

**GARDENS OF STONE NATIONAL PARK  
PLAN OF MANAGEMENT**

**National Parks and Wildlife Service  
Part of the Department of Environment and Climate Change NSW**

**June 2009**

**This plan of management was adopted by the Minister for Climate Change and the Environment on 24<sup>th</sup> June 2009.**

**Acknowledgments:**

This plan of management is based on a draft plan prepared by National Parks and Wildlife Service staff, Blue Mountains Region. The assistance from members of the Blue Mountains Advisory Committee and National Parks and Wildlife Advisory Council is gratefully acknowledged.

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## FOREWORD

Gardens of Stone National Park comprises 15,010 hectares of varied terrain from limestone outcrops to sandstone escarpments. It is located on the western fringe of the Sydney Basin, 35 kilometres north of Lithgow. The park adjoins the western boundary of Wollemi National Park.

Important values of the park include the spectacular wild and rugged scenery, a diversity of natural environments, a large number of eucalypt species, the occurrence of threatened or restricted native plant and animal species, and its cultural heritage. Because of its values, Gardens of Stone National Park has been included as part of the Greater Blue Mountains World Heritage Area.

The park offers opportunities, in conjunction with other conservation areas in the Sydney sandstone system, for the conservation of evolutionary and ecological processes, solitude and a range of recreation opportunities.

The *National Parks and Wildlife Act 1974* requires the preparation of plans of management and details the process for preparation, exhibition and adoption of a plan of management. A draft plan of management for Gardens of Stone National Park was placed on public exhibition from 3<sup>rd</sup> September until 20<sup>th</sup> December 2004. The submissions received were carefully considered before adopting this plan.

This plan of management contains a number of actions to help achieve Priority E4 in the State Plan, *Better environmental outcomes for native vegetation, biodiversity, land, rivers, and coastal waterways*, including active rehabilitation of a degraded areas, activities to assist in the recovery of threatened species, control of weeds and feral animals, and preparation of a revised fire management strategy for the park.

In accordance with section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

**Carmel Tebbutt MP**  
**Deputy Premier**  
**Minister for Climate Change and the Environment**



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# 1. NATIONAL PARKS IN NSW

## 1.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of national parks in NSW is in the context of a legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act), the *National Parks and Wildlife Regulation*, the *Threatened Species Conservation Act 1995* and the policies of the National Parks and Wildlife Service. The policies are based on 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* requires the assessment and mitigation of the environmental impacts of any works proposed in this plan. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* also applies in relation to actions that may impact on World Heritage values.

A plan of management is a statutory document under the NPW Act. Once the Minister has adopted a plan, no operations may be undertaken within the national park except in accordance with this plan. This plan will also apply to any future additions to the national park. Should management strategies or works be proposed for the park or any additions that are not consistent with the plan, an amendment to the plan will be required.

## 1.2 MANAGEMENT PURPOSES AND PRINCIPLES

National parks are reserved under the NPW Act to protect and conserve areas containing outstanding or representative ecosystems, natural or cultural features or landscapes or phenomena that provide opportunities for public appreciation and inspiration and sustainable visitor use.

Under the Act, national parks are managed to:

- conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and maintain natural landscapes;
- conserve places, objects, features and landscapes of cultural value;
- protect the ecological integrity of one or more ecosystems for present and future generations;
- promote public appreciation and understanding of the park's natural and cultural values;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of natural and cultural values;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of natural and cultural values; and
- provide for appropriate research and monitoring.

### 1.3 WORLD HERITAGE

The International Convention for the Protection of the World Cultural and Natural Heritage was adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1972, and ratified by Australia in 1974. The Convention provides a framework for international cooperation and the collective protection of cultural and natural heritage of outstanding universal value.

In November 2000, the Greater Blue Mountains Area was inscribed on the World Heritage List on the grounds of natural criteria (NPWS and Environment Australia, 1998). The listed area of over one million hectares includes Gardens of Stone, Yengo, Wollemi, Blue Mountains, Kanangra-Boyd, Nattai and Thirlmere Lakes National Parks and Jenolan Karst Conservation Reserve.

The Greater Blue Mountains World Heritage Area was inscribed on the World Heritage List because it satisfies the following criteria for natural values of outstanding universal significance. It contains:

- outstanding examples of significant ongoing ecological and biological processes in the evolution and development of ecosystems and communities of plants and animals (*criterion II*), particularly eucalypt-dominated ecosystems; and
- important and significant natural habitats for in-situ conservation of biological diversity (*criterion IV*), including the eucalypts and eucalypt-dominated communities, primitive species with Gondwanan affinities such as the Wollemi pine, and a diversity of rare or threatened plants and animals of conservation significance.

This plan has been prepared in accordance with the Convention for the Protection of the World Cultural and Natural Heritage. In accordance with the Convention, this park will be managed to identify, protect, conserve, present and transmit to future generations, the World Heritage Values of the property. The park will also be managed in accordance with the Greater Blue Mountains World Heritage Area Strategic Plan.



## 2. GARDENS OF STONE NATIONAL PARK

### 2.1 LOCATION, HISTORY OF DEDICATION AND REGIONAL CONTEXT

Gardens of Stone National Park consists of three separate areas comprising a total area of 15,010 hectares of varied terrain from limestone outcrops to sandstone escarpments. The park extends east from the Castlereagh Highway between Cullen Bullen and Capertee, its eastern most boundary the Wollemi National Park. To the north, the park boundary is Glen Davis Road and farmland in the Capertee Valley (Map 1).

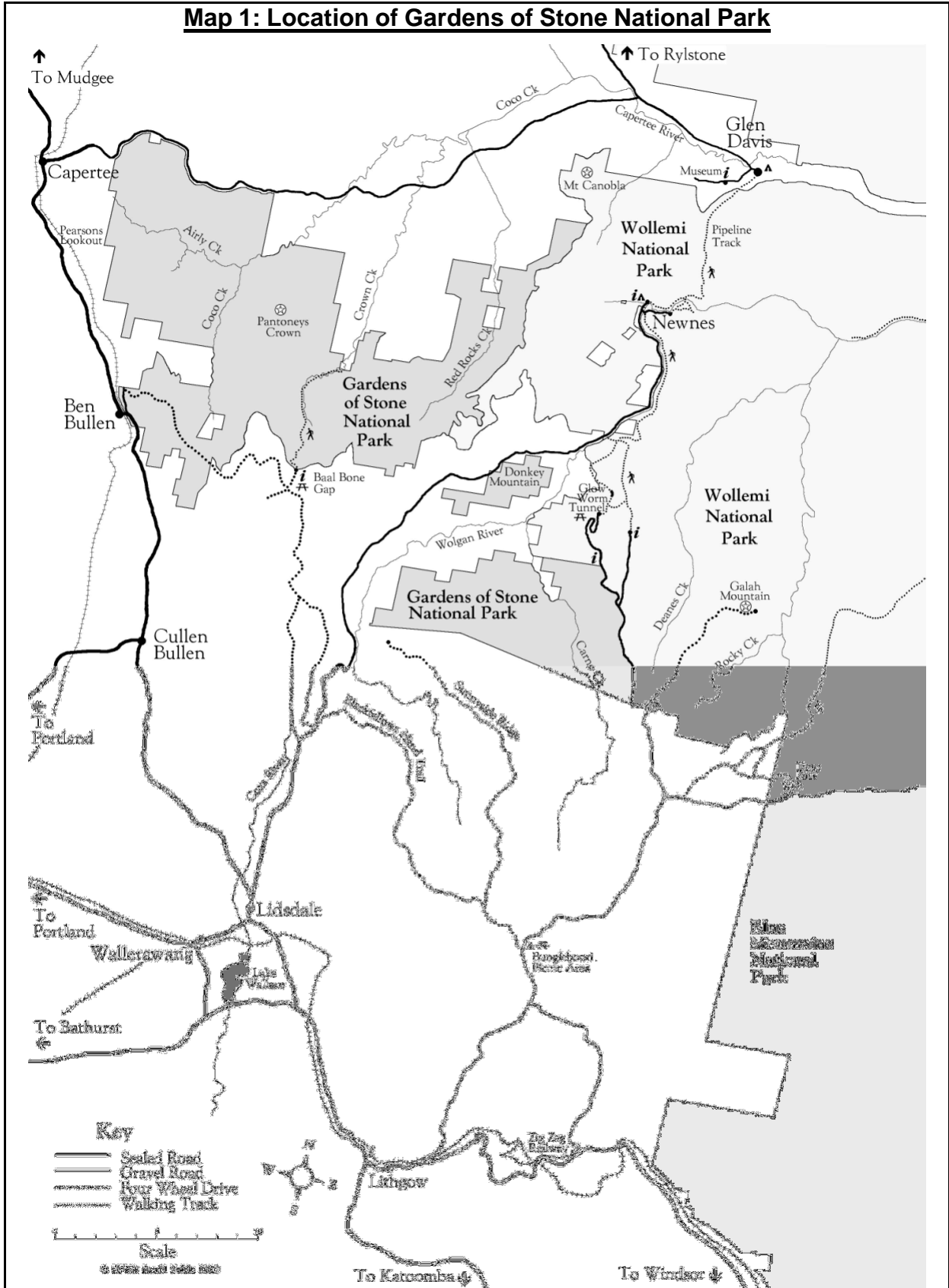
The National Parks and Primitive Areas Council proposed Newnes Plateau, as part of the Greater Blue Mountains National Park, for reservation in 1932. The National Trust in 1966 proposed a Pinnacles State Park. Pantoneys Crown Nature Reserve was gazetted in 1977 and included 3,230 hectares. In 1984 the National Parks Association proposed a western extension of the Wollemi National Park. In September 1985 the Colo Committee, Colong Committee and Federation of Bushwalking Clubs made a detailed Gardens of Stone proposal for extensions to Wollemi National Park. The Colong Foundation for Wilderness then put forward a modified and successful proposal in April 1993. This proposal involved a proposed national park of 18,030 hectares. Gardens of Stone National Park was proclaimed on the 30th November 1994. On the 22<sup>nd</sup> of December 1995 Pantoneys Crown Nature Reserve was added to the park. The name “Gardens of Stone” is a tribute to the park’s heathland and geodiversity as exemplified by the pagoda formations.

