

MOUNT DOWLING NATURE RESERVE

PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

Part of the Department of Environment and Conservation (NSW)

March 2007

This plan of management was adopted by the Minister for the Environment on 1st March 2007.

Acknowledgments

The NPWS acknowledges that this nature reserve is located near the borders of Walgalu, Walbanga and Ngarigo Country and the area of the Bodalla Local Aboriginal Land Council.

This plan of management is based on a draft plan prepared by staff of the Queanbeyan Area, South West Slopes Region of the National Parks and Wildlife Service (now Parks and Wildlife Division of the Department of Environment and Conservation NSW).

Valuable information and comments were provided by NPWS specialists, other government agencies and members of the public. The NPWS would like to thank all those who submitted information and comments regarding the reserve.

Inquiries about this draft plan of management should be directed to the Ranger at the NPWS Queanbeyan Area Office, 6 Rutledge Street (PO Box 1189), Queanbeyan 2620 or by telephone on 6299 2929.

© **Department of Environment and Conservation (NSW) 2007:** Use permitted with appropriate acknowledgment

ISBN 1 74122 249 4

FOREWORD

Mount Dowling Nature Reserve lies about 65 kilometres south of Queanbeyan and 15 kilometres east of Bredbo, off the Bredbo-Jerangle Road. The reserve is 513 hectares in size and encompasses Mount Dowling, from which it gets its name.

Mount Dowling Nature Reserve is part of a much larger timbered and mountainous area. It is an important remnant of forest communities occurring in the Bredbo area, where significant forest has been cleared for agricultural development.

Of particular significance in the reserve is the silver-leaved mountain gum, which is listed as a threatened species. This species has a highly disjunct distribution in NSW and a large population has been identified in the Mount Dowling area.

Threatened animal species recorded in the reserve include koalas, yellow-bellied gliders, spotted-tailed quolls and eastern pygmy-possums.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each nature reserve. A plan of management is a legal document that outlines how an area will be managed in the years ahead.

A draft plan of management for Mount Dowling Nature Reserve was placed on public exhibition for three months from 10 June until 16 September 2005. The exhibition of the plan of management attracted five submissions, which were carefully considered before adopting this plan of management.

This plan of management establishes the scheme of operations for Mount Dowling Nature Reserve. In accordance with section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

Bob Debus
Minister for the Environment

CONTENTS

| | |
|---|-----------|
| 1. MANAGEMENT CONTEXT | 1 |
| 1.1 Legislative and Policy Framework | 1 |
| 1.2 Management Purposes and Principles | 1 |
| 1.2.1 Nature Reserves | 1 |
| 1.2.2 Regional Forest Agreements | 2 |
| Map of Reserve | 3 |
| 2. MOUNT DOWLING NATURE RESERVE | 4 |
| 2.1 Location, Gazettal and Regional Setting | 4 |
| 2.2 Landscape | 4 |
| 2.3 Natural and Cultural Heritage | 5 |
| 2.3.1 Landform, Geology and Soils | 5 |
| 2.3.2 Native Plants | 5 |
| 2.3.3 Native Animals | 6 |
| 2.4 Aboriginal Heritage | 6 |
| 2.5 Non-Aboriginal Heritage | 7 |
| 2.6 Public Use | 7 |
| 2.7 Threats to Reserve Values | 8 |
| 2.7.1 Soil Erosion | 8 |
| 2.7.2 Introduced Plants and Pest Animals | 8 |
| 2.7.3 Fire Management | 8 |
| 2.8 References | 9 |
| 3. MANAGEMENT ISSUES AND STRATEGIES | 10 |

1. MANAGEMENT CONTEXT

1.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of nature reserves in NSW is in the context of a legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act), the NPW Regulation, the *Threatened Species Conservation Act 1995* (TSC Act) and the policies of the National Parks and Wildlife Service (NPWS). Section 72AA of the NPW Act lists the matters to be considered in the preparation of a plan of management. The policies arise from the legislative background and internationally accepted principles of park management. They relate to nature conservation, Aboriginal and historic heritage conservation, recreation, commercial use, research and communication.

