i>Epilobium tasmanicum</i>	
Ericaceae	<i>Gaultheria depressa</i>	r3 T	Oxalidaceae	<i>Oxalis magellanica</i>	
	<i>Gaultheria hispida</i>	EN	Pittosporaceae	<i>Billardiera longiflora</i>	
	<i>Gaultheria tasmanica</i>			<i>Pittosporum bicolor</i>	
Escalloniaceae	<i>Anopterus glandulosus</i>	EN	Plantaginaceae	<i>Plantago daltonii</i>	EN
	<i>Tetracarpaea tasmanica</i>	EN		<i>Plantago gunnii</i>	EN
Eucryphiaceae	<i>Eucryphia lucida</i>	EN		<i>Plantago paradoxa</i>	EN
	<i>Eucryphia milliganii</i>	EN		<i>Plantago tasmanica</i>	
Euphorbiaceae	<i>Poranthera microphylla</i>		Portulacaceae	<i>Montia fontana</i>	
Fabaceae	<i>Almaleea subumbellata</i>			<i>Neopaxia australasica</i>	
	<i>Aotus ericoides</i>		Proteaceae	<i>Agastachys odorata</i>	
	<i>Daviesia latifolia</i>			<i>Banksia marginata</i>	
	<i>Goodia lotifolia</i>			<i>Bellenden montana</i>	EN
	<i>Glycine clandestina</i>			<i>Cenarrhenes nitida</i>	EN
	<i>Lotus australis</i>	5		<i>Grevillea australis</i>	
	<i>Oxylobium ellipticum</i>			<i>Hakea epiglottis</i>	EN
	<i>Pultenaea juniperina</i>			<i>Hakea lissosperma</i>	
Mimosaceae	<i>Acacia dealbata</i>			<i>Hakea microcarpa</i>	
	<i>Acacia melanoxydon</i>			<i>Lomatia polymorpha</i>	EN
	<i>Acacia verniciflua</i>			<i>Lomatia tinctoria</i>	EN
	<i>Acacia verticillata</i>			<i>Orites acicularis</i>	EN
Fagaceae	<i>Nothofagus cunninghamii</i>			<i>Orites diversifolia</i>	EN
	<i>Nothofagus gunnii</i>	EN		<i>Orites revoluta</i>	EN
Gentianaceae	<i>Chionogentias spp.</i>			<i>Persoonia gunnii var. gunnii</i>	r2
Geraniaceae	<i>Geranium potentilloides</i>			<i>Telopea truncata</i>	EN
Goodeniaceae	<i>Scaevola hookeri</i>		Ranunculaceae	<i>Caltha phylloptera</i>	r2 EN
	<i>Velleia montana</i>			<i>Clematis aristata</i>	
Haloragaceae	<i>Gonocarpus micranthus</i>			<i>Ranunculus amphitrichus</i>	5
	<i>Gonocarpus montanus</i>			<i>Ranunculus collicolus</i>	r2
	<i>Gonocarpus serpyllifolius</i>			<i>Ranunculus collinus</i>	
	<i>Gonocarpus teucrioides</i>			<i>Ranunculus decurvus</i>	
	<i>Myriophyllum pendunculatum</i>			<i>Ranunculus glabrifolius</i>	
	<i>Myriophyllum salsugineum</i>			<i>Ranunculus nanus</i>	EN
Lamiaceae	<i>Prostanthera lasianthos</i>			<i>Ranunculus pimpinellifolius</i>	
Lentibulariaceae	<i>Utricularia dichotoma</i>			<i>Ranunculus scapiger</i>	
	<i>Utricularia lateriflora</i>			<i>Ranunculus triplodontus</i>	EN
	<i>Utricularia monanthos</i>		Rhamnaceae	<i>Pomaderris apetala</i>	EN
Loganiaceae	<i>Schizacme archeri</i>			<i>Pomaderris elliptica</i>	EN
	<i>Schizacme montana</i>			<i>Acaena agnipila</i>	
Menyanthaceae	<i>Liparophyllum gunnii</i>	r2 T	Rosaceae	<i>Acaena montana</i>	EN
	<i>Nymphoides exigua</i>	EN		<i>Acaena novae-zelandiae</i>	
Monimiaceae	<i>Atherosperma moschatum</i>			<i>Rubus gunnianus</i>	EN
Myrtaceae	<i>Baeckea gunniana</i>		Rubiaceae	<i>Asperula gunnii</i>	
	<i>Callistemon viridiflorus</i>	EN		<i>Coprosma hirtella</i>	
	<i>Eucalyptus amygdalina</i>	EN		<i>Coprosma moorei</i>	

