



NSW NATIONAL PARKS & WILDLIFE SERVICE

Copeland Tops State Conservation Area

Plan of Management



Copeland Tops State Conservation Area Plan of Management

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Cover photo: Dry rainforest along Hidden Treasure Track. Photo credit: J Spencer/DPIE.

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Copeland Tops State Conservation Area is in the traditional Country of the Worimi and Biripi Aboriginal peoples.

This plan of management was prepared by staff of the NSW National Parks and Wildlife Service (NPWS), part of DPIE.

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1. Introduction

1.1 Location, reservation and regional setting

Features	Description
Location	Copeland Tops State Conservation Area (referred to as ‘the park’ in this plan) is located west of the village of Copeland, approximately 18 kilometres west of Gloucester in the hinterland of the NSW Mid North Coast. The park is dissected by Scone Road (see Map 1).
Area	<p>The park covers 2420 hectares and is surrounded by private property. Most of the park lies north of the Scone Road, with only three smaller portions south of the road. The park surrounds a large inholding of private property and a trigonometrical station on a small area of Crown land.</p> <p>The area managed as park includes two council road reserves in the southern section of the park, one of which includes part of the Hidden Treasure Day Use Area (see Map 1). The National Parks and Wildlife Service (NPWS) obtained the agreement of the former Gloucester Shire Council that the land in these road reserves (totalling 5.5 hectares) will be added to the park.</p> <p>The area managed as park also includes a road that is vested in the Minister under Part 11 of the NSW <i>National Parks and Wildlife Act 1974</i> to ensure continued access to neighbouring land. This road does not form part of the area formally reserved as Copeland Tops State Conservation Area but its management is subject to the National Parks and Wildlife Regulation. This plan also provides direction for the management of these lands (see Section 5.2).</p>
Reservation date	Reservation occurred in stages, the first on 1 July 2003 (1692 hectares), with subsequent additions in August 2006 (509 hectares), May 2008 (0.6 hectares) and February 2012 (218.9 hectares).
Previous tenure	<p>Approximately 70% of the park was formerly Copeland Tops State Forest, becoming a state conservation area through the <i>National Park Estate (Reservations) Act 2003</i> as part of the outcomes of the North East Regional Forest Agreement. The North East Regional Forest Agreement resulted in major additions to the park system following consideration of biodiversity and conservation values. Of the area that was formerly state forest, approximately 250 hectares had been protected in 1992 under the former <i>Forestry Act 1916</i> as Copeland Tops Flora Reserve for the preservation of native plants.</p> <p>Most of the rest of the park was previously Crown land held under lease for grazing. A small area (less than 1 hectare) was freehold.</p> <p>The park is named after the nearby village and surrounding locality of Copeland, which in turn are named after Henry Copeland, the Secretary of the Mines when the mining town was initially surveyed in 1878.</p>
Regional context	
Biogeographic region	The park is located in the NSW North Coast Bioregion and is one of a number of parks in the Gloucester district. Barrington Tops National Park lies to the west, Woko National Park to the north, and The Glen and Berrico nature reserves to the south.
Surrounding land use	Adjacent areas are primarily used for agriculture, particularly cattle grazing.
Other authorities	The park is located within the administrative areas of Forster Local Aboriginal Land Council, Hunter Local Land Services and MidCoast Council.

1.2 Statement of significance

The park is significant for its biological, historical heritage, economic, recreational and educational values.

Biological values

The park protects stands of Lowland Rainforest Endangered Ecological Community (EEC), of both subtropical and dry rainforest forms, including a readily accessible area of dry rainforest dominated by shatterwood (*Backhousia sciadophora*). The tall open eucalypt forest in the park supports the endangered Craven grey box (*Eucalyptus largeana*), which is restricted to the local area. The park provides habitat for 21 threatened animal species.

Historical heritage values

The park protects the Mountain Maid Mine, which is considered to be of potential state heritage significance for its history as an operating goldmine between 1876 and 1979, making it one of the longest continually operating goldmines in New South Wales.

Economic values

The Mountain Maid Mine precinct is an important tourist destination and school education facility. This, combined with the park's recreational values, contributes to the local economy of the Gloucester area.

Recreational values

The park provides a range of recreational opportunities, including tourist facilities, heritage walks, and cycling and horse riding trails.

Educational values

The history of goldmining and the presence of a range of vegetation communities in the park provide a unique and important educational resource for school groups and the wider public.