Other legislation, international agreements and charters may also apply to management of the area. In particular, the *Environmental Planning and Assessment Act 1979* (EPA Act) requires the assessment and mitigation of the environmental impacts of any works proposed in this plan.

The plan of management is a statutory document under the NPW Act. Once the Minister has adopted a plan, no operations may be undertaken within Mount Dowling Nature Reserve except in accordance with the plan. The plan will also apply to any future additions to Mount Dowling Nature Reserve. Where management strategies or works are proposed for the nature reserve or any additions that are not consistent with the plan, an amendment to the plan will be required.

1.2 MANAGEMENT PURPOSES AND PRINCIPLES

1.2.1 Nature Reserves

Nature reserves are reserved under the NPW Act to protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena.

Under the Act, nature reserves are managed to:

- conserve biodiversity, maintain ecosystem functions, and protect geological and geomorphological features and natural phenomena;
- conserve places, objects, features and landscapes of cultural value;
- promote public appreciation, enjoyment and understanding of the reserve's natural and cultural values; and
- provide for appropriate research and monitoring.

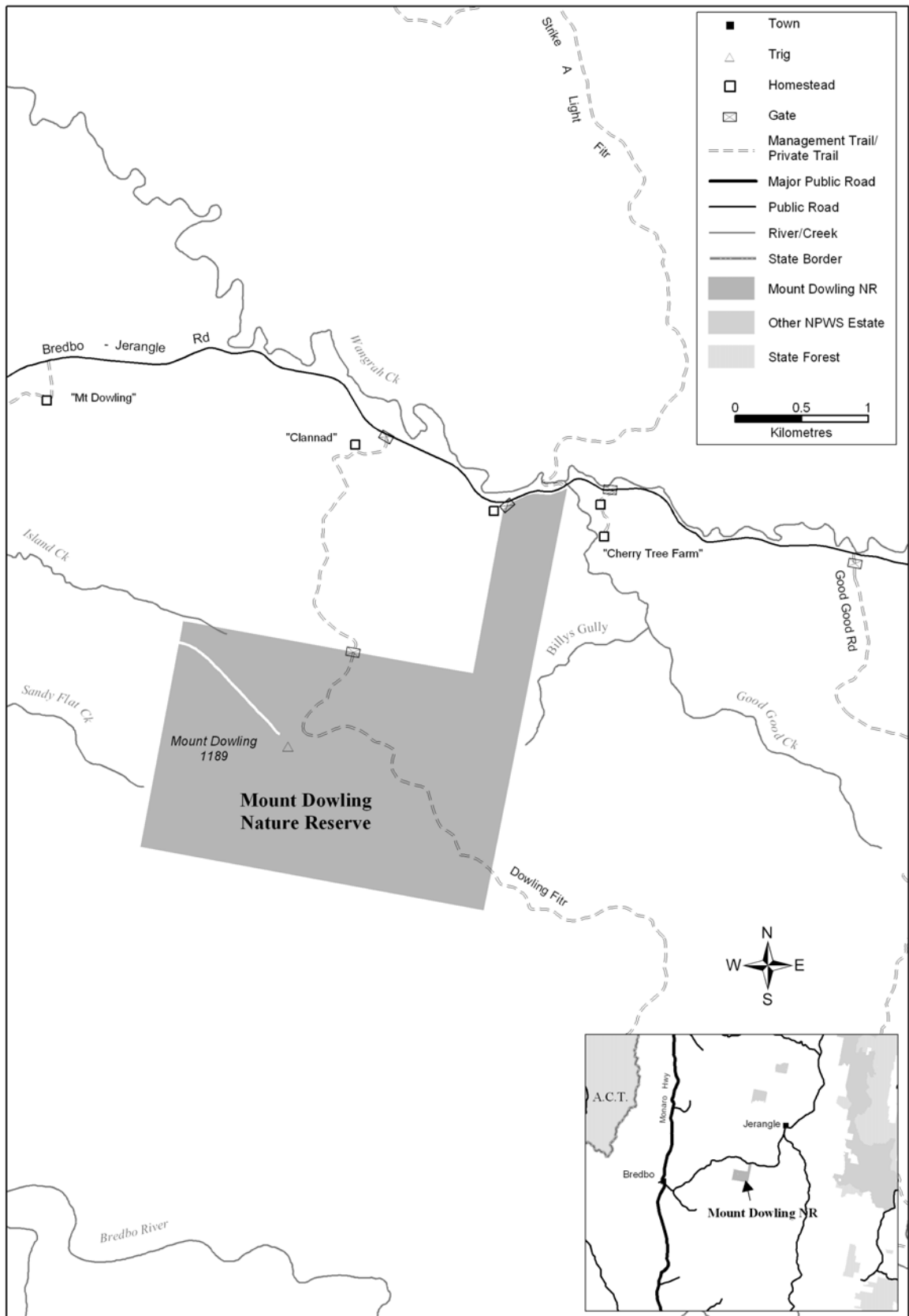
Nature reserves differ from national parks in that they do not have, as a management principle, to provide for visitor use.