	<i>Coprosma nitida</i>			<i>Lepidosperma elatius</i>	
	<i>Coprosma pumila</i>			<i>Lepidosperma filiforme</i>	
	<i>Coprosma quadrifida</i>			<i>Lepidosperma gunnii</i>	
	<i>Galium australe</i>	EN		<i>Lepidosperma inops</i>	
Rutaceae	<i>Galium gaudichaudii</i>			<i>Oreobolus acutifolius</i>	EN
	<i>Boronia citriodora</i>			<i>Oreobolus distichus</i>	
	<i>Boronia parviflora</i>			<i>Oreobolus oxycarpus</i>	
	<i>Phebalium squameum</i>			<i>Oreobolus pumilio</i>	
Santalaceae	<i>Zieria arborescens</i>			<i>Schoenus calytratus</i>	
	<i>Exocarpos humifusus</i>	EN		<i>Schoenus fluitans</i>	
	<i>Leptomeria drupacea</i>			<i>Schoenus maschalinus</i>	
Sapindaceae	<i>Dodonaea filiformis</i>			<i>Schoenus pygmaeus</i>	r1 EN
Scrophulariaceae	<i>Derwentia nivea</i>	r2		<i>Uncinia compacta</i>	
	<i>Euphrasia collina</i>	EN		<i>Uncinia elegans</i>	5
	<i>Euphrasia gibbsiae</i>			<i>Uncinia flaccida</i>	
	<i>spp. comberi</i>	r2		<i>Uncinia nervosa</i>	T
	<i>Euphrasia gibbsiae</i>			<i>Uncinia riparia</i>	
	<i>spp. gibbsiae</i>	r2 EN		<i>Uncinia tenella</i>	
	<i>Euphrasia gibbsiae</i>		Hydatellaceae	<i>Hydatella filamentosa</i>	r2 EN
	<i>spp. pulvinestris</i>	r1 5	Iridaceae	<i>Diplarrena latifolia</i>	EN
	<i>Euphrasia striata</i>			<i>Diplarrena moraea</i>	
	<i>Gratiola latifolia</i>			<i>Isophysis tasmanica</i>	EN
	<i>Ourisia integrifolia</i>	EN		<i>Libertia pulchella</i>	
Stylidiaceae	<i>Forstera bellidifolia</i>	EN	Juncaceae	<i>Juncus antarcticus</i>	
	<i>Phyllachne colensoi</i>	r2 T		<i>Juncus australis</i>	
	<i>Stylidium graminifolium</i>			<i>Juncus bassianus</i>	
Thymelaeaceae	<i>Pimelea drupacea</i>			<i>Juncus falcatus</i>	
	<i>Pimelea linifolia</i>	EN		<i>Juncus kraussii</i>	
	<i>Pimelea nivea</i>	EN		<i>Juncus pallidus</i>	
	<i>Pimelea sericea</i>	EN		<i>Juncus pauciflorus</i>	
Tremandraceae	<i>Tetratheca pilosa</i>			<i>Juncus planifolius</i>	
	<i>Tetratheca procumbens</i>	EN		<i>Juncus ratkowskyanus</i>	EN
Urticaceae	<i>Urtica incisa</i>			<i>Juncus sandwithii</i>	
Violaceae	<i>Viola cunninghamii</i>			<i>Luzula australasica</i>	
	<i>Viola hederacea</i> spp. <i>curtisae</i>	r1 5, EN		<i>Luzula campestris</i>	
Winteraceae	<i>Tasmania lanceolata</i>			<i>Luzula meridionalis</i>	
				<i>Luzula multiflora</i>	
				<i>Luzula novae-cambriae</i>	
<b>MONOCOTYLEDONS</b>			Juncaginaceae	<i>Triglochin procerum</i>	
			Liliaceae	<i>Astelia alpina alpina</i>	
Burmanniaceae	<i>Thismia rodwayi</i>	r2 5		<i>Blandfordia punicea</i>	
Centrolepidaceae	<i>Centrolepis monogyna</i>	EN		<i>Campynema lineare</i>	EN
	<i>Centrolepis muscoides</i>	r2 EN		<i>Dianella revoluta</i>	
	<i>Gaimardia fitzgeraldii</i>	EN		<i>Dianella tasmanica</i>	
	<i>Gaimardia setacea</i>	T		<i>Drymophila cyanocarpa</i>	
Cyperaceae	<i>Carex aff. diandra</i>	r2		<i>Milligania densiflora</i>	EN
	<i>Carex appressa</i> var. <i>virgata</i>	r2 T		<i>Milligania lindoniana</i>	r2 EN
	<i>Carex archeri</i>	r2		<i>Milligania stylosa</i>	r2 EN
	<i>Carex barbata</i>	EN	Orchidaceae	<i>Caladenia alpina</i>	
	<i>Carex breviculmis</i>			<i>Chiloglottis cornuta</i>	
	<i>Carex gaudichaudiana</i>			<i>Chiloglottis grammata</i>	
	<i>Carex gunniana</i>	5		<i>Chiloglottis gunnii</i>	
	<i>Carex polyantha</i>	r2		<i>Corybas incurvus</i>	
	<i>Carex tasmanica</i>	VU		<i>Gastrodia procera</i>	EN
	<i>Carpha alpina</i>			<i>Prasophyllum alpinum</i>	
	<i>Carpha rodwayi</i>	EN		<i>Pterostylis decurva</i>	
	<i>Eleocharis gracilis</i>			<i>Pterostylis dubia</i>	r2
	<i>Eleocharis sphacelata</i>			<i>Pterostylis foliata</i>	
	<i>Gahnia grandis</i>			<i>Pterostylis furcata</i>	
	<i>Gymnoschoenus sphaerocephalus</i>			<i>Pterostylis parviflora</i>	
	<i>Isolepis alpina</i>			<i>Pterostylis pedunculata</i>	
	<i>Isolepis aucklandica</i>			<i>Thelymitra circumsepta</i>	
	<i>Isolepis crassiuscula</i>			<i>Townsonia viridis</i>	T
	<i>Isolepis fluitans</i>		Poaceae	<i>Agrostis aemula</i> (both var)	5
	<i>Isolepis inundata</i>			<i>Agrostis lacunarum</i>	r2 EN
	<i>Isolepis limbata</i>	r2 EN		<i>Agrostis parviflora</i>	
	<i>Isolepis montivaga</i>			<i>Agrostis venusta</i>	
	<i>Isolepis subtilissima</i>			<i>Amphibromus recurvatus</i>	