Mountain Maid gold mine, Copeland Tops State Conservation Area (Brent Mail/DPIE)

2. Management context

2.1 Legislative and policy framework

State conservation areas in New South Wales are managed within a legislative and policy framework, primarily the National Parks and Wildlife Act and Regulation, the *Biodiversity Conservation Act 2016* and NPWS policies.

Other legislation, strategies and international agreements may also apply to management of the area. In particular, the NSW *Environmental Planning and Assessment Act 1979* may require the assessment of the environmental impacts of works proposed in this plan. The NSW *Heritage Act 1977* may apply to the excavation of known archaeological sites or sites with the potential to contain historical archaeological relics. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* may apply in relation to actions that affect matters of national environmental significance, such as migratory and threatened species listed under that Act.

A plan of management is a statutory document under the National Parks and Wildlife Act. Once the Minister has adopted a plan of management, the plan must be carried out and no operations may be undertaken in relation to the lands to which the plan relates unless the operations are in accordance with the plan. This plan will also apply to any future additions to Copeland Tops State Conservation Area. Should management strategies or works be proposed in future that are not consistent with this plan, an amendment to the plan will be required.

2.2 Management purposes and principles

State conservation areas are reserved under the National Parks and Wildlife Act to protect and conserve areas that:

- contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance
- are capable of providing opportunities for sustainable visitor or tourist use and enjoyment, the sustainable use of buildings and structures, or research
- are capable of providing opportunities for uses permitted under other provisions of the National Parks and Wildlife Act.

Under the National Parks and Wildlife Act (section 30G), state conservation areas are managed to:

- conserve biodiversity, maintain ecosystem functions, protect natural phenomena and maintain natural landscapes
- conserve places, objects and features of cultural value
- provide for uses permitted under other provisions of the National Parks and Wildlife Act (including uses permitted under section 47J, such as mineral exploration and mining), having regard to the conservation of the natural and cultural values of the state conservation area
- provide for sustainable visitor or tourist use and enjoyment that is compatible with conservation of the area's natural and cultural values and with uses permitted in the area
- provide for sustainable use (including adaptive re-use) of any buildings or structures or modified natural areas having regard to conservation of the area's natural and cultural values and with other uses permitted in the area

- provide for appropriate research and monitoring.

Land is reserved as a state conservation area where mineral values do not allow for reservation under another category. The National Parks and Wildlife Act requires a review of the classification of state conservation areas every five years in consultation with the Minister administering the *Mining Act 1992*. Reviews were undertaken in 2008 and 2013, with no change to the status of Copeland Tops State Conservation Area.

In the long term, subject to the outcomes of future five-yearly reviews, Copeland Tops State Conservation Area may become a national park. Therefore, as far as possible, management of the park will also be guided by the management principles for national parks.

2.3 Specific management directions

In addition to the general principles for the management of state conservation areas (see Section 2.2), the following specific management directions apply to the management of the park:

- Provide educational opportunities to encourage the ongoing appreciation of the goldmining history and the natural environment of the park.
- Provide for recreational activities in the park, such as walking, cycling and horse riding, that complement recreational opportunities provided in the surrounding district.
- Provide and promote the park as a tourism destination, in partnership with relevant local and regional stakeholders.
- Conserve and promote the significant heritage values of the park, consistent with an updated conservation management plan for the Mountain Maid Mine precinct (see Map 1).

3. Values

This plan aims to conserve both the natural and cultural values of the park. The location, landforms, and plant and animal communities of an area have determined how it has been valued and used by Aboriginal and non-Aboriginal people historically, and how it is currently valued and used. The natural and cultural values of an area may be the landscape as a whole or individual component of it, such as the plant and animal species used by Aboriginal people. To make the document clear and easy to use, the various natural and cultural heritage values of the park and its visitor use values are dealt with individually, but their interrelationships are recognised and underlie this plan.

3.1 Geology, landscape and hydrology

The park consists of a series of fairly high mountain ridges that rise from approximately 300 metres to 825 metres above sea level. The park lies within the Gloucester River subcatchment of the Manning River catchment. In the south of the park, the two branches of Copeland Creek drain the area before joining the Barrington River. The northern parts of the park drain into the Bowman River.

The laminated siltstones and sandstones comprising the metasedimentary Bowman beds were laid down during the Devonian/Carboniferous period, approximately 320 to 400 million years ago (Veness and Associates 1995). These sediments are the basis of the park's red soils, which have a high clay content.