Gardens of Stone National Park is part of a chain of protected natural lands surrounding the Sydney metropolitan area. This chain of reserves acts as a large integrated natural bushland system that preserves the links between the Sydney, Hunter, Central West and Southern Tablelands of New South Wales. The northern, southern and western sections of the park adjoin regions where large-scale agricultural and mining development has occurred in the last decade.

Several planning instruments including the *Lithgow Council Local Environmental Plan* (LEP) affect landholdings adjacent to the park. These instruments, in addition to the National Parks and Wildlife Act 1974, affect management and development activities adjoining the park. *State Environmental Planning Policy No. 4* is also relevant in terms of development control within the park. The *Catchment Management Act 1989*, with the support of Total Catchment Management (TCM) Authorities, provides a framework to manage the Capertee River that is within the Hawkesbury Nepean Catchment and is incorporated within the Hawkesbury Nepean Catchment Action Plan.

Due to its remote location and limited access, Gardens of Stone National Park is well placed to provide recreation opportunities towards the less developed end of the recreational opportunity spectrum.

**Map 1: Location of Gardens of Stone National Park**



## 2.2 VALUES OF GARDENS OF STONE NATIONAL PARK

### Geology

The park contains a diverse array of geological and geomorphological features such as pagoda rock formations, quaternary alluvium deposits, limestone outcrops, karst and a variety of impressive scenic formations including deep gorges, canyons, hanging swamps, waterfalls and precipitous sandstone escarpments.

### Vegetation

The park lies within the Central Tablelands Division of NSW. The park plays a significant role in conserving vegetation communities of this botanical region, particularly its drier northern extent, and eucalypt species. Over 400 plant species were identified in a recent survey of the park, including 16 threatened or rare species.

The variation in topography, altitude, aspect, fire regime and microclimates has resulted in diversity of vegetation structure and composition. For example, the Illawarra and Singleton Coal Measures which outcrop in the western escarpment areas of the park produce deep clay loams that support poorly represented Yellow-Box / Ironbark Woodland communities. These are considered important habitat for the threatened regent honeyeater (*Xanthomyza phrygia*) and turquoise parrot (*Neophema pulchella*). The exposed limestone outcrops of the older Devonian sediments in the Crown Creek area support the rare White Box / Grassy Woodland and White Box / Grass Tree / Spinifex Woodland communities.

### Fauna

A number of threatened mammal and bird species have been recorded within the park such as the brush-tailed rock wallaby (*Petrogale penicillata*), large pied bat (*Chalinolobus dwyeri*), tiger quoll (*Dasyurus maculatus*), glossy black cockatoo (*Calyptorhynchus lathami*), turquoise parrot (*Neophema pulchella*), powerful owl (*Ninox strenua*), peregrine falcon (*Falco peregrinus*) and regent honeyeater (*Xanthomyza phrygia*). Other threatened species, such as the yellow bellied glider (*Petaurus australis*) and the booroolong frog (*Litoria booroolongensis*) recorded in nearby areas, are also likely to rely on the park for habitat.

### Recreation

Gardens of Stone National Park is one of a number of conservation reserves in close proximity to Sydney and the Central Western regions. Its distance from Sydney and remote and rugged terrain limits the number of visitors and type of recreation.

### Cultural Heritage

As the Capertee and Wolgan Valleys contain numerous Aboriginal sites, it is expected that many sites will be found in the park following a cultural survey. To date, however, the park has not been fully surveyed.

A still-used water pipeline, which was the main source of water to the former shale-mining town of Glen Davis, traverses the park en route to the former township site. There are also the remains of huts that were used for pipeline construction and of fences from past grazing activities. Relics from previous coal mining ventures such as ruins, adits and surface deposits of coal also remain in the park.

### 3. OBJECTIVES OF MANAGEMENT

#### 3.1 SPECIFIC OBJECTIVES FOR GARDENS OF STONE NATIONAL PARK

In addition to the general management principles for national parks (refer section 2.1), the following specific objectives apply to the park:

- \* manage the park in recognition of its role as part of a world heritage area and as part of a contiguous system of parks, reserves and other protected lands;
- \* protect fragile geodiversity, including fragile sandstone pagoda formations and limestone outcrops;
- \* maintain the park's biodiversity with emphasis on the protection of threatened floral and faunal species such as *Eucalyptus cannonii*, *Grevillea obtusiflora* sub species *fecunda*, *Haloragodendron lucasii*, *Persoonia marginata* and brush-tailed rock wallaby (*Petrogale penicillata*), large pied bat (*Chalinolobus dwyeri*), tiger quoll (*Dasyurus maculatus*), glossy black cockatoo (*Calyptorhynchus lathamii*), turquoise parrot (*Neophema pulchella*), powerful owl (*Ninox strenua*) and regent honeyeater (*Xanthomyza phrygia*);
- \* protect the park's catchment values of Airly, Coco, Crown, Red Rocks and Carne Creeks;
- \* promote public awareness, understanding and appreciation of the park with emphasis on:
  - the natural and cultural values, particularly World Heritage values;
  - threatening processes and minimal impact use; and
  - community participation in park management.

#### 3.2 OVERALL STRATEGY

Given the regional context of the park, there will be two major management emphases for the park during the life of this plan:

- implementation of a coordinated management strategy with adjacent conservation reserves to enhance their ecological integrity as the largest natural area in eastern New South Wales; and
- promotion of appropriate land use planning and management amongst relevant land management authorities to ensure protection of the park's outstanding natural and cultural values from adverse external impacts.

Emphasis will also be given to the following specific management strategies:

- the precautionary principles of ecologically sustainable development will be applied to the geodiversity, with particular emphasis on pagoda rock formations and limestone landscapes.
- ongoing monitoring and improved management of recreation activities which have the potential for adverse impacts on the park's natural and cultural features, particularly its areas of wilderness quality;

- monitoring and regulation of commercial tourism and recreation to minimise potential adverse impacts and enhance opportunities for visitor appreciation and understanding;
- survey and monitoring of the park's natural heritage to contribute to better understanding of geodiversity and biodiversity to assist in development of management programs; and
- co-operative programs with the local community, particularly neighbours of the park, to raise awareness of the importance and purpose of management programs and increase the effectiveness of programs for control of fire, weeds and introduced animals and removal of firewood and bushrock.

The remainder of this plan outlines the policies and actions required to achieve the above objectives and strategies.

## 4. POLICIES AND FRAMEWORK FOR MANAGEMENT

This section contains the policies and framework for the management of the park together with relevant background information. Policies and actions are summarised under the following headings:

- 4.1 Conservation of Nature;
- 4.2 Cultural Heritage; and
- 4.3 Use of the Park.

### 4.1 CONSERVATION OF NATURE

#### 4.1.1 Geology, Landforms, Soils and Catchments

The park is located on the western side of the Blue Mountains. Although the cliff-forming Triassic sedimentary rocks dominate the park and are preserved as imposing sandstone plateaus and mesas, the landscape is also influenced by the less resistant sedimentary rocks of the Devonian and Permian periods.

Devonian rocks form the basement to the region. They comprise a folded sequence of shale, siltstone, quartzite, tuff and limestone, and are exposed in the floor of the valleys containing Coco, Airly and Crown Creeks. They generally weather to form infertile, shallow loamy soils that, where associated with limestone outcrops, support vegetation communities existing at the limits of their habitat range.

Permian and Triassic cover rocks that overlie the Devonian basement belong to the western edge of the geological and geomorphological feature known as the Sydney Basin. The tilt of the strata in this section of the Sydney Basin is shallowly downward in easterly to southeasterly directions. The Permian sequence contains the Illawarra Coal Measures that are visible beneath cliff lines along the Capertee and Wolgan river valleys and many of the bigger creeks. The coal seams and the shale, siltstone and sandstone strata weather to rich deep clay loams that form steep densely vegetated slopes.

The Triassic sequence within the mesas, plateaus and cliffs consists of thick sandstone beds with intervening shale and claystone horizons and resistant 'ironstone' layers and bands. These rocks, which are underlain by the more thinly bedded and softer sandstones, siltstones and shales of the transitional Caley Formation, mainly belong to units of the Narrabeen Group (principally the Grose Sandstone and Burrellow Formation). The highly resistant layers of planar and convoluted ironstone within relatively friable sandstone experience the positive differential weathering that gives rise to the beehive, dome, castellated and elaborate platformed shapes of physiographic features commonly called Pagodas. The aerially extensive Narrabeen Group has given rise to the park's characteristically dissected landscape, dominated by deep valleys, slot canyons, waterfalls, and towering cliffs and pagodas, as in the Wolgan and Capertee valleys.