	<i>Austroanthonia caespitosa</i>			<i>Grammitis poeppigiana</i>
	<i>Austroanthonia diemenica</i>		Hymenophyllaceae	<i>Crepidomanes venosum</i>
	<i>Rytidosperma fortuneae-hibernae</i>	EN		<i>Hymenophyllum australe</i>
	<i>Rytidosperma nivicolium</i>			<i>Hymenophyllum cupressiforme</i>
	<i>Rytidosperma nudiflorum</i>			<i>Hymenophyllum flabellatum</i>
	<i>Rytidosperma pauciflorum</i>	EN		<i>Hymenophyllum peltatum</i>
	<i>Austroanthonia penicillata</i>			<i>Hymenophyllum rarum</i>
	<i>Deyeuxia carinata</i>			<i>Polyphlebium venosum</i>
	<i>Deyeuxia contracta</i>			<i>Sphaerocionium applanatum</i>
	<i>Deyeuxia innominata</i>		Isoetaceae	<i>Isoetes gunnii</i>
	<i>Deyeuxia monticola</i>		Lycopodiaceae	<i>Huperzia australiana</i>
	<i>Deyeuxia rodwayi</i>	EN		<i>Huperzia varia</i>
	<i>Echinopogon ovatus</i>			<i>Lycopodium fastigiatum</i>
	<i>Ehrharta oreophila</i>			<i>Lycopodium scariosum</i>
	<i>Ehrharta stipoides</i>		Polypodiaceae	<i>Microsorium pustulatum</i>
	<i>Ehrharta tasmanica</i>	EN	Psilotaceae	<i>Tmesipteris obliqua</i>
	<i>Erythranthera australis</i>	r2	Schizaeaceae	<i>Schizaea fistulosa</i>
	<i>Hierochloe fraseri</i>	EN		
	<i>Hierochloe redolens</i>			
	<i>Poa gunnii</i>	EN		
	<i>Poa labillardierei</i>			
	<i>Poa saxicola</i>			
Potamogetonaceae	<i>Potamogeton tricarinatus</i>			
Restionaceae	<i>Empodisma minus</i>			
	<i>Hypolaena fastigiata</i>			
	<i>Leptocarpus tenax</i>			
	<i>Sporadanthus tasmanicus</i>			
	<i>Baloskion australe</i>			
	<i>Eurychorda complanata</i>			
Xyridaceae	<i>Xyris operculata</i>			
<b>GYMNOSPERMS</b>				
Cupressaceae	<i>Diselma archeri</i>	EN		
Phyllocladaceae	<i>Phyllocladus aspleniifolius</i>	EN		
Podocarpaceae	<i>Microcachrys tetragona</i>	EN		
	<i>Microstrobos niphophilus</i>	r2, 4EN		
	<i>Podocarpus lawrencei</i>			
Taxodiaceae	<i>Athrotaxis cupressoides</i>	EN		
	<i>Athrotaxis laxifolia</i>	EN		
	<i>Athrotaxis selaginoides</i>	EN		
<b>PTERYDIOPHYTES</b>				
Aspleniaceae	<i>Asplenium appendiculatum</i>			
	<i>Asplenium bulbiferum</i>			
	<i>Asplenium flabellifolium</i>			
	<i>Asplenium trichomanes</i>			
Athyriaceae	<i>Cystopteris tasmanica</i>	r2		
Blechnaceae	<i>Blechnum chambersii</i>			
	<i>Blechnum fluviatile</i>			
	<i>Blechnum nudum</i>			
	<i>Blechnum penna-marina</i>			
	<i>Blechnum watsii</i>			
Dennstaedtiaceae	<i>Histiopteris incisa</i>			
	<i>Hypolepis amaurorachis</i>			
	<i>Hypolepis rugosula</i>			
	<i>Pteridium esculentum</i>			
Dicksoniaceae	<i>Dicksonia antarctica</i>			
Dryopteridaceae	<i>Polystichum proliferum</i>			
	<i>Rumohra adiantiformis</i>			
Gleicheniaceae	<i>Gleichenia alpina</i>	T		
	<i>Gleichenia dicarpa</i>			
	<i>Sticherus tener</i>			
Grammitidaceae	<i>Ctenopteris heterophylla</i>			
	<i>Grammitis billardieri</i>			
	<i>Grammitis magellanica</i>			
	var. <i>nothofagei</i>			