1.2.2 Regional Forest Agreements

Regional Forest Agreements (RFA) are one of the principal means of implementing the National Forest Policy Statement of 1992. Under this Statement, Commonwealth, State and Territory governments agree to work towards a shared vision for Australia's forests. This aims to maintain native forest estate, manage it in an ecologically sustainable manner and develop sustainable forest-based industries. The Statement provided for joint comprehensive assessments of the natural, cultural, economic and social values of forests. These assessments formed the basis for negotiation of Regional Forest Agreements that provide, amongst other things, for Ecologically Sustainable Forest Management.

The Southern Region RFA covers the planning area. The process leading up to the RFA provided for major additions to the reserve system, including the establishment of Mount Dowling Nature Reserve.

MOUNT DOWLING NATURE RESERVE MAP



2. MOUNT DOWLING NATURE RESERVE

2.1 LOCATION, GAZETTAL AND REGIONAL SETTING

Mount Dowling Nature Reserve is located about 65 kilometres south of Queanbeyan and 15 kilometres east of Bredbo off the Bredbo-Jerangle Road. The reserve is 513 hectares in size and encompasses Mount Dowling, from which it gets its name. The land was transferred to the NPWS on 1 January 2001 as a result of the Southern Regional Forest Agreement (2000). Prior to gazettal, the reserve was Crown land held under an annual Permissive Occupancy grazing licence administered by the then Department of Land and Water Conservation.

The reserve forms only a small part of a much larger timbered and mountainous area. The reserve borders cleared agricultural lands to the west. Cattle and sheep grazing constitute the main land uses of surrounding cleared lands while the timbered and mountainous lands remain largely undeveloped.

Mount Dowling Nature Reserve is within the geographical area of Cooma-Monaro Shire Council, the Upper Murrumbidgee Catchment Management Authority, Cooma Rural Lands Protection Board and the Bodalla Local Aboriginal Land Council.

2.2 LANDSCAPE

Natural and cultural heritage and on-going uses are strongly inter-related and together form the landscape of an area. Much of the Australian environment has been influenced by past Aboriginal and non-Aboriginal land use practices, and the activities of modern day Australians continue to influence bushland through recreational use, cultural practices, the presence of introduced plants and animals and in some cases air and water pollution.

Mount Dowling Nature Reserve is part of a heavily timbered and mountainous area. Mount Dowling itself is a prominent feature in this landscape. It is at the westernmost edge of a long west-east ridge divided by Wangrah Creek to the north and the Bredbo River to the south. The western boundary of the reserve borders rolling hills that are mostly cleared.

The geology, landforms, climate and plant and animal communities of the area, plus its location, have determined how humans have used it. The reserve represents only a small part of what was a much larger landscape utilised by traditional Aboriginal society for uses such as hunting and gathering. Historically it constituted a part of a timbered backdrop to pastoral and farming enterprises. Its environmental attributes resulted in very limited use for activities such as grazing and timber getting. Due to its relative remoteness and inaccessibility it is not a popular area for recreation.