The mean annual rainfall is approximately 1000 millimetres, with most falling from December to March. Sufficient moisture is retained by soils to sustain both dry and subtropical rainforest vegetation communities in some sections of the park. However, in other parts, such as along Copeland Creek, the rock strata are close to the surface and only a thin layer of soil is present, so plants must obtain moisture from sloping rock and soil faces.

Issues

- The risk of soil erosion is great on steeper slopes.
- Disturbed areas, in particular roads and old mining sites, have the potential to cause erosion and degrade water quality of streams.
- Visitor use may cause erosion, in turn affecting water quality.
- There has been interest in undertaking fossicking within the park (see Section 3.6).

Desired outcomes

- The park's geological features, catchment and scenic values are protected.
- Soil erosion is minimised.
- Water quality and health of streams within the park are maintained.

Management responses

3.1.1 Ensure management activities, including maintenance of roads, road closures and quarry management, are carried out in a manner that minimises soil erosion and water pollution.

3.1.2 Manage recreational and other uses to minimise erosion, changes to soil structure and degradation of catchment values.

3.1.3 Prohibit the extraction of clay, rock and gravel from the park, except where the material will be used for works within the park.

3.2 Native plants

The vegetation of the Copeland Tops State Conservation Area is predominantly tall open eucalypt forest dominated by grey gum (*Eucalyptus biturbinata*), with the endangered Craven grey box occurring on the upper ridges. In the western part of the park the dominant dry sclerophyll species are white mahogany (*E. acmenoides*), forest red gum (*E. tereticornis*), rough-barked apple (*Angophora floribunda*) and forest oak (*Allocasuarina torulosa*).

Both subtropical rainforest and dry rainforest occur in the park. Where rainforest occurs below 600 metres above sea level, it is considered an Endangered Ecological Community under the Biodiversity Conservation Act (Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions).

Subtropical rainforest in the moister gullies of the park typically contain Moreton Bay fig (*Ficus macrophylla* form *macrophylla*), giant stinging tree (*Dendrocnide excelsa*), red carabeen (*Karrabina benthamiana*), white cedar (*Melia azedarach*) and red cedar (*Toona ciliata*).

In the gullies of the Copeland Creek basin, south of the Scone Road, the dry rainforest vegetation community is characterised by shatterwood and grey myrtle (*Backhousia myrtifolia*). This community is generally found in areas with lower rainfall and shallower soils.

The park contains the largest and most easily accessible area of dry rainforest in the Gloucester district. Of particular significance is one of the largest known stands of red cedar in the region, found along the approach to the entrance of the Mountain Maid Mine precinct (see Map 1). Historically, the high value of red cedar for timber brought timber-getters to the area, and subsequently led to the discovery of gold in this location.

Much of the park's vegetation is regrowth forest with a range of age classes resulting from past mining and timber-getting across the area.

Two endangered plants occur in the park. Craven grey box is listed as endangered under the Biodiversity Conservation Act. It is restricted to the Gloucester district south to Craven and near Pokolbin (Briggs & Leigh 1996; PlantNET 2018). The white-flowered wax plant (*Cynanchum elegans*) is listed as endangered in New South Wales (Biodiversity Conservation Act) and nationally (Environment Protection and Biodiversity Conservation Act).

Strategies for the recovery of threatened species, populations and ecological communities have been set out in a statewide *Biodiversity Conservation Program* (OEH 2017a, previously known as the *Threatened Species Priorities Action Statement* [DECC 2007]). These actions are currently prioritised and implemented through the *Saving our Species* program, which aims to maximise the number of threatened species that can be secured in the wild in New South Wales for 100 years (OEH 2013a). Individual recovery plans may be prepared for threatened species listed under the Environment Protection and Biodiversity Conservation Act.

Current priorities for the park include strategies for the protection of populations of the white-flowered wax plant.

Issues

- The most significant issues affecting the management of vegetation in the park are fire, invasion of weeds, and bell miner (*Manorina melanophrys*) associated dieback (see Section 4).
- Vegetation maps are a key tool to inform management, but the plant community types have not yet been mapped for all areas of the park.

- Some parts of the park have been subject to past disturbance from mining, forestry or other land management practices. Most such areas are regenerating naturally. However, some sites, including a previously cleared area in the north-west of the park, may require active revegetation.
- The white-flowered wax plant can be confused with the exotic moth vine (*Araujia sericifera*), which is an issue when undertaking weed control.