Sandstone-based soils of the Narrabeen Group are particularly fragile. This has special implications for park management, in that vehicular and horse riding tracks inevitably require substantial work for initial stabilisation and ongoing maintenance.

Soil erosion resulting from frequent or extensive high intensity fires is also a management concern.

The park incorporates and protects a number of relatively undisturbed catchments that make significant contributions to the water quality of the Colo River system. However, other waterways, including Carne and Airly creeks, rise outside the park. If such streams are subject to disturbance and pollution in their upper catchments, this can seriously impact on the downstream hydrology, habitat use and even the recreational enjoyment. Other risks to catchments include pollution from adjoining agricultural and industrial activities, as well as from road-borne sources.

### **Policies**

- \* Features and sites of geological, geomorphic and / or pedological significance will be protected against damage from human activities.
- \* Disturbed sites not required for public or management use or to be protected for their historic value will be rehabilitated or allowed to regenerate. Restoration works will only use native species collected from or near to that location and geologically compatible soil and gravel free of pollutants and foreign propagules.
- \* All relevant management activities in the park will utilise appropriate soil erosion and sedimentation control standards and practices.
- \* Catchment values will be protected and all practical steps taken to limit disturbance and the entry of pollutants into catchments.

### **Actions**

- \* The following areas will be actively rehabilitated:
  - Ben Bullen Mine (mining site);
  - Red Rock Creek (cleared for grazing);
  - Ben Bullen (Portion 93) (cleared for grazing); and
  - Carne Creek (cleared for grazing).
- \* The NPWS will liaise with local councils and other relevant management agencies to minimise the impacts of adjacent developments on the scenic and catchment values of the park.
- \* The NPWS will develop maintenance standards and maintenance priorities for public roads, management trails and walking tracks that minimise erosion and impacts on the park.

#### **4.1.2 Native Plants and Animals**

As a result of its diverse landscape, the park protects a large number of different plant communities and important species. Washington (2001) identified 440 species within the park, 17 of which were exotic species and 423 native species. The dominant vegetation communities in the park are the eucalypt-dominated open forests and woodlands that occur on flat or gently sloping sandstone-shale terrain.

These communities are the most widespread out of the 30 communities identified so far within the park.

A significant proportion of these two communities comprises Ironbark (*Eucalyptus fibrosa*, *Eucalyptus crebra*) and Yellow Box (*Eucalyptus melliodora*) Woodlands located on the western edge of the park, White Box Woodland (*Eucalyptus albens*) on the south western portions of the park and Scribbly Gum Woodland (*Eucalyptus rossi*, *Eucalyptus sparsifolia*) on the eastern edge of the park. Less than 1% of the park is comprised of moist forest type vegetation.

### **Communities of Conservation Significance**

Pagoda communities have the highest conservation significance as they are easily irreparably damaged by human activity. The limestone outcrops on the northwestern edge of the park also support White Box / Grass Tree / *Triodia* Woodland (*Eucalyptus albens* / *Xanthorrhoea glauca* / *Triodia* sub species) communities. Other communities of conservation significance occurring in the park include White Box Woodlands (*Eucalyptus albens*) with a grassy understorey and the Ironbark Woodlands (*Eucalyptus fibrosa*, *Eucalyptus crebra*), which are considered poorly conserved outside of reserves across the state.

### **Species of Conservation Significance**

There are sixteen (16) threatened or rare species in the park of which six (6) are listed as threatened species under the *Threatened Species Conservation Act 1995* (TSC Act), including *Apatophyllum constablei*, *Haloragodendron lucasii*, *Eucalyptus cannonii*, *Prostanthera cryptandroides*, *Persoonia marginata*, and *Grevillea obtusifolia* sub species *fecunda*. The recent survey of the park's plant communities (Washington 2001) indicates a number of species at the geographic limits of their known distribution, for example *Xanthorrhoea johnsonii*, *Brachyscome microcarpa*, *Darwinia fascicularis* ssp. *oligantha*, *Marsdenia viridifolia*, *Astroloma pinifolium* and *Eremophila deserti*.

The ranges of topography, altitude, aspect, fire regime and microclimates have resulted in a diverse range of habitats for native plants and animals. The vegetation in particular exhibits an outstanding range in terms of its structure and composition. For example the Illawarra and Singleton Coal Measures that outcrop in the western escarpment areas of the park produce deep clay loams which are important habitat for conserving poorly represented Yellow-Box / Ironbark Woodland Communities. In themselves, these communities are important habitat for the threatened regent honeyeater (*Xanthomyza phrygia*) and turquoise parrot (*Neophema pulchella*).

The habitats with the greatest diversity of native animals are the ecotones or areas where plant communities overlap. Other significant habitats occur as pocket-like environments such as limestone outcrops, alluvial gullies, pagoda heaths and moist forest. The most widespread and abundant habitat types are the eucalypt-dominated forest complexes on sandstone (a significant feature giving rise to the region's inclusion on the World Heritage List). A major threat to the vegetation communities is the illegal collection of firewood, which also threatens habitat for native animals.

Fifty-eight (58) reptiles and thirty-two (32) amphibian species have been recorded on the Blue Mountain dissected plateau. As such, most of these species would likely



also be found within Gardens of Stone National Park. Twenty reptiles have been recorded in the park including the thick-tailed gecko (*Underwoodisaurus milii*), the lace monitor (*Varanus varius*) and the eastern water skink (*Eulamprus quoyii*). The endangered broad-headed snake (*Hoplocephalus bungaroides*) occurs on Hawkesbury sandstone areas to the east of the park. A major threat to the reptiles within the park is illegal bushrock removal that damages habitat. Amphibians recorded within the park include the common eastern froglet (*Crinia signifera*), spotted marsh frog (*Limnodynastes tasmaniensis*), Perons tree frog (*Litoria peronii*) and the banjo frog (*Limnodynastes dumerilii*).

A large number of bird species (235) have been recorded on the Blue Mountains dissected plateau area, fifty nine of which have been seen in the park. A number of those species are listed as threatened under the TSC Act. The regent honeyeater (*Xanthomyza phrygia*) for example, occurs as a nomadic opportunist with very specific nesting requirements in mature Ironbark and Red-Yellow Box communities. Other species considered as vulnerable are the powerful owl (*Ninox strenua*), peregrine falcon (*Falco peregrinus*) and the glossy black cockatoo (*Calyptorhynchus lathamii*).

Forty-six (46) mammals have been recorded on the Blue Mountains dissected sandstone plateau area, fourteen of which have been recorded in the park. Species recorded include the sugar glider (*Petaurus breviceps*), brush-tailed rock wallaby (*Petrogale penicillata*), common bent-wing bat (*Miniopterus schreibersii*), large pied bat (*Chalinolobus dwyeri*) and the greater broad-nosed bat (*Scoteanax rueppellii*). Isolated sightings of other threatened species including the koala (*Phascolarctos cinereus*), tiger quoll (*Dasyurus maculatus*) and the yellow-bellied glider (*Petaurus australis*) have also been reported nearby.

A number of recovery plans under the provisions of the TSC Act have been or are being developed for species found in the park (eg Webster and Menkhorst, 1992). A Priorities Action Statement (PAS) has been prepared that identifies the strategies and actions to promote the recovery of threatened species, populations and ecological communities and manage key threatening processes.

### **Policies**

- \* The management of plant and animal species and habitats within the park will give priority to threatened species, critical habitat and endangered populations.
- \* Species recovery plans, threat abatement plans and the PAS will be implemented for those threatened species that are known or suspected to occur within the park.
- \* Research and survey will be encouraged into the distribution, habitat requirements and ecology of threatened animal species that occur within the park.

### **Actions**

- \* The NPWS will work with local Landcare groups in the recovery of the regent honeyeater and other endangered species and their habitats both within the park and in areas adjacent to the park.

- \* The NPWS will alter park signs to indicate penalties that apply to the illegal collection of firewood and bushrock.
- \* A biodiversity survey program will be designed and implemented in conjunction with local community groups and tertiary institutions to systematically collate information on the native animals of the park and their habitats, giving priority to the survey for threatened species.
- \* Management guidelines will be developed for threatened and other significant species within the park.
- \* The NPWS will actively promote education programs within the community that discourage activities that threaten native habitat (eg collection of bushrock and firewood).

### 4.1.3 Introduced Plants and Animals

Introduced plants and animals are those species that are not indigenous to the park environment. They represent one of the most significant threats to the natural values of the park and are a major focus for management programs. Introduced species within the park and on adjoining land are of concern as they have the potential to out-compete or predate on native species, disrupt food chains, alter habitat and impact on wilderness qualities and recreational experiences.

The Blue Mountains Region has a Pest Management Plan that identifies introduced species of concern and provides detailed information on control priorities and methods. A recent vegetation survey identified 17 exotic species occurring within the park.