## Appendix 4 Recorded Animals at Mount Field National Park

x = extinct; t = threatened  
as defined in the *Tasmanian Threatened Species  
Protection Act 1995*

### VERTEBRATES

#### AMPHIBIANS

Tasmanian Froglet	<i>Crinia tasmaniensis</i>
Brown froglet	<i>Crinia signifera</i>
Banjo Frog	<i>Limnodynastes dumerili</i>
Brown Tree Frog	<i>Litoria ewingi</i>

#### REPTILES

She-oak Skink	<i>Cyclodomorpus casuarinae</i>
White's Skink	<i>Egernia whitii</i>
Metallic Skink	<i>Niveoscincus metallicus</i>
Southern Snow Skink	<i>Niveoscincus microlepidotus</i>
Ocellated Skink	<i>Niveoscincus ocellatus</i>
Mountain Skink	<i>Niveoscincus orocryptus*</i>
Tasmanian Tree Skink	<i>Niveoscincus pretiosus</i>
Southern Grass Skink	<i>Pseudemoia entrecasteuxii</i>
Blotched Blue-tongue	<i>Tiliqua nigrolutea</i>
White-lipped Snake	<i>Drysdalia coronoides</i>
Tiger Snake	<i>Notechis ater</i>

\*not recorded from the area but may occur here.