Desired outcomes

- Populations of significant plant species and ecological communities are appropriately mapped, recorded and conserved.
- Negative impacts on threatened and significant plant species are minimised, particularly the impacts of inappropriate fire regimes and the invasion of weed species.
- Knowledge of the park’s native plants and ecological communities is improved.
- Structural diversity and habitat values are maintained and restored in degraded areas.

Management responses

- 3.2.1 Implement relevant actions set out in the *Biodiversity Conservation Program* or any recovery plans for threatened species or communities in the park.
- 3.2.2 Undertake or encourage a comprehensive vegetation survey of the park (subject to available resources), with priority given to identifying, mapping and recording threatened and significant plants species and ecological communities.
- 3.2.3 Monitor the rehabilitation of previously disturbed areas and undertake active revegetation where needed, using local native species. Priority to be given to rehabilitating the cleared land in the vicinity of Christmas Box Creek Trail.
- 3.2.4 Ensure staff and volunteers are trained in the identification of the white-flowered wax plant and other significant species, and their appropriate management.

3.3 Native animals

The diverse vegetation communities within the park provide habitat for a wide range of native animals, including a number of species listed as vulnerable or endangered under the Biodiversity Conservation Act (see Table 1).

Table 1: Threatened animal species recorded in the park

Common name	Scientific name	Status ^A	
		BC Act	EPBC Act
Frogs and reptiles			
Stephens’ banded snake	<i>Hoplocephalus stephensii</i>	Vulnerable	
Stuttering frog ^B	<i>Mixophyes balbus</i>	Endangered	Vulnerable
Birds			
Flame robin	<i>Petroica phoenicea</i>	Vulnerable	
Glossy black-cockatoo	<i>Calyptorhynchus lathamii</i>	Vulnerable	
Masked owl ^B	<i>Tyto novaehollandiae</i>	Vulnerable	

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Common name	Scientific name	Status ^A	
		BC Act	EPBC Act
Olive whistler	<i>Pachycephala olivacea</i>	Vulnerable	
Powerful owl ^B	<i>Ninox strenua</i>	Vulnerable	
Sooty owl ^B	<i>Tyto tenebricosa</i>	Vulnerable	
Superb fruit-dove	<i>Ptilinopus superbus</i>	Vulnerable	
Varied sittella	<i>Daphoenositta chrysoptera</i>	Vulnerable	
Wompoo fruit-dove	<i>Ptilinopus magnificus</i>	Vulnerable	
Mammals			
Brush-tailed phascogale	<i>Phascogale tapoatafa</i>	Vulnerable	
Eastern bentwing-bat	<i>Miniopterus schreibersii oceanensis</i>	Vulnerable	
Eastern freetail bat	<i>Mormopterus norfolkensis</i>	Vulnerable	
Greater glider	<i>Petauroides volans</i>		Vulnerable
Koala ^B	<i>Phascolarctos cinereus</i>	Vulnerable	Vulnerable
Little bentwing-bat	<i>Miniopterus australis</i>	Vulnerable	
Long-nosed potoroo	<i>Potorous tridactylus</i>	Vulnerable	Vulnerable
Red-legged pademelon	<i>Thylogale stigmatica</i>	Vulnerable	
Spotted-tailed quoll	<i>Dasyurus maculatus</i>	Vulnerable	Endangered
Yellow-bellied glider ^B	<i>Petaurus australis</i>	Vulnerable	

^A BC Act = Biodiversity Conservation Act; EPBC Act = Environment Protection and Biodiversity Conservation Act.

^B Recovery plan prepared.

Several other threatened species are predicted to occur in the park, based on the habitats present and nearby records. For example, a number of other micro-bat species listed as vulnerable under the Biodiversity Conservation Act have been recorded within one kilometre of the park (Hoye 2006 [micro-bat expert, park neighbour], pers. comm.), including the greater broad-nosed bat (*Scoteanax rueppellii*) and golden-tipped bat (*Kerivoula papuensis*). The abundance of disused mineshafts and adits provides an abundance of potential roosting habitat for micro-bat species.

As for threatened plants and vegetation communities, strategies for the recovery of threatened animal species and populations are set out in the *Biodiversity Conservation Program* (OEH 2017a). Individual recovery plans may be prepared for nationally listed threatened species (under the Environment Protection and Biodiversity Conservation Act). Recovery plans were previously prepared for some state-listed species that occur in the park, to consider management needs in more detail. Species with recovery plans are indicated in Table 1.