#### Introduced Plants

Under the *Noxious Weeds Act 1993*, the NPWS has a statutory responsibility to prevent the spread of noxious weeds to adjoining lands. In general, the park is free from widespread infestations of introduced plants. However, some localised infestations do exist and are generally associated with disturbed sites, watercourses and areas adjacent to the park boundary.

Infestations of concern include St John's wort (*Hypericum perforatum*) in the Wolgan Valley area and blackberry (*Rubus fruticosus*) along Carne and Airly Creeks. Another species of concern is prickly pear (*Opuntia stricta*) in the catchment of Coco Creek.

Ongoing park management programs have been directed at the control of specific infestations of introduced plants. Considerable success has been made to date with eradication of tree of heaven (*Ailanthus altissima*) at Crown Creek and the control of blackberry at Ben Bullen and Carne Creeks.

Introduced plant control methods used include herbicide spraying and injection, physical removal and biological control. Control methods are species specific and effective management of some species relies on the use of more than one control method. The control methodology selected for each target species is selected on the basis of its effectiveness and its minimal impact on non-target species.

## Introduced Animals

Introduced animals of concern to park management are dogs (*Canis familiaris*), goats (*Capra hircus*), pigs (*Sus scrofa*), foxes (*Vulpes vulpes*) and cats (*Felis catus*). Cats and foxes occur primarily on the periphery of the park, particularly close to human settlement. They are believed to have had the most impact on native fauna populations as they both predate upon native fauna and compete with native predators.

Wild dogs and foxes are reported periodically, particularly in the western areas of the park. The NPWS supports a policy of co-operative baiting of wild dogs in perimeter areas where a program complements similar controls on adjoining properties. Ground baiting using sand mounds is the preferred practice as it reduces impacts on non-target species and enables accurate data to be accumulated on baiting success.

Goat populations have been recorded in the western section of the park in the Airly, Coco and Crown Creek catchments. Goats selectively graze on rock shelf vegetation and their hard hooves can cause considerable disturbance to fragile cliff-face soils. They contribute to damage to Aboriginal sites and places, cause erosion on steep slopes and displace native animals such as Rock Wallabies.

Pigs have been recorded on Newnes Plateau. Feral pigs cause widespread disturbance as they overturn soil looking for invertebrates, tubers and fungi. There is evidence of the deliberate release of pigs, probably for hunting purposes. Monitoring of pig populations will provide information regarding movements and help determine where future control efforts should be concentrated.

Rabbits (*Oryctolagus cuniculus*) and European bee species occur in the park. Rabbits graze on seedlings inhibiting regrowth and cause erosion. European bees can compete with native bees, honeyeaters and small mammals for nectar and nesting holes and may disrupt natural pollination mechanisms. There are no licensed bee-keeping operations within the park.

Annual control programs are undertaken throughout the park targeting goats and pigs. Wild dogs and foxes have only been targeted on the park perimeter.

## Policies

- \* The NPWS will co-operate with other agencies such as the Rural Lands Protection Board, regional Noxious Weeds Committees and landholders in implementing introduced species control programs.
- \* Priority will be given to the control of introduced plant and animal species which:
  - have the potential to spread to neighbouring properties;
  - are a risk to threatened species, critical habitat or significant plant communities;
  - are having a detrimental impact on Aboriginal or historic places or recreational areas;
  - are species for which current neighbouring control programs are in place or for which threat abatement plans have been prepared;

- have a high capacity for dispersal;
- are new, isolated occurrences;
- are declared noxious; or
- pose a threat to domestic animals through the spread of disease.

\* Control programs will be continually monitored to evaluate their effectiveness.

### **Actions**

\* Introduced species and their populations will continue to be systematically surveyed and recorded.

\* Introduced plant control programs will give priority to the control of:

- Blackberry in Carne and Airly Creeks;
- Prickly pear in the Coco Creek catchment;
- St Johns Wort in the Wolgan Valley; and
- Any new weed occurrences.

\* Introduced animal control programs will give priority to the control of:

- Pigs on Newnes Plateau;
- Wild dogs in the Capertee area;
- Foxes and goats throughout the park;
- Cats and rabbits where opportunistic control is possible; and
- Any new feral animal occurrences.

\* The NPWS will liaise and develop a co-operative pig management program for the park with neighbours, Forests NSW, and other agencies.

\* European honeybee swarms / hives found in the park will be removed.

#### **4.1.4 Fire Management**

Fire is a natural feature of many environments and is essential for the survival of some plant communities. However, inappropriate fire regimes can lead to loss of particular plant and animal species and communities, and high frequency fires have been listed as a key threatening process under the TSC Act.

Under the *Rural Fires Act 1997*, the NPWS is both a fire authority and is responsible for the management of fire on all lands under its control. This includes the detection and suppression of fires and the implementation of risk prevention programs to protect life and property from fires. The NPWS also assists with the suppression of fires on adjacent lands, as may be required under plans prepared under the *Rural Fires Act 1997*.

The primary objectives of fire management by the NPWS are to:

- protect life, property and community assets from the adverse impacts of fire;
- develop and implement cooperative and coordinated fire management arrangements with other fire authorities, reserve neighbours and the community;
- manage fire regimes within reserves to maintain and enhance biodiversity; protect Aboriginal sites known to exist within NSW and historic places and culturally significant features known to exist within reserves from damage by fire; and
- assist other fire agencies, land management authorities and landholders in developing fire management practices to conserve biodiversity and cultural heritage across the landscape.

The NSW National Parks and Wildlife Service *Fire Management Manual* (DEC 2006) details the policies and procedures for fire management planning and fire operations on lands reserved under the *National Parks and Wildlife Act 1974* and any land managed by NPWS on behalf of the Minister for the Environment.

### ***Fire History***

As the area surrounding the park was settled in the early 1880s, small farms developed on the alluvial soils of the Capertee and Wolgan River valleys. These attracted rough grazing and associated practices of burning to produce a “green pick”. These fires occurred mainly in late spring and early summer around the edges of the bush land and were often left to burn unchecked causing extensive damage to the biodiversity.

The NPWS has kept a comprehensive record of bush fires within the park since gazettal as a national park in 1994. Since 1994, five small fires have occurred during spring and summer with lightning or escaped hazard reduction burns from outside the park being the main causes. The park is zoned low risk by the Lithgow District Bush Fire Management Committee.

### ***Fire Planning***

The NPWS uses a zoning system for bush fire management which is compatible with the system adopted by the Bush Fire Coordinating Committee for use in District Bush Fire Management Committee bush fire risk management plans.

NPWS has assessed Gardens of Stone National Park for fire management planning purposes and considers the park should be zoned as a Land Management Zone (LMZ). The primary fire management objectives for this zone are to prevent the extinction of all species that are known to occur naturally within the park, and to protect culturally significant sites. The park has been designated as a LMZ because it is not adjacent to built assets which would be exposed to a high level of bush fire risk, and does not have a history of bush fire ignitions or known areas of high bush fire potential. The LMZ does not require intensive management and focuses on those actions appropriate to conserve biodiversity and cultural heritage including exclusion of fire from the reserve. Desired fire interval guidelines for the various vegetation communities in the park will be developed as part of the fire management strategy for the park.

## Policies

- \* Fire in the park will be managed in accordance with the management objectives stated above and with the Fire Management Strategy for the park (which will reflect these objectives) when prepared.
- \* Appropriate environmental impact assessment will continue to be carried out prior to implementing hazard reduction activities.
- \* Opportunities for the development of co-operative arrangements with neighbours to reduce the risk of damage to life and property on adjoining lands and inholdings will be identified.
- \* Fire may be used as means of reducing fire hazards in areas where there is an identified bush fire threat and / or for the purposes of managing the conservation of the park's biodiversity.
- \* Research into fire ecology will be encouraged to refine fire management prescriptions, with priority given to threatened species and critical habitats.
- \* The risk of high intensity wildfire will be minimised within 100 metres of known koala habitat or the habitat of other fire sensitive threatened species, sensitive plant communities, significant geological sites, Aboriginal sites and places or historic places, major visitor areas, utilities and other park infrastructure.
- \* An effective management trail system will be maintained within the park to facilitate essential fire management programs (refer map, centre pages). No new permanent management trails will be constructed for fire management purposes and non-essential trails will be rehabilitated.
- \* Prescribed burning will be implemented in late summer-autumn as far as possible.
- \* On days of high fire danger or above, or when bush fires are burning within the park:
  - Recreational use of the park may be regulated to minimise further risk of wild fires and associated threats to visitor safety; and
  - Co-operative arrangements with neighbours and other fire authorities for bush fire detection and monitoring will be implemented.

## Actions

- \* A map-based (type 2) fire management strategy will be prepared and implemented for the park by December 2008.
- \* The NPWS will undertake ongoing liaison with park neighbours on co-operative fire management programs.
- \* Fire history records will be maintained for the park and adjacent areas and incorporated into fire management planning.

- \* Regional staff will attend Greater Lithgow City Bush Fire Management Committee meetings and Volunteer Rural Fire Brigade meetings and contribute to co-operative wildfire suppression and risk management planning and operations within the park and as required on adjoining lands.

## 4.2 CULTURAL HERITAGE

Aboriginal people are believed to have occupied the area now known as Gardens of Stone National Park for at least 12,000 years prior to European settlement.