#### BIRDS

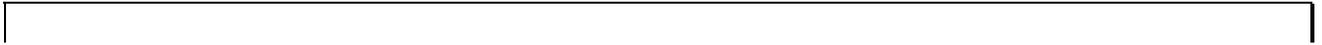
##### Native Birds

Great Cormorant	<i>Phalacrocorax carbo novaehollandiae</i>
Little Pied Cormorant	<i>Phalacrocorax melanoleucos melanoleucos</i>
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>
White-faced Heron	<i>Ardea novaehollandiae</i>
Chestnut Teal	<i>Anas castanea</i>
Mallard (hybrid species)	<i>Anas platyrhynchos</i>
Pacific Black Duck	<i>Anas superciliosa superciliosa</i>
Black Swan	<i>Cygnus atratus</i>
Collared Sparrowhawk	<i>Accipiter cirrhocephalus cirrhocephalus</i>
Brown Goshawk	<i>Accipiter fasciatus fasciatus</i>
Grey (White) Goshawk (t)	<i>Accipiter novaehollandiae novaehollandiae</i>
Wedge-tailed Eagle (t)	<i>Aquila audax fleayi</i>
Marsh Harrier	<i>Circus (approximans) aeruginosus gouldi</i>
Brown Falcon	<i>Falco berigora tasmanica</i>
Peregrine Falcon	<i>Falco peregrinus macropus</i>
Swamp Quail (ssp.of Brown)	<i>Coturnix australis ysilophorus</i>
Tasmanian Native-hen	<i>Gallinula mortierii</i>

Purple Swamphen	<i>Porphyrio porphyrio melanotus</i>
Lewin's Rail	<i>Rallus (Dryolimnas) pectoralis brachipus</i>
Masked Lapwing	<i>Vanellus miles novaehollandiae</i>
Latham's Snipe	<i>Gallinago hardwickii</i>
Silver Gull	<i>Larus novaehollandiae novaehollandiae</i>
Brush Bronzewing	<i>Phaps elegans</i>
Sulphur-crested Cockatoo	<i>Cacatua galerita galerita</i>
Yellow-tailed Black Cockatoo	<i>Calyptorhynchus funereus xanthanotus</i>
Swift Parrot (t)	<i>Lathamus discolor</i>
Blue-winged Parrot	<i>Neophema chrysostoma</i>
Green Rosella	<i>Platycercus caledonicus</i>
Horsfield's Bronze-cuckoo	<i>Chrysococcyx basalis</i>
Shining Bronze-cuckoo	<i>Chrysococcyx lucidus plagosus</i>
Pallid Cuckoo	<i>Cuculus pallidus</i>
Fan-tailed Cuckoo	<i>Cuculuspyrrhophanus prionurus</i>
Southern Boobook	<i>Ninox novaeseelandiae lucopus</i>
Masked Owl	<i>Tyto novaehollandiae castanops</i>
Tawny Frogmouth	<i>Podargus strigoides strigoides</i>
Tree Martin	<i>Cevopsis nigricans nigricans</i>
Welcome Swallow	<i>Hirundo neoxena</i>
Richard's Pipit	<i>Anthus novaehollandiae</i>
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>
Grey Shrike-thrush	<i>Colluricincla harmonica harmonica</i>
Dusky Robin	<i>Melanodryas vittata</i>
Satin Flycatcher	<i>Myiagra cyanoleuca</i>
Olive Whistler	<i>Pachycephala olivacea</i>
Golden Whistler	<i>Pachycephala pectoralis</i>
Scarlet Robin	<i>Petroica multicolor boodang</i>
Flame Robin	<i>Petroica phoenicea</i>
Pink Robin	<i>Petroica rodinogaster</i>
Grey Fantail	<i>Rhipidurafuliginosa albiscapa</i>
Bassinian Thrush (scaly)	<i>Zoothera dauma lunolata</i>
Superb Fairy-wren	<i>Malurus cyaneus cyaneus</i>
Southern Emu-wren	<i>Stipiturus malachurus littleri</i>
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>
Tasmanian Thornbill	<i>Acanthiza ewingii</i>
Brown Thornbill	<i>Acanthiza pusilla diemenensis</i>
Tasmanian Scrubwren	<i>Sericornis humilus</i>
Striated Field wren	<i>Sericornis fuliginosus</i>
Scrubtit	<i>Sericornis magnus</i>
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>
Yellow Wattlebird	<i>Anthochaera paradoxa</i>
Yellow-throated Honeyeater	<i>Lichenostomus flavicollis</i>
Black-headed Honeyeater	<i>Melithreptus affinis</i>
Strong-billed Honeyeater	<i>Melithreptus validirostris</i>