Mapping of key habitats and corridors for forest fauna has been undertaken by NPWS to provide a landscape framework for conservation in north-east NSW (Scotts 2003). Key habitats are areas of predicted high conservation value for forest fauna, whereas corridors are areas of potential habitat for resident populations or nomadic and migratory species. Corridors provide landscape connectivity to facilitate wildlife movement. Approximately 25% of the park has been mapped as key habitat and the park has also been identified as part of a regional corridor.

Issues

- A number of threatened animal species not already recorded (see Table 1) may occur in the park, including several species of micro-bat.
- The most significant threats to native animal populations in the park include habitat degradation from inappropriate fire regimes, and predation and competition from pest animals (see Section 4).

Desired outcomes

- Negative impacts on threatened species are minimised.
- The habitat and populations of all threatened animal species are protected, maintained and, where subject to previous disturbance, restored.
- Knowledge of the park's native animals is improved.

Management responses

- 3.3.1 Implement relevant actions set out in the *Biodiversity Conservation Program* or any recovery plans for threatened species in the park.
- 3.3.2 Undertake surveys of micro-bats and other fauna in the park as funding allows and ensure results are recorded in appropriate databases.
- 3.3.3 Encourage other research that fills gaps in knowledge and is relevant to the management of the park's populations of native animals.

3.4 Aboriginal heritage

The park lies within the traditional Country of the Worimi and Biripi peoples, and the Gathang language group. The land, water, sky, plants and animals within a landscape are central to Aboriginal spirituality and contribute to Aboriginal identity. The landscape has a central role in passing on cultural knowledge, kinship systems and strengthening family and social bonds. Aboriginal people live with and off the natural environment, and the links that exist can contribute to holistic sustainable management across the landscape.

Access to parks, such as Copeland Tops State Conservation Area, is one way in which Aboriginal people can continue connection with Country and provide opportunities for the teaching and maintenance of traditional and contemporary cultural practice.

Aboriginal sites are places with evidence of Aboriginal occupation or that are related to other aspects of Aboriginal culture. They are important as evidence of Aboriginal history and as part of the culture of local Aboriginal people. A number of Aboriginal sites are known to occur within five kilometres of the park, although none are currently recorded within the park itself. Although it is likely that past logging and mining activities may have removed any trees of significance, other sites may be present and these may be identified by future surveys.

There are many plant species within the park that are known or likely to have been used as food and medicines by Aboriginal people in the past. NPWS supports non-commercial cultural use of wild resources, such as medicinal plants and bush tucker, subject to NPWS policies and licensing.

Although the NSW Government has legal responsibility for the protection of Aboriginal sites and places under the National Parks and Wildlife Act, 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.

Issues

- There is potential for unrecorded Aboriginal sites present in the park to be damaged in management operations.

Desired outcomes

- Aboriginal sites and cultural values are identified, protected and managed with the involvement of the appropriate members of the Aboriginal community.
- Understanding of the Aboriginal values of the park is improved and, where appropriate, interpreted.

Management responses

- 3.4.1 Continue to consult and involve the Forster Local Aboriginal Land Council, relevant Elders groups, other relevant Aboriginal community organisations and custodial families in the management of their Country, including the management of Aboriginal sites, places and cultural and natural values.
- 3.4.2 Encourage a systematic archaeological survey and cultural assessment of the park in consultation with the appropriate Aboriginal community members and organisations.
- 3.4.3 Undertake an archaeological survey and cultural assessment before undertaking any works with the potential to affect Aboriginal sites or values.

3.5 Shared heritage

Heritage places and landscapes are composed of living stories as well as connections to the past that can include natural resources, objects, customs and traditions that individuals and communities have inherited and wish to conserve for current and future generations. Cultural heritage comprises places and items that may have historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance. NPWS conserves the significant heritage features of NSW parks.

The park has significant cultural heritage values. The Mountain Maid Mine is considered to be of state heritage significance because it was one of the longest continually operating goldmines in New South Wales (Ecotecture 2006; NSW Government 2010). However, it has not been formally listed on the State Heritage Register. Copeland village and nearby sections of the park are also highly significant in the history of the local area because they represent some of the earliest non-Aboriginal settlement in the area.

Timber-getters seeking red cedar discovered gold in the Barrington River in 1874, which led to a rush of prospectors to the area. Alluvial gold resources were quickly exhausted along both branches of Copeland Creek, then known as Back Creek (Ecotecture 2006). Reef mining is thought to have begun some time after 1877, with prospectors required to take out a mining lease.