Both Aboriginal and non-Aboriginal people place cultural values on natural areas, including aesthetic, social, spiritual, recreational and other values. Cultural values may be attached to the landscape as a whole or to individual components, for example to plant and animal species used by Aboriginal people. This plan of management aims to conserve both natural and cultural values. For reasons of clarity and document usefulness natural and cultural heritage, non-human threats and on-going use are dealt with individually, but their inter-relationships are recognised.

2.3 NATURAL AND CULTURAL HERITAGE

2.3.1 Landform, Geology and Soils

Mount Dowling Nature Reserve comprises the summit and slopes of Mount Dowling, which rises to 1200 metres. Areas of rock scree and small outcrops are a feature on its western side. A number of non-perennial creeks rise in the reserve, such as Billys Gully.

The reserve's geology is dominated by metasediments of the Foxlow Beds. The western slopes of Mount Dowling comprise granitic material of the Michelago Igneous Complex.

Dominant topsoil materials of the metasediments are made up of orange-brown gravelly loams with over 50 per cent rock fragments of various sizes, consisting of coarse gravels and cobbles of shale, slate and greywacke. Quartz coarse gravels are also present. Dominant topsoil materials of the granitic area are made up of loamy coarse sand with bedrock often near the surface. Soil characteristics in the reserve can be described as stony, shallow, highly erodible, strongly acidic, with a low fertility and water holding capacity (Jenkins, 1993).

2.3.2 Native Plants

Dry shrub and tussock grass forests dominate the vegetation communities found in Mount Dowling Nature Reserve. The reserve is an important remnant of forest communities occurring in the Bredbo area, where significant areas of land have been cleared for agricultural development.

The forests typically comprise varying alliances of Red Stringybark *Eucalyptus macrorhyncha*, Brittle Gum *E. mannifera*, Scribbly Gum *E. rossii*, Candlebark *E. rubida* and Broad-leaved Peppermint *E. dives*. The forest floor comprises a variety of forbs, shrubs and small trees. The tussock grass Red-anther Wallaby Grass *Joycea pallida* and Poa grasses generally dominate the ground layer. The shrub layer is often dense, possibly as a result of regeneration after a wildfire in 1987.

Variants to the typical dry forest trees occur in some parts of the reserve. For example, Apple Box *E. bridgesiana* is frequently found bordering valley floors, Ribbon Gum *E. viminalis* is found on sheltered slopes and in gullies, Black Sallee *E. stellulata* is located in a frost hollow in the north of the reserve, and Black Cypress-pine *Callitris endlicheri* occurs on the granitic western slopes of Mount Dowling.

Of particular significance in the reserve is the Silver-leaved Mountain Gum *E. pulverulenta*. This small tree is listed as vulnerable under the *Threatened Species Conservation Act 1995* (TSC Act). It typically occurs in the Mount Dowling area on metasediments on the crests or upper slopes of moderately steep hillsides. The species has a highly disjunct distribution in NSW and a large population has been identified in the Mount Dowling area (Briggs & Leigh, 1990). Threats to this species in the reserve include earthworks, such as the construction of new firebreaks or trails, and frequent fire.

Past land uses have affected vegetation in the reserve in a relatively insignificant way. The main uses were limited sheep and cattle grazing.

2.3.3 Native Animals

A variety of native animals occur in Mount Dowling Nature Reserve, including bats, macropods, possums, gliders, reptiles and amphibians. A fauna survey was carried out in the reserve in 2002 (Mills & Reside, 2003). Common species recorded included the Eastern Grey Kangaroo *Macropus giganteus*, Swamp Wallaby *Wallabia bicolor*, Sugar Glider *Petaurus breviceps*, Brushtail Possum *Trichosurus vulpecula*, Short-beaked Echidna *Tachyglossus aculeatus* and Common Wombat *Vombatus ursinus*.

Limited bird species have been recorded due to limited surveys. However, a diversity of species is expected to occur. The Superb Lyrebird *Menura novaehollandiae* is prevalent in the reserve.