The park contains only one known Aboriginal site although many more Aboriginal sites and places would be expected from a systematic survey. Aboriginal sites and places within the park are non-renewable and are subject to deterioration from both natural and human processes. For example, wind erosion and vandalism can damage art sites and rock engravings. Fire, animal and human interference can destroy scarred and carved trees. Aboriginal sites and places identified within the park may therefore require active management to ensure their continued existence.

The Wiradjuri Tribal Council, Bathurst Local Aboriginal Land Council, the Greater Lithgow Aboriginal and Torres Strait Island Corporation and other Aboriginal groups represent the contemporary Aboriginal community in the Capertee Valley area. The on-going involvement of the Aboriginal community with the management of Aboriginal heritage in the park is encouraged at all levels.

European attitudes to the area around the park were based on their knowledge of the area as an unproductive, remote and rugged landscape. As a result large areas have remained largely unoccupied and undisturbed although there was some limited use of the area for agriculture, forestry and coal mining, particularly on the edges.

The park has some historic places that provide physical evidence of past land-use. These include fences, building foundations, stockyards, dams, early roads and associated structures. The foundations of a hut used for the construction and maintenance of the Glen Davis Pipeline is the only significant remains of occupation in the park.

### Policies

- \* All cultural heritage places will be recorded and an assessment made of each site's significance and threats to its long-term preservation.
- \* Conservation policies will be developed and implemented for significant places under threat based on the above assessment. Management options may include recording, passive management and periodic monitoring, stabilisation, adaptation, interpretation or other managed alternative.
- \* The NPWS will liaise with the Wiradjuri Tribal Council and Bathurst Local Aboriginal Land Council and other Aboriginal communities on all aspects of Aboriginal site management within the park.
- \* Non-destructive research for the purpose of locating new sites, places or assisting site conservation will generally be encouraged in the park.

- \* Visitor impacts on Aboriginal sites and places within the park will be closely monitored and visitor use will be regulated and site protection works undertaken where necessary.

### **Actions**

- \* A strategy and on-going program of surveying, recording and protecting Aboriginal sites and places will be developed in conjunction with local Aboriginal communities.
- \* Cultural heritage will be recorded and left in-situ.

## **4.3 USE OF THE PARK**

The park will be managed to ensure that its use whether by the general public, special interest groups, NPWS staff or other authorities, is appropriate and conforms to the management objectives of this plan.

The major categories of use that may be appropriate within NPWS areas are:

- recreation in a natural setting;
- environmental education;
- promotion of natural and cultural heritage conservation;
- scientific research; and
- management operations by the NPWS and other authorities.

The extent to which these categories of use are appropriate to the park is indicated in the following sections.

### **4.3.1 Park Promotion and Recreation Management**

Promotion of the park is currently directed towards neighbours and park visitors. This includes providing directional signs, a park brochure, website information and regular neighbour meetings. Another key component of promotion occurs in the local community where provision of educational material on the park contributes to enhancing appreciation of park values.

The NPWS manages recreation within national parks in the context of available recreational opportunities within the region as a whole. The park is surrounded by a large and diverse system of reserves and land uses which provide more developed destinations and settings for recreation. In this context, the park appears to be well placed to provide recreational settings at the unmodified end of the recreational spectrum and to therefore cater for natural area recreation opportunities.

The rugged terrain of the park and its relative inaccessibility have been strong determining factors on both the style and location of recreational use in the park. Accordingly, most recreational activity has occurred around the edges.

Public vehicle access is provided to Ben Bullen and Capertee on the outer edges of the park. Some areas have been partially modified by roads and clearing. Substantial areas, however, retain many natural and cultural values of importance



and complementary significance to the adjacent wilderness area in Wollemi National Park.

The recreational use of the park is predicted to increase as the metropolitan area of Sydney expands and the demand for outdoor recreation, particularly self-reliant and adventure activities in natural settings, increases. However, no substantial increase is expected in the near future.

Adventure activities such as climbing and abseiling are slowly growing in popularity in the Capertee and Wolgan River valleys. Group use of park areas has the greatest potential to impact on park management. User conflicts, risks of accidents and injuries and impact on natural and cultural heritage values all rise in direct proportion to the size of the group. An upper limit on group numbers will depend on the area to be visited and the nature of the activity. Although maximum group numbers are specified for some activities, such numbers will be subject to future reviews in consultation with user groups. The Bicentennial National Trail passes through the park via Baal Bone Gap and the Crown Creek Management Trail, and is available for use by walkers, cyclists and horse riders.

Commercial recreation is an activity within the park that has grown slightly in recent years. It contributes to the improvement of the regional economy; it enhances the range of recreational opportunities available to park visitors; it fosters a greater appreciation and understanding of park values; and it provides a means for the NPWS to better manage visitor impacts and care for visitor safety. Commercial recreation can however, also lead to the deterioration of certain sites or places if not carefully managed. All commercial activities within the park require a licence from NPWS.

All users can have unacceptable impacts in certain circumstances including erosion of soils and trails, the introduction of weeds and plant species not native to the area and conflict with other uses. The policies and actions below provide a general framework. Detailed policies for specific recreational activities are covered in later sections of this plan.

## **Policies**

- \* The NPWS will promote the following major themes within the park:
  - the importance of the parks and reserves of the Blue Mountains region for geodiversity, biodiversity, and conservation;
  - the Greater Blue Mountains World Heritage Area and its values; and
  - self-reliant recreation and minimal impact codes or practices.
- \* Recreational facilities will be limited to the edges of the park.
- \* Recreational use of the park will be managed to minimise user conflict, protect visitor safety and welfare, minimise nuisance to neighbours and protect the natural and cultural heritage values of the park.
- \* The NPWS will consult with the recreational industry and peak user groups where appropriate in managing recreational use.

- \* The NPWS will manage and prescribe appropriate standards for group size, numbers of groups, leader-client ratios, guide qualifications, etc. in accordance with adopted NPWS policy for certain activities and in accordance with any area specific guidelines (e.g. NPWS, 1995b).
- \* Recreational areas may be temporarily or permanently closed to users for safety, environmental or other management requirements. All stakeholder groups will be consulted before permanent closures occur.
- \* Minimum impact recreation will be promoted to all park users.
- \* Approval of the Regional Manager will be required for the following activities:
  - competitive activities; and
  - activities involving groups of twelve (12) or more people.
- \* Competitive activities will not be permitted in limestone and pagoda landscapes within the park.

### **Actions**

- \* Regional staff will maintain a register of all consents issued for commercial and recreational activities within the park and will conduct monitoring and auditing of visitor impacts at regularly used sites and places to ensure consistency with the policies above.
- \* Park brochures, booklets and information signs will be reviewed to ensure consistency with the policies above and the Interpretation and Visitor Orientation Plan for the Greater Blue Mountains World Heritage Area.
- \* Geodiversity education programs will be promoted, particularly in relation to the fragility of pagodas.
- \* An annual newsletter on the park will be produced and circulated to park neighbours and interested stakeholders.
- \* The NPWS will negotiate with the Capertee community regarding park information displays in the area.
- \* Interpretive and public education programs will target park neighbours, local communities and schools, and visitors to vulnerable or sensitive sites.
- \* The NPWS will actively participate in regional tourism and regional development organisations and will co-operate with Tourism NSW in the development and implementation of tourism marketing strategies appropriate for the park.
- \* Regional staff will assist authors and publishers with information on the park.

### 4.3.2 Public Vehicular Access

There are two types of authorised vehicle access available within the park:

- two wheel drive roads - which are maintained (by the NPWS and other authorities) to two wheel drive standard in all but the most extreme weather conditions; and
- four wheel drive roads - which are maintained by the NPWS to four wheel drive standard in dry conditions.

Other driving routes and opportunities are provided in the nearby Turon, Wollemi and Blue Mountains National Parks. The park also contains a number of management trails that are not available for public vehicle use. These trails are required for essential park management works such as fire suppression, pest species control, infrastructure maintenance and heritage management (4.3.10 Management Facilities and Operations) and occasionally provide access to inholdings. The costs of constructing and maintaining unsealed roads in a stable condition and which are safe for public use in all weather conditions is often difficult to justify given the level of use.

#### Policies

- \* The Glow Worm Tunnel Road to the Tunnel Walking Track and Hutchinson Road will be maintained to two wheel drive standard.
- \* The roads that will be maintained to a four wheel drive standard are:
  - Airly Creek Trail;
  - Ben Bullen Trail;
  - Murdocks Creek Trail;
  - Rowans Hole Trail; and
  - Secret Crag Trail.
- \* The maximum group size for vehicle touring and tag along tours within the park will be limited to five (5) vehicles unless otherwise approved by the Regional Manager.
- \* Minimum impact driving techniques will be encouraged throughout the park.

#### Actions

- \* Regional staff will liaise with authorities responsible for the maintenance of roads through or to the park to ensure that these routes are maintained and signposted in a complementary and co-operative manner.
- \* All roads within the park will be signposted.
- \* A program to rehabilitate unauthorised vehicle access routes will be instituted.
- \* The NPWS will install, monitor and analyse visitor numbers throughout the park using visitor books, road counters and observation.

### 4.3.3 Walking Tracks and Bushwalking

Bushwalking in the park is undertaken along roads, management trails, closed roads, and cross-country. No formal constructed walking tracks currently exist or are considered necessary or appropriate in the park.