New Holland Honeyeater	<i>Phylidonyris novaehollandiae canescens</i>	Long-tailed Mouse	<i>Pseudomys higginsi</i>
Crescent Honeyeater	<i>Phylidonyris pyrrhoptera inornata</i>	Swamp Rat	<i>Rattus lutreolus velutinus</i>
Spotted Pardalote	<i>Pardalotus punctatus</i>		
Striated Pardalote	<i>Pardalotus striatus ornatus</i>		
Silvereye	<i>Zosterops lateralis lateralis</i>		
Beautiful Firetail	<i>Emblema bella</i>		
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>		
Grey Butcherbird	<i>Cracticus torquatus cinereus</i>		
Australian Magpie	<i>Gymnorhina tibicen hypoleuca</i>		
Black Currawong	<i>Strepera fuliginosa</i>		
Grey (clinking) Currawong	<i>Strepera versicolor arguta</i>		
Forest Raven	<i>Corvus tasmanicus Tasmanicus</i>		
<b>Introduced Birds</b>			
Superb Lyrebird	<i>Menura novaehollandiae</i>		
Laughing Kookaburra	<i>Dacelo novaeguineae novaeguineae</i>		
Common Skylark	<i>Alauda arvensis</i>		
Common Blackbird	<i>Turdus merula</i>		
European Goldfinch	<i>Carduelis carduelis</i>		
European Greenfinch	<i>Carduelis chloris</i>		
House Sparrow	<i>Passer domesticus</i>		
Common Starling.	<i>Sturnus vulgaris</i>		
<b>MONOTREMES</b>			
Platypus	<i>Ornithorhynchus anatinus</i>		
Echidna	<i>Tachyglossus aculeatus</i>		
<b>MAMMALS</b>			
<b>Native Mammals</b>			
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>		
Eastern Quoll	<i>Dasyurus viverrinus</i>		
Tasmanian Devil	<i>Sarcophilus harrisi</i>		
Southern Brown Bandicoot	<i>Isoodon obesulus</i>		
Eastern Barred Bandicoot	<i>Perameles gunnii</i>		
Common Wombat	<i>Vombatus ursinus</i>		
Sugar Glider	<i>Petaurus breviceps</i>		
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>		
Brush-tail Possum	<i>Trichosurus vulpecula</i>		
Little Pygmy-possum	<i>Cercartetus lepidus</i>		
Eastern Pygmy-possum	<i>Cercartetus nanus</i>		
Tasmanian Bettong	<i>Bettongia gaimardi</i>		
Long-nosed Potoroo	<i>Potorous tridactylus apicalis</i>		
Bennetts Wallaby	<i>Macropus rufogriseus</i>		
Tasmanian Pademelon	<i>Thylogale billardieri</i>		
Chocolate Wattled Bat	<i>Chalinolobus morio</i>		
King River Vespertilion	<i>Vespadelus regulus</i>		
Little Forest Vespertilion	<i>Vespadelus vulturinus</i>		
Tasmanian Pipistrelle	<i>Falsistrellus tasmaniensis</i>		
Lesser Long-eared Bat	<i>Nyctophilus geoffroyi</i>		
Greater Long-eared Bat	<i>Nyctophilus timoriensis</i>		
Water Rat	<i>Hydromys chrysogaster</i>		
		<b>Introduced Mammals</b>	
		Rabbit	<i>Oryctolagus cuniculus cuniculus</i>
		Cats (feral & domestic)	<i>Felis catus</i>
		House Mouse	<i>Mus musculus</i>
		<b><u>INVERTEBRATES</u></b>	
		See also Clarke (1997a) for cave invertebrates.	
		<b>BUTTERFLIES</b>	
		<b>Native</b>	
		Dominula Skipper	<i>Anisynta dominula</i>
		Donnysa Skipper	<i>Hesperilla donnysa</i>
		Flame Skipper	<i>Hesperilla idothea</i>
		Yellow-banded Dart	<i>Ocybadistes walkeri</i>
		White Grassdart	<i>Taractrocera papyria</i>
		Macleay's Swallowtail	<i>Graphium macleayanum</i>
		Hobart Brown	<i>Argynnina hobartia</i>
		Klug's Xenica	<i>Geitoneura klugi</i>
		Common Brown	<i>Heteronympha merope</i>
		Shouldered Brown	<i>Heteronympha penelope</i>
		Leprea Brown	<i>Nesoxenica leprea</i>
		Silver Xenica	<i>Oreixenica lathoniella</i>
		Meadow Argus	<i>Junonia villida</i>
		Australian Admiral	<i>Vanessa itea</i>
		Australian Painted Lady	<i>Vanessa kershawi</i>
		Bright Copper	<i>Paralucia aurifera</i>
		Mountain Blue	<i>Neolucia hobartensis</i>
		Common Grass Blue	<i>Zizinia labradus</i>
		<b>Introduced Butterflies</b>	
		Cabbage White	<i>Pieris rapae</i>
		<b>ARTHROPODA</b>	
		<b>Arachnida</b>	
		Hexathelidae	<i>Plesiothele fentoni</i> (t)
		<b>Insecta</b>	
		Carabidae	<i>Goedtrechus parallelus</i>
		(t)	
		Geometridae	<i>Dirce aesiodora</i>
			<i>Plesanemma altafucata</i>
		Hydrobiosidae	<i>Poecilochorema evansi</i>
		Hydropsychidae	<i>Diplectrona castanea</i> (x)
		Lycaenidae	<i>Neolucia hobartensis hobartensis</i>
			<i>Archipetalia auriculata</i>
		Petalidae	<i>Blaste falcifer</i>
		Psocidae	<i>Synthemopsis</i>
		Synthemidae	<i>gomphomacromioid</i>
		<b>Onychophora</b>	
		Peripatopsidae	<i>Ooperipatellus insignis</i>
		<b>ASCEHELMINTHES</b>	
		<b>Rotifers</b>	
		Monogononta	<i>Ascomorpha ecaudis</i>
			<i>Cephalodella remanei</i>
			<i>Colurella uncinata</i>