The Koala *Phascolarctos cinereus* is listed as vulnerable under the TSC Act. Following reports of Koalas in the area, the Australian Koala Foundation in conjunction with the NPWS conducted a formal survey of the reserve in 2003. A further survey was carried out by the NPWS in 2004. Although no Koalas were sighted, evidence of Koalas was found throughout the reserve in low to medium density and in a variety of trees, including Brittle Gum *E. mannifera*, Scribbly Gum *E. rossii*, Red Stringybark *E. macrorhyncha* and Ribbon Gum *E. viminalis*. The unusual habit of bark chewing on smooth-barked gums has been recorded in the reserve. Koalas in the reserve probably represent the northern distribution of a Monaro population.

Other threatened animals have been recorded in the reserve through analysis of predator scats from foxes and dogs. These include the Yellow-bellied Glider *Petaurus australis*, Spotted-tailed Quoll *Dasyurus maculatus* and Eastern Pygmy-possum *Cercartetus nanus* (Mills & Reside, 2003).

Threats to threatened animals in the reserve include predation by introduced animals, gross changes in forest structure from impacts such as high intensity or too frequent fire, and fragmentation of habitat outside of the reserve.

The reserve is a small part of a much larger timbered area. The protection of native animals in the area is reliant on the adequate protection of habitat over a much larger scale. The reserve's habitat value is best appreciated when viewed as a component of a greater range of habitats surrounding the reserve, including forest, woodland, grassland and riparian environments.

2.4 ABORIGINAL HERITAGE

Mount Dowling Nature Reserve is located in an area that was occupied by the Ngarigo people. Neighbouring people included the Walgalu, Ngunawal and Walbanga (Tindale, 1974).

Traditional use, such as hunting, gathering and ceremony, would have taken place over the entire landscape, of which the reserve is only a small part. Aboriginal communities have an association and connection to the land. The land and water values within the reserve landscape are a part of Aboriginal spirituality and contribute to Aboriginal identity.

There are no recorded Aboriginal sites though no formal surveys in the reserve have been undertaken.

While the NPWS presently has legal responsibility for the protection of Aboriginal sites and places, it acknowledges the right of Aboriginal people to make decisions about their own heritage. It is therefore policy that Aboriginal communities be consulted and involved in the management of Aboriginal sites, places and related issues and the promotion and presentation of Aboriginal culture and history. The reserve is within the area of the Bodalla Local Aboriginal Land Council. The Buru Ngunawal Aboriginal Corporation is a recognised elders' group that also has an interest in the area.

2.5 NON-ABORIGINAL HERITAGE

The first known Europeans to visit the northern Monaro were members of an exploration party led by Captain Currie in 1823. Settlement of explored areas was quick to follow, with squatters entrenched in most areas by 1830.

Large pastoral runs, such as Bredbo Station and Good Good Holdings were set up in the region. These runs took advantage of the grazing opportunities in the plains and valleys and seldom extended into timbered mountainous areas such as Mount Dowling.

Mount Dowling Nature Reserve has been held under various Crown leases since 1885.

The landscape of the reserve remains largely unmodified. Past European land uses in the reserve area were limited grazing and timber getting, however, the rocky and skeletal soils combined with the sparse vegetative cover allowed only marginal use for these purposes.

The only item of European heritage significance identified in the reserve is the trig station on the summit of Mount Dowling, established in 1896 (Dearling, 2003).

2.6 PUBLIC USE

The primary purposes of nature reserves are conservation of wildlife and natural environments and provision of opportunities for education and scientific research into these resources.

Public access to the reserve is limited to one point off the Bredbo-Jerangle Road. There is no trail in this area so access is by foot only. The Dowling Fire Trail traverses the reserve. This trail is not a legal right of way and users should seek permission from adjoining landholders (which can be refused).

For the above reasons recreational facilities will not be provided in the reserve and the reserve will not be promoted for recreational use. Notwithstanding, it is recognised that the reserve can provide a resource for people to enjoy, appreciate and understand the natural environment. Appropriate recreation activities, consistent with the purposes of gazettal and management objectives, include day-use bushwalking, nature study and educational and research activity.