Informal walking tracks often occur at the commencement of walking routes into remote areas and adjacent to Baal Bone Gap. These tracks will be monitored for safety and environmental damage.

#### Policies

- \* Bushwalkers within the park will be encouraged to follow minimal impact bushwalking codes.
- \* The number of walkers using the park will be monitored.
- \* Maximum group size for bushwalking will be twelve (12) persons.

#### Actions

- \* Visitors books will be maintained at appropriate sites including:
  - Baal Bone Gap;
  - Pinnacle Ridge; and
  - Pantoneys Crown.
- \* Informal tracks will be monitored for safety and environmental concerns.
- \* Maintenance and / or rehabilitation of trails will be undertaken as part of the routine works program when and where necessary.
- \* The NPWS will review its publications to ensure up to date information is available and minimal impact bushwalking codes are included.
- \* The NPWS will assist authors and publishers of bushwalking publications with information on the park to ensure safety and environmental considerations are promoted within the park.

### 4.3.4 Picnicking and Camping

Self-reliant overnight camping occurs in the park adjacent to walking routes. Current use levels and impacts along walking routes in remote areas are relatively small.

Picnicking is mainly associated with vehicle access routes, principally around the edges of the park.

#### Policies

- \* Maintain a small picnic area including tables and an information bay at Baal Bone Gap.

- \* Bush camping (ie, camping more than 200m away from developed sites and roads) will be permitted, provided that no damage to existing vegetation or other natural features will be caused.
- \* Rubbish bins will not be provided in the park. Visitors will be required to remove all waste from the park.
- \* Campfires will not be permitted in sensitive areas in the park, including Baal Bone Gap, Pantoneys Crown and along the Crown Creek Management Track.

### **Actions**

- \* Camping regulations and minimal impact codes will be shown on brochures and maps. Visitors will be required to provide portable fuel stoves for cooking.
- \* A toilet may be provided at Baal Bone Gap if use increases significantly.

### **4.3.5 Horse Riding**

Horse riding in the park mainly occurs on the Crown Creek Management Trail, which forms part of the Bicentennial National Trail. Horse riders requiring access through the four gates on the Crown Creek Trail can obtain information on access from the NPWS visitors centre at Blackheath. Should usage increase beyond sustainable levels Crown Creek Management Trail will be closed to horse riding.

Horses are also permitted on public roads in the park. Other parts of the park are not suitable for horse riding due to the fragile nature of the soils and rock formations.

### **Policies**

- \* Horse riding within the park will only be permitted on public roads and the Crown Creek Management Trail.
- \* Patterns of use and environmental impacts will be monitored on Crown Creek Management Trail, and route alternatives sought if warranted.
- \* Arrangements for access through the gates on the Crown Creek Trail for riders using the Bicentennial National Trail will continue to be provided through the visitors centre at Blackheath.
- \* Maximum group size for horse riding in the park will be eight (8) horses unless otherwise approved by the Regional Manager.
- \* Horse riders will be required to follow minimum impact horse riding practices, as outlined in the Bicentennial National Trail Handbook and Trekkers Code and NPWS brochures.
- \* Overnight horse camps will not be permitted within the park.

## Actions

- \* The impact of horse riding on the Crown Creek Management Trail will be monitored.
- \* The minimum impact code for horse riding will be promoted to horse riders, using brochures, interpretive signage and the Bicentennial National Trail Handbook.

### 4.3.6 Adventure Recreation

The park is a minor destination in New South Wales for adventure recreation activities including abseiling, rock climbing and canyoning (caving within Gardens of Stone National Park is only permitted for scientific research purposes).

Rock climbing and abseiling occur in dispersed locations throughout the park but are most popular on the sandstone cliffs in the Wolgan Valley. Canyoning is a minor activity in Gardens of Stone National Park, however, it is popular in the nearby Wollemi and Blue Mountains National Park.

All of these adventure activities have been undergoing a steady increase in popularity since the mid 1980s. In some parts of Wollemi and Blue Mountains National Parks they have caused environmental impacts such as trail formation, damage to vegetation and rock surfaces, fire rings and garbage. Management of adventure activities will focus on the protection of natural features, minimisation of conflicts between user groups, maintenance of the quality of visitor experience and the encouragement of safety principles and self-sufficiency and responsibility.

## Policies

- \* Maximum group size for adventure activities will be eight (8) persons unless otherwise approved by the Regional Manager.
- \* Caving will only be permitted within the park for scientific research or by members of the Australian Speleological Federation for survey and documentation, with the written permission of the Regional Manager.
- \* Climbing will be permitted on the north-eastern escarpment of Carne Creek (see map). Climbing in other locations will require the approval of the Regional Manager, and depending on the extent of the activity may require a formal review of environmental factors (REF).
- \* Specific facilities for adventure activities will not be provided.
- \* No new rock bolts or anchors may be placed within the park. Existing bolts may be replaced on the north east escarpment of Carne Creek in accordance with the rock climbing code of conduct and with the written permission of the Regional Manager.
- \* NPWS will promote minimal impact use for adventure activities within the park.

## **Actions**

- \* A visitor use-monitoring program for specific well patronised adventure activity sites will be established, eg Carne Creek.
- \* Rock bolts or anchors emplaced for climbing, canyoning or abseiling outside the north east escarpment of Carne Creek will be removed where they impact on natural and cultural values and where they have not had prior approval of the Regional Manager.

### **4.3.7 Cycling**

Cycling is an increasingly popular recreation activity within the park, especially with the expanding use of mountain bikes. Roads and management trails provide opportunities for short rides and overnight excursions.

## **Policies**

- \* Cycling will be permitted on all roads and management trails.
- \* Cycling will not be permitted on closed roads or walking tracks.
- \* Maximum group size for cycling on park roads and management trails will be twelve (12) persons.

## **Actions**

- \* Minimal impact practices for cycling will be promoted in brochures and signs in conjunction with peak user groups to address safety and environmental issues.

### **4.3.8 Commercial Recreation**

Guided tours and commercial recreation form a small but significant and growing component of public use of the park and are an important sector of the tourism industry based in the Blue Mountains and Sydney. Activities include four wheel drive vehicle touring which are generally of one day's duration. These tours and guided activities increase the opportunity for public participation in nature-based activities and provide opportunities for professional instruction in 4WD safety and minimal environmental impact. Guided activities also have potential to interpret and promote the natural and cultural values of the park.

The positive role of guided tours and commercial activities needs to be balanced with the protection of the park's natural and cultural resources. Commercial recreation needs to be managed as a component of all recreation in the park to ensure that it is carried out in a sustainable manner and that all impacts are within acceptable limits. Commercial activities in the park are required by legislation to be licensed. Licensing provides the mechanism for ensuring that future activities, levels of use and behaviour are appropriate for the park and specific locations and compatible with general recreational use.

It is appropriate that industries and operators who utilise the park's public resources for commercial purposes make a financial contribution to park management and display the highest standards of behaviour towards the park and its protection.

## **Policies**

- \* Guided activities, commercial recreational and environmental education activities will only be considered within the park by the Regional Manager where:
  - the activity is ecologically sustainable, has a minimal impact on the environment and is consistent with park management objectives;
  - if previously licensed, the operator has a good record and has complied with licence conditions; and
  - the activity promotes natural and / or cultural heritage conservation and minimal impact use.
- \* Management of guided activities and commercial recreation will be directed towards:
  - protection of the special recreational experiences available in the park;
  - control of environmental impacts;
  - promotion of safety and accountability;
  - maximisation of educational benefits; and
  - recovery of appropriate commercial returns to the NPWS.
- \* All management policies and actions will be developed and implemented in consultation with the commercial recreation industry and other stakeholders.
- \* All commercial recreation activities in the park require a licence.
- \* Commercial recreation activities will be required to conform to any group size limits imposed for various activities within the park.
- \* Fees will be applied to all commercial use of the park.
- \* Commercial recreation activities will not be granted any rights of access which are exclusive of the public or which exceed normal public rights within the term of this plan.
- \* Commercial operators whose activities may encroach on or utilise any Aboriginal site or place must consult with local Aboriginal community groups.
- \* Commercial horse riding activities will not be permitted in the park.

## **Actions**

- \* Unlicensed commercial operators will be excluded wherever possible from the park through monitoring and enforcement.
- \* All licensed commercial operators and activities will be monitored with respect to impacts, safety requirements and compliance with licence conditions.



### 4.3.9 Research

The function of research in the park is to assist in the understanding of its resources, usage patterns and effective management. The park has the potential to attract tertiary institution interest in undertaking research.

The park and its regional setting offers an outstanding range of research opportunities that would provide important information for park management. These include topics such as a fire ecology, hazard / risk assessment and fire behaviour research; pest species distribution and impacts; threatened species ecology, habitat requirements and distribution; survey and assessment of significance of cultural sites; adequacy of conservation of plant communities and economic valuation of park and reserves to the region.

There is currently very little published material available that the NPWS can use to assist with management of the park.

### Policies

- \* Priority will be given to research and survey of the following:
  - threatened species distribution, habitat requirements and ecology;
  - adequacy of conservation of major plant communities within the region;
  - pest species distribution, ecology and control;
  - systematic survey for cultural sites and places; and
  - geodiversity throughout the park.
- \* All research activities within the park will require prior consent from the Regional Manager.