*Eothinia elongata*  
*Euchlanis meneta*  
*Keratella slacki*  
*Lacinularia flosculosa*  
*Lepadella patella*  
*Macrochaetus collinsi*  
*Testudinella amphora*  
*Trichocerca porcellus*  
*Trichocerca pusilla*  
*Trichocerca scipio*



## Appendix 5 Draft National Park Management Standards

*The following National Park Management Standards provide a general benchmark of the expected standards of management to be met in Tasmanian national parks, and are based on the objectives of management specified in Schedule 4 of the National Parks and Wildlife Act 1970. In addition, standards for community engagement are included because of their recognised critical importance for effective park management.*

*The performance of management for national parks will generally be evaluated against the vision and the key desired outcomes identified in the management plan for the park, together with the following standards.*

### **Over the term of the management plan for the park:**

#### ***Natural Biological and Geological Diversity***

- The natural diversity and conservation status of flora and fauna in the park has been maintained or enhanced. Populations of rare, threatened or endangered species within the national park are stable or increasing. Populations of other native flora and fauna remain secure.
- The significant natural landforms and sites of geoheritage significance in the national park have not been disturbed.
- *Where required, relevant subsidiary plans (such as conservation plans for endangered species) have been prepared and implemented.*

#### ***Water Quality and Catchments***

- Protected Environmental Values under the State Policy on Water Quality Management have been maintained or enhanced.
- There has been no deterioration of water quality within the national park and the water quality at formerly polluted sites has improved.