2.7 THREATS TO RESERVE VALUES

2.7.1 Soil Erosion

Soils in Mount Dowling Nature Reserve are stony, highly erodible and with a low water holding capacity. Much of the reserve's terrain is very steep and likely to erode if disturbed. Care must be taken to avoid activities likely to lead to erosion.

2.7.2 Introduced Plants and Pest Animals

An introduced species is defined in this plan as any plant or animal species not native to Australia. Introduced species within Mount Dowling Nature Reserve and on adjoining land are of concern because they have the potential to have detrimental effects on ecological values and can spread to and from neighbouring land. In addition, the *Noxious Weeds Act 1993* places an obligation upon public authorities to control noxious weeds on land that they occupy to the extent necessary to prevent such weeds spreading to adjoining lands.

The NPWS aims to manage populations of introduced plants and animals to minimise adverse impacts by employing best practice methods. There is a clear recognition that the eradication of introduced species is generally not feasible. Pest management will be undertaken in accordance with strategies and recommendations outlined in the NPWS South West Slopes Region Pest Management Strategy (2003) and relevant Threat Abatement Plans.

The most serious weeds in the reserve are Serrated Tussock *Nassella trichotoma* and Viper's Bugloss *Echium vulgare*, which occur in small infestations along the northern boundary.

There is the possibility of the spread of other serious weeds from surrounding lands into the reserve (which have not yet been identified in the reserve), including St John's Wort *Hypericum perforatum* and African Lovegrass *Eragrostis curvula*.

The fox *Vulpes vulpes*, feral pig *Sus scrofa* and wild dog *Canis lupus* are pest animals of a serious nature identified in the reserve. The rabbit *Oryctolagus cuniculus*, feral goat *Capra hirtus*, feral cat *Felis cattus*, feral deer *Dama dama/cervus* and straying sheep and cattle are other pest animals of a less serious nature possibly occurring in the reserve.

2.7.3 Fire Management

The management of fire in Mount Dowling Nature Reserve is an important and complex issue. Management must aim to achieve both long-term conservation of natural communities and ongoing protection of life and property within and adjacent to the reserve.

Fire is a natural feature of many environments and is essential to the survival of some plant communities. Inappropriate fire regimes, however, can lead to loss of particular plant and animal species and communities. Fire can also damage sites or objects of cultural heritage value and can threaten visitors and neighbouring land. High frequency fire is listed as a key threatening process under the TSC Act.

A separate map-based Fire Management Strategy will be developed for the reserve in accordance with the NPWS Fire Management Strategy (NPWS, 2003).

A wildfire last occurred in the reserve in February 1987, which burnt much of the reserve.

2.8 REFERENCES

Briggs, JD and Leigh, JH. 1990. *Delineation of Important Habitats of Threatened Plant Species in Southeastern NSW*. Research Report to the Australian Heritage Commission.

Dearling, Charles. 2003. *Preliminary European Cultural Heritage (Desktop) Study – Selected National Parks and Nature Reserves*. Report to NPWS, South West Slopes Region.

Jenkins, BR. 1993. *Soil Landscapes of the Michelago 1:100 000 Sheet (Captains Flat, Jerangle, Bredbo, Tharwa)* Dept of Conservation and Land Management, NSW.

Mills, D Dr and Reside, James. 2003. *Fauna Surveys of Selected National Parks and Nature Reserves in the NSW NPWS Southern Directorate*. Report to NPWS.

NPWS. 2003. *South West Slopes Region Pest Management Strategy*.

NPWS. 2003. *NPWS Fire Management Strategy*.

Tindale, NB. 1974. *Aboriginal Tribes of Australia*. ANU Press, Canberra.