### Actions

- \* The NPWS will promote appropriate research within the park.

### 4.3.10 Management Facilities and Operations

The park is managed by Upper Mountains Area within Blue Mountains Region, based at Blackheath. A workshop servicing the park has also been established at Hartley.

Management facilities in the park include only roads, and management trails. Roads and management trails are shown on Map 2.

Community volunteers have been involved in park management programs including weed removal, flora and fauna surveys and bush regeneration. Potential exists to expand the involvement of volunteers to generate greater benefits to park management and community education and understanding. There is a need to ensure that volunteer programs are effectively managed with adequate support and training and that works are directed towards agreed priorities.

There are many trails in the park without legal status. Many of these were constructed for timber extraction, cattle grazing and bushrock removal. Most are

disused, have no management function and detract from the park's natural values. In addition, these trails are often accessed for illegal activities such as car dumping, rubbish dumping, timber extraction, illegal cropping and arson.

## **Policies**

- \* Any new park management infrastructure will be located off-park or on disturbed areas on-park wherever possible and will be subject to environmental and financial impact assessment.
- \* No additional management trails will be constructed except in the following situations:
  - re-alignment of an existing route to a more environmentally acceptable location;
  - protection of specific natural and cultural heritage values, property or life where such protection is more important than the impact of the trail; and
  - emergency situations (eg wildfire control) where there is no practical or prudent alternative. Such trails will be rehabilitated as soon as possible after the emergency.
- \* The following management trails will be maintained for essential park management purposes:
  - White Gate Trail;
  - Halfway Hollow Trail;
  - Malcolms Gully Trail;
  - Hut Trail;
  - Crown Creek Trail;
  - Between Blocks Trail;
  - Red Rock Trail.
- \* Management trails will be signposted and managed for essential park management access and / or property access purposes only.
- \* Aircraft will not be permitted to land within the park unless part of an authorised management operation.
- \* Further opportunities for the use of volunteers and community organisations to assist priority park management programs such as bush regeneration, weed control, flora / fauna survey and walking track maintenance, may be developed in accordance with NPWS policy.

## **Actions**

- \* Vehicle access routes not part of the authorised vehicle access system as mentioned above will be allowed to overgrow or will be actively rehabilitated.

#### **4.3.11 Alien Uses, Leases and Licences**

There are currently a number of organisations and individuals occupying or using lands reserved as Gardens of Stone National Park for public purposes (eg the Fish River Water Supply pipeline from Baal Bone Gap to the base of Crown Creek) or private purposes in association with inholdings. Although these uses are inconsistent with the objectives of the Act, they may qualify as 'existing interests' under Section 39 of the NPW Act.

This does not however, preclude the NPWS, on behalf of and with approval of the Minister, reaching an agreement in regards to the future use or conditions of use of the park for these alien uses. Alien uses can affect to varying degrees the natural, cultural and recreation values of the park.

Many of the alien works, facilities and operations are not presently covered by a lease, licence or easement under the Act or by any other form of agreement.

There are also a small number of inholdings and / or neighbouring property holders who may require formalised access agreements through the park (e.g. Rowans Hole).

#### **Policies**

- \* The NPWS will liaise with organisations and individuals occupying or using lands reserved as Gardens of Stone National Park to assess the nature, authority, impact and necessity for their presence.
- \* The NPWS will formalise and update agreements for all essential works, facilities and operations by other organisations (e.g. water pipelines) and authorised access to inholdings (other than via public access roads) within the park in accordance with the Act and NPWS policy with the specific aim of minimising adverse impacts on the park.
- \* Alien uses, which are not essential, cannot be proven to show continued and long-standing use and / or are not covered by formal agreements within 4 years will be terminated and / or removed.
- \* New works, facilities or operations proposed by any organisation or individual will not be permitted within the park unless they are consistent with the Act, the purpose of reservation of the park and the objectives of this plan.
- \* The Regional Manager will approve access to private property within the park only subject to appropriate conditions in the following circumstances:
  - no reasonable alternative exists;
  - approval from other relevant authorities and neighbours has been given;
  - the environmental impact of proposed use is acceptable;
  - the proposed use is consistent with approved past use patterns; and
  - the access route is also required for essential park management purposes.

- \* The NPWS will seek commercial returns for all alien uses in the park.

### **Actions**

- \* The NPWS will seek to formalise all alien tenure licences within the park over the next four years and seek to determine revenue returns to the NPWS after undertaking appropriate action. These include:
  - The Public Works pipeline along Crown Creek;
  - Access to Rowans Hole, and;
  - Access to Lot 13 on Coco Creek.
- \* The NPWS will develop formal access agreements with landowners requiring access along management access routes consistent with the policies above and the National Parks and Wildlife Act.
- \* The NPWS will negotiate for inclusion into the park of the Crown Road reserve to Rowans Hole following formalising of the currently used access road.

## 5. PLAN IMPLEMENTATION

Plans of management are part of a system of planning employed by the NPWS to direct the management of national parks throughout the State. This plan is placed in a hierarchy of planning instruments used to guide the management of the park. Other planning instruments include NPWS-wide policy documents, conservation plans, species recovery plans, Section 52 Bush Fire Risk Management Plans and local environmental plans.

The implementation of this plan will be undertaken within the annual programs of Blue Mountains Region. Priorities determined in the context of regional strategic planning will be subject to the availability of necessary staff and funds and to any special requirements of the Director-General or Minister. Regional programs are subject to on-going review within which works and other activities carried out within the park are evaluated in relation to the objectives laid out in this plan.

Assessments for activities undertaken in the park are required by the NPWS under Part 5 of the *Environmental Planning and Assessment Act*. The NPWS requires that a review of environmental factors (REF) be prepared in accordance with Clause 228 of the *Environmental Planning and Assessment Regulation 2002* for all activities likely to impact on the park.

Plans of management are statutory documents and therefore have special significance. In accordance with Section 81 (4) of the *National Parks and Wildlife Act 1974* and notwithstanding anything in that Act or any other Act or in any instrument made under that or any other Act, no operations can be undertaken within Gardens of Stone National Park except in accordance with this plan. If, after adequate investigation, operations not included in this plan are found to be justified either for the purpose of conserving the park's resources or for their use, this plan may be amended in accordance with Section 73B of the Act.

Other lands may be added to the park during the currency of this plan. Such lands will be managed consistent to this plan. If other lands acquired are proposed for management with a purpose inconsistent to this plan, such proposals will be placed on public exhibition as an amendment to the plan.

As a guide to the orderly implementation of this plan, relative priorities for identified activities are summarised below:

### 5.1 Priorities for Implementation of Actions Specified in the Plan

Actions	Priority	Plan Reference
Actively rehabilitate Ben Bullen (mine & Portion 93), Red Rock and Carne Creeks	High	4.1.1
Liaise with local government regarding developments adjoining the park.	High	4.1.1
Prioritise park management routes and maintain to standard.	High	4.1.1
Work with Landcare groups in recovery of Regent Honeyeater and other endangered species.	High	4.1.2
Add penalties to park signs for illegal firewood / bushrock collection.	High	4.1.2
Map the distribution of introduced species.	High	4.1.3
Control blackberries, St Johns Wort and Prickly Pear in the park.	High	4.1.3
Control wild dogs, foxes, goats, pigs and cats in the park.	High	4.1.3
Remove any European honeybee swarms / hives found on park.	High	4.1.3
Prepare and implement a "Type 2" fire management strategy.	High	4.1.4
Liaise with park neighbours on fire management programs.	High	4.1.4
Maintain and analyse fire history records.	High	4.1.4
Regional staff to attend Lithgow City Bush Fire Management and Volunteer Bush Fire Brigade meetings and contribute to suppression, planning and operations.	High	4.1.4
Develop / implement a strategy of surveying and recording Aboriginal sites and places.	High	4.2
Regional staff to maintain register of all commercial and recreational consents, and will monitor / audit visitor impacts	High	4.3.1
Update the park information brochure.	High	4.3.1
Produce an annual newsletter on the park for neighbours.	High	4.3.1
Liaise with other road / trail management authorities and neighbours regarding road signposting and maintenance.	High	4.3.2

<b>Actions</b>	<b>Priority</b>	<b>Plan Reference</b>
Rehabilitate unauthorised vehicle access routes.	High	4.3.2
Maintain visitors books at Baal Bone Gap, Pinnacle Ridge, Pantoneys Crown.	High	4.3.3
Encourage minimal impact codes for camping.	High	4.3.4
Monitor impacts of horse riding on the Crown Creek Management Trail.	High	4.3.5
Monitor and enforce regulations regarding unlicensed commercial operators	High	4.3.8
Monitor licensed operator impacts, safety requirements, compliance.	High	4.3.8
Formalise / renegotiate all alien tenure licences.	High	4.3.11
Develop formal access agreements for inholdings.	High	4.3.11
Develop co-operative pig programs for Newnes Plateau with State Forests.	Medium	4.1.3
Attend bush fire committee meetings and contribute to S.52 plans.	Medium	4.1.4
Negotiate with Capertee community regarding park information displays.	Medium	4.3.1
Monitor visitor numbers using visitor books, road counters, observation.	Medium	4.3.2
Monitor informal tracks for safety and environmental concerns.	Medium	4.3.3
Maintenance / rehabilitation of trails will be undertaken as required.	Medium	4.3.3
Update walking track brochures and promote minimal impact bushwalking.	Medium	4.3.3
Promote minimal impact code for horse riders.	Medium	4.3.5
Establish monitoring of adventure activity sites.	Medium	4.3.6
Remove anchors / bolts outside the NE escarpment of Carne Creek and without Regional approval.	Medium	4.3.6
Promote minimal impact codes for cycling in brochures and signs.	Medium	4.3.7

Actions	Priority	Plan Reference
Promote research within the park.	Medium	4.3.9
Rehabilitate not part of the authorised vehicle system.	Medium	4.3.10
Actively promote community education to discourage activities that threaten native habitat.	Low	4.1.2
Historic evidence will be recorded and left in-situ.	Low	4.2
Education programs will target audiences to vulnerable or sensitive areas.	Low	4.3.1
Contribute to regional tourism strategies and projects.	Low	4.3.1
Assist authors and publishers regarding park information.	Low	4.3.1
Assist authors and publishers with minimal impact bushwalking information on the park.	Low	4.3.3
Provide visitors toilet at Baal Bone Gap if use increases substantially.	Low	4.3.4

### Key to Priorities

**High** priority activities are those imperative to achievement of desired outcomes and objectives. 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 be deferred in preference to other priorities.