#### ***Culturally Significant Sites and Areas***

- Sites and areas of Aboriginal cultural significance are conserved.
- Sites and areas of historic cultural significance are conserved.
- *Where required, relevant subsidiary plans (such as conservation plans for historic structures) have been prepared and implemented.*

#### ***Education and Interpretation***

- The significant natural and cultural values of the national park, and the purpose of reservation of the national park, are clearly explained to visitors and the general community. Aboriginal cultural heritage is interpreted in cooperation with the Aboriginal community.
- *Where required, relevant subsidiary plans (such as an interpretation plan) have been prepared and implemented.*

#### ***Research***

- Research is underway, and/or results are available, that contributes to the effective management of the national park, especially in furthering the purpose of reservation of the national park (i.e. the protection and maintenance of the natural and cultural values of the area of land while providing for ecologically sustainable recreation consistent with conserving those values), or in other ways contributes to scientific knowledge without adversely affecting the national park or its values.

#### ***Protection and Rehabilitation***

- There has been no loss or degradation of the identified significant natural or cultural values of the national park.

- Damaged or degraded significant natural or cultural values of the national park have been rehabilitated/conserved.
- Damage at formerly degraded sites in the national park has been rehabilitated, or is stable and not causing significant impact on the environmental, heritage or recreational values of the national park. There is no ongoing cumulative degradation of the national park's natural or cultural values.
- Threats or adverse impacts to the national park's natural and cultural values and assets (and, where relevant, to assets on neighbouring lands) have been identified and have been successfully averted, or are being actively managed within acceptable limits.
- There have been no unanticipated adverse impacts on the national park's natural or cultural values or assets (or, where relevant, on the assets on neighbouring lands) as a result of national park management decisions or actions, including the use of fire.
- Targeted fire regimes for the national park have been achieved.
- There has been no new establishment of introduced species in the national park (especially weeds, pests or pathogens), and the impact of pre-existing introduced species has been contained or reduced.
- *Where required, relevant subsidiary plans (such as weed management, fire management plans etc) have been prepared and implemented.*

#### **Tourism, Recreation and Enjoyment**

- Facilities and services that encourage and provide for tourism, recreational use and enjoyment are of a nature, size and location that is consistent with the conservation of the national park's natural and cultural values.
- Information and direction signs are sufficient to enable visitors to find their way easily to, and around, the national park and its facilities, and are consistent with the PWS Signs Manual. (There are no visitor complaints about the inadequacy of signage.) *Where required, a sign plan for the national park has been prepared and implemented.*
- Recreation and tourism facilities and services within the *national park* are provided in accordance with the provisions of the management plan, relevant site plan, zoning scheme and/or licence conditions. *Where required, a site plan has been prepared and implemented.*
- Use of the *national park* is consistent with the provisions of the management plan, other approved subsidiary plans, zoning scheme, and/or licence conditions.
- Visitors and other users of the national park cooperate with the Service in caring for the national park, its values and assets. (Vandalism is insignificant, or has significantly reduced in nature and severity. There have been no prosecutable incidents in the national park, or the level and significance of offences has significantly decreased. Visitors and other users of the national park generally comply with management advice and directives.)
- Visitor and community comments about the national park and its management are predominantly positive, especially with regard to :
  - the quality of their experience of the national park;
  - the quality of service provided by PWS staff, concessionaires and others;
  - the nature, quality and condition of visitor facilities provided in the national park; and
  - the nature and quality of information and educational material or programs provided.
- National park management has in place a system to monitor and, where appropriate, take action in response to visitor and/or community complaint or suggestions.
- The number of visits to the national park is within sustainable limits that do not cause unacceptable or cumulative impacts on the natural and cultural values of the national park.
- *Where required, subsidiary plans (such as visitor management or tourism strategy plans) have been prepared and implemented.*

***Cooperative Management Programs with Aborigines***

- Cooperative management programs have been developed with Aboriginal people in areas of significance to them.
- Management programs with Aboriginal people are consistent with the purpose of reservation and other management objectives.

***Wilderness Areas***

- There has been no loss of the natural, primitive and remote character of wilderness areas.

***Other Legal Obligations***

- All legal obligations related to the national park and its management have been met.
- There has been no loss of human life, injury or environment-related illness associated with use of the national park due to negligence on the part of management.

***Community Engagement***

- There is general community familiarity with, and support for, the national park and its management.
- Relevant community consultative and advisory committees and other key stakeholders are regularly informed about national park management progress and issues.
- The community is encouraged to participate in national park management planning processes and projects that assist national park management.
- Working relations between the community and PWS have improved, or remain excellent.