3. MANAGEMENT ISSUES AND STRATEGIES

| Current Situation | Desired Outcomes | Strategies | Priority |
|---|--|--|---------------|
| <p>Soil and water conservation</p> <p>Soils in the reserve are highly erodible when disturbed.</p> | <p>Soil erosion is minimised.</p> | <p>Undertake work as necessary on the Dowling Fire Trail where it traverses the reserve, to minimise soil erosion.</p> | <p>Medium</p> |
| | <p>Water quality and health of reserve streams are maintained.</p> | <p>The construction of new trails and tracks is not permitted.</p> | <p>High</p> |
| | | <p>Any development of new boundary fire breaks will leave ground layer grasses and shrubs in situ.</p> | <p>Medium</p> |
| | | <p>Any earthworks carried out during a bushfire will be rehabilitated as soon as possible after the event.</p> | <p>High</p> |

| Current Situation | Desired Outcomes | Strategies | Priority |
|--|---|--|--|
| <p>Native plant and animal conservation</p> <p>Limited formal surveys for animals have been carried out in the reserve.</p> <p>The reserve provides habitat for the threatened Koala and other animal species. Threats to these species include fragmented habitat, gross changes in forest structure as a result of frequent and high intensity fire, and predation by introduced animals.</p> <p>The reserve protects populations of the threatened Silver-leaved Mountain Gum <i>E. pulverulenta</i>. Threats to this species in the reserve include earthworks, such as the construction of new firebreaks or trails, and frequent fire.</p> <p>The protection of native animals in the area is reliant on the adequate protection of habitat over a much larger scale.</p> | <p>All native plant and animal species and communities are conserved.</p> <p>Structural diversity and habitat values are maintained and restored.</p> | <p>A survey targeting threatened species will be undertaken.</p> <p>A survey targeting the Koala, including its distribution, abundance, and recommendations for its conservation in the reserve will be undertaken.</p> <p>A comprehensive map of the reserve and surrounding area showing all known populations of <i>E. pulverulenta</i> will be prepared. This information will also be recorded on the reserve fire operations map so that fire managers can ensure populations are avoided during fire suppression operations.</p> <p>Any applicable measures included in recovery plans for threatened species will be implemented.</p> <p>Detail fire management guidelines for the conservation of the reserve's vegetation communities as part of the fire operations map (see Fire Management).</p> <p>Any offers of undeveloped land in the reserve area should be considered by the NPWS for addition to the reserve.</p> <p>Work with neighbours and vegetation management committees to encourage conservation of remnant native vegetation in the vicinity of the reserve.</p> | <p>Medium</p> <p>Medium</p> <p>High</p> <p>High</p> <p>Medium</p> <p>Medium</p> <p>Low</p> |

| Current Situation | Desired Outcomes | Strategies | Priority |
|--|--|--|--|
| <p>Introduced species</p> <p>The most serious weeds in the reserve are Serrated Tussock and Viper's Bugloss.</p> <p>There is the possibility of the spread of other serious weeds from surrounding lands into the reserve (which have not yet been identified in the reserve).</p> <p>The fox and wild dog are pest animals of a serious nature identified in the reserve. The rabbit, goat, cat, deer and straying sheep and cattle are other pest animals of a less serious nature possibly occurring in the reserve.</p> <p>Pest animals have a negative impact on habitat and native animals. Due to the small size of the reserve, any control programs would be futile unless carried out over a larger area with all landholders co-operating.</p> | <p>The impact of introduced species on native species and neighbouring lands is minimised.</p> | <p>Implement control programs for weeds as per the Regional Pest Management Strategy. Priority will be given to Serrated Tussock and Viper's Bugloss.</p> <p>Monitor the reserve for significant noxious and environmental weeds. Treat any new infestations.</p> <p>Implement pest animal control programs for priority species in accordance with the regional pest management strategy, but only in co-operation with, or when co-ordinated by all adjacent landholders and/or the Cooma Rural Lands Protection Board. Programs must meet the objectives of the reserve and broader community and be demonstrated to have low impacts on native wildlife.</p> <p>Ensure that all boundary fences are stock-proof where required. Manage boundary fencing in accordance with the NPWS Boundary Fence policy and in co-operation with adjacent landholders.</p> | <p>High</p> <p>Medium</p> <p>Medium</p> <p>Low</p> |