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## 7. DEFINITIONS AND ABBREVIATIONS

In this plan of management:

“Act” means the *National Parks and Wildlife Act 1974* as amended from time to time and any Act replacing the same;

“Bush fire management committee” means a committee constituted under Section 41AA of the Rural Fires Act 1997 and which is responsible for co-ordinating fire management activities within the local government area;

“Conservation plan” means a conservation plan prepared in accordance with the Burra Charter (see ICOMOS below) and its associated guidelines (see Kerr, 1985) and which has been approved for adoption by the Director-General;

“ICOMOS” stands for the *Australian ICOMOS Charter for the Conservation of Places of Cultural Significance* (ie the Burra Charter) which is a set of principles to help in planning the care and management of heritage items;

“IUCN” stands for the *International Union for the Conservation of Nature and Natural Resources*;

“Minister” refers to the Minister responsible under the Act;

“NPWS” refers to the National Parks and Wildlife Service of New South Wales;

“Pagoda” a rock formation rising from the ground with delicate ironstone shelves protruding;

“Park” means the area of land permanently reserved by or under the Act and known as Gardens of Stone National Park;

“Recreation Opportunity Spectrum” means the range of recreational opportunities provided within the context of the park (see Clark and Stankey, 1979);

“Region” in the context of this plan means the NPWS Blue Mountains Region;

“Regional Advisory Committee” means the committee of community representatives approved by the Minister and appointed under the Act to advise and assist with the management of the area / Region for which they are appointed;

“Regional Manager” means the person appointed for the time being as the officer of the National Parks and Wildlife Service in charge of the Park or the Region in which the park is located and includes any person acting as such;

“Review of Environmental Factors (REF)” refers to an outline of any proposed development activity both on or off-park, a review of environmental impact(s) on natural and cultural assets present from any development activity proposed and the various options to minimise or mitigate the impact of the development activity;

“Section 52 Bush Fire Risk Management Plan” means a fuel management plan or fire operations plan developed by a bush fire management committee and approved by the NSW Bush Fire Co-ordinating Committee in accordance with Section 52 of the *Rural Fires Act 1997*;

“Species recovery plan” means a plan prepared in accordance with Part 4 of the *Threatened Species Conservation Act 1995*;

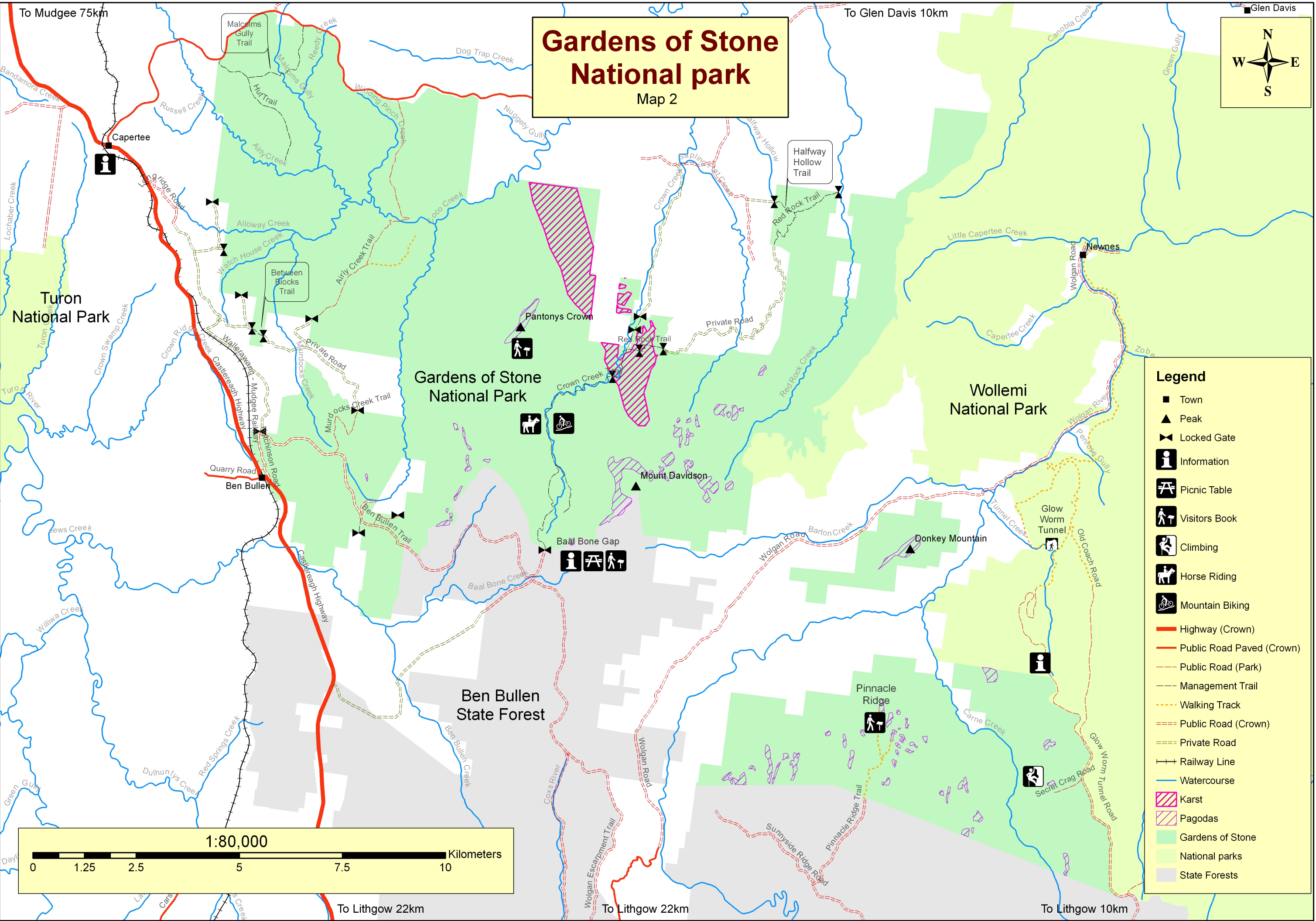
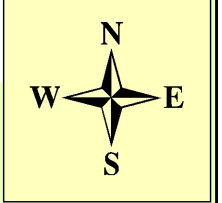
“Threatened Species Priorities Action Statement (PAS) outlines the broad strategies and detailed priority actions in NSW to:

- manage key threatening processes, promote the recovery of threatened species;
- population and ecological communities;

“Wildlife” means native plants and animals.

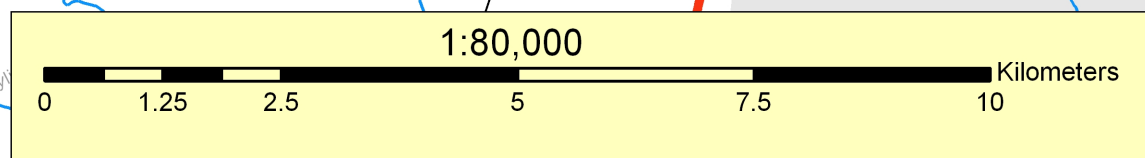
# Gardens of Stone National park

Map 2



### Legend

- Town
- ▲ Peak
- ◀ Locked Gate
- ⓘ Information
- ☂ Picnic Table
- 📖 Visitors Book
- 🧗 Climbing
- 🐎 Horse Riding
- 🚲 Mountain Biking
- Highway (Crown)
- Public Road Paved (Crown)
- Public Road (Park)
- Management Trail
- Walking Track
- Public Road (Crown)
- Private Road
- Railway Line
- Watercourse
- ▨ Karst
- ▨ Pagodas
- Gardens of Stone
- National parks
- State Forests



To Mudgee 75km

To Glen Davis 10km

Glen Davis

Turon National Park

Gardens of Stone National Park

Wollemi National Park

Ben Bullen State Forest

To Lithgow 22km

To Lithgow 22km

To Lithgow 10km