| Current Situation | Desired Outcomes | Strategies | Priority |
|--|--|---|---|
| <p>Fire management</p> <p>Fire is a natural feature of many environments and is essential to the survival of some plant communities. Inappropriate fire regimes, however, can lead to loss of particular plant and animal species and communities. Fire can also damage objects and places of cultural value and can threaten visitors and neighbouring land.</p> <p>The reserve is only a small part of a much larger timbered area.</p> <p>The Dowling Fire Trail traverses the reserve.</p> <p>A wildfire burnt much of the reserve in 1987.</p> | <p>Life, property and natural and cultural values are protected from bushfire.</p> <p>Fire regimes are appropriate for conservation of plant and animal communities.</p> | <p>Participate in the Snowy River and Cooma-Monaro District Bush Fire Management Committee. Maintain co-ordination and co-operation with the Rural Fire Service (including the Bredbo, Peak View, Jerangle and Numeralla Rural Fire Brigades), and adjacent landholders with regard to fire management strategies.</p> <p>Suppress all unplanned fires in the reserves during periods of high fire danger to minimise damage to surrounding lands.</p> <p>Develop a map-based Fire Management Strategy and Fire Operations Map for the reserve by the end of 2006.</p> <p>Maintain the Dowling Fire Trail in the reserve.</p> | <p>High</p> <p>High</p> <p>High</p> <p>Medium</p> |

| Current Situation | Desired Outcomes | Strategies | Priority |
|---|---|--|---|
| <p>Cultural heritage</p> <p>No Aboriginal sites have been identified, however, no formal surveys have been carried out in the reserve.</p> <p>Threats to Aboriginal sites include activities such as trail maintenance works.</p> <p>The reserve is within the area of the Bodalla Local Aboriginal Land Council. The Buru Ngunawal Aboriginal Corporation is a native title claimant and a recognised elders' group that also has an interest in the area.</p> <p>The Trig Station on Mount Dowling has been identified as an item of local historic heritage significance.</p> | <p>Aboriginal features and values are identified and protected.</p> <p>Aboriginal people are involved in management of the Aboriginal cultural values in the reserve.</p> <p>Cultural features are conserved and managed in accordance with their significance.</p> | <p>Precede all new works/activities likely to lead to ground disturbance by an assessment for cultural features.</p> <p>Consult and involve the Bodalla Local Aboriginal Land Council, the Buru Ngunawal Aboriginal Corporation and other relevant Aboriginal community organisations in the management of Aboriginal sites, places and values, including interpretation of places or values.</p> <p>Encourage further research into the Aboriginal heritage values of the reserve in close consultation with relevant stakeholders and community members.</p> <p>Continue to build on existing relationships with local Aboriginal community to enhance exchange of information about reserve values.</p> | <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> |
| <p>Visitor use</p> <p>Public access to the reserve is limited to one point and is by walking only.</p> <p>Vehicle access to the reserve via the Dowling Fire Trail traverses private property and is not a public right of way.</p> <p>There are no visitor facilities in the reserve.</p> | <p>The local community is aware of the significance of the area and of management programs.</p> <p>Visitor use is ecologically sustainable.</p> | <p>Recreational facilities in the reserve will not be provided and the reserve will not be promoted for recreational use.</p> <p>In accordance with the objectives of a nature reserve, allow day-use bushwalking, nature study, educational and research activity, but not commercial activities, community events, orienteering or overnight camping.</p> <p>Inform any people wishing to access the reserve via Dowling Fire Trail of the need to seek permission from neighbours to cross their land.</p> | <p>Medium</p> <p>Low</p> <p>High</p> |

| Current Situation | Desired Outcomes | Strategies | Priority |
|---|--|---|------------|
| <p>Research</p> <p>Further research will improve understanding of the reserve's natural and cultural heritage, the processes that affect them and the requirements for management of particular species.</p> <p>Priority fields for research in the reserve are threatened plants and animals.</p> | <p>Research enhances the management information base and has minimal environmental impact.</p> | <p>Undertake and encourage research to improve knowledge and management of natural and cultural heritage.</p> | <p>Low</p> |

High priority activities are those imperative to achievement of the objectives and desired outcomes. They must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.

Medium priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent.

Low priority activities are desirable to achieve management objectives and desired outcomes but can wait until resources become available.