Soon after the discovery of gold, a miners' camp was established at the base of the steep ravine of Copeland Creek. Tracks were cleared and sites levelled to make roads and on which to build houses or shacks. In about 1878, government surveyors arrived to design the village now known as Copeland, including streets and sites for a school, church, police station and courthouse. However, the first haphazard layer of settlement had already spread over the entire area, including sections of the current park. By 1890, Copeland village had the social infrastructure typical of any community of that period.

The Mountain Maid Mine was the most productive goldmine of the Copeland goldfields. Goldmining at the Mountain Maid Mine began in 1876 and continued until the last mining

licence was terminated in 1979. The mine also operated as a tourism mine between 1976 and 1978 (during the period that the Mountain Maid syndicate held the last mining licence), and again from about 1987 to the present.

The Mountain Maid Mine is also significant because it is one of the few goldmines in the Copeland goldfield to retain an array of operational fabric in its basic setting. The 'low capital' approach to goldmining demonstrated at the Mountain Maid Mine is very rare in New South Wales and something that is not found in better known and bigger goldfields. The minimally industrialised techniques and processes used at Mountain Maid are evident in the remaining fabric on the site.

The closeness of the Mountain Maid Mine to Copeland shows the broader context of the mine, including the approach from the village to the mine, and the retention in the village of many buildings and landscape features associated with the development phase of the mine and contributes to its unique historical character (Ecotecture 2006). The significant features of the entire site are described in the *Draft Mountain Maid Conservation Management Plan* (Ecotecture 2006).

The *Draft Conservation Management Plan* assessed the footprints of the old mining lease and other major sites that were part of the Mountain Maid operations, such as the mining shafts and the boiler. The plan also details the work required to ensure the historical values are retained. A large proportion of the recommendations in the draft conservation management plan have been completed, and the completion of the rest is dependent on additional resourcing.

The Mountain Maid Mine precinct contains four historic buildings: the Crusher Shed, Compressor Shed, Caretaker's Cottage and Caretaker's Shed. The Crusher Shed contains most of the mining equipment and is currently being used for educational purposes as part of guided tours delivered by the NPWS Discovery program. The Caretaker's Cottage and Shed also have potential to be used for interpretation and leasing or licensing (see Section 3.6).

A survey of movable cultural heritage items (OHM Consultants 2007) was completed for the Mountain Maid precinct and the park's other related heritage items outside this precinct, as determined in the *Draft Conservation Management Plan*. This document details the significance of items and provides recommendations on their future management.

An oral history project was also undertaken (OHM Consultants 2008). This has provided additional information on some of the movable cultural heritage items in the park and also contrasts with some of the information previously outlined in the *Draft Mountain Maid Conservation Management Plan*.

There are a number of other heritage sites within the park. The Hidden Treasure Mine, west of the Mountain Maid Mine precinct, is listed as being of local significance on the *Gloucester Local Environment Plan 2010* (NSW Government 2010). The Bowman cottage and associated outhouse, in the north of the park, requires assessment. Should it be found to be of significance, an updated conservation management plan (for places of state and high local historic heritage significance) or heritage action statement (for simple structures of local heritage significance) will be prepared to guide future management.

Issues

- The Draft Mountain Maid Conservation Management Plan needs to be reviewed and amended to incorporate new information obtained via the oral history recordings and the survey of movable cultural heritage.
- There is a cottage, outhouse and potentially other mining relics elsewhere in the park that are yet to be assessed for any historical significance.

- The Bowman cottage has suffered from a major termite infestation and is now structurally unsound. The house is considered to be a risk to public safety and is closed to the public.

Desired outcomes

- Understanding of the park's historical and cultural values is improved.
- Significant historical features are appropriately conserved, managed and recorded.

Management responses

3.5.1 Update and finalise the Mountain Maid Conservation Management Plan to reflect completed actions and incorporate new information obtained via the oral history recordings and the survey of movable cultural heritage. Implement the conservation management plan for the Mountain Maid Mine precinct.

3.5.2 Undertake a historical assessment of the Bowman Cottage, outhouse and any other mining relics located in the park to determine their significance. Should an item be found to be of significance, prepare and implement a conservation management plan or heritage action statement to guide future management.

3.5.3 Subject to the outcomes of the historical assessment of the Bowman cottage, consider the removal of the cottage.

3.5.4 Undertake an archaeological survey and cultural assessment before undertaking any works with the potential to impact on historical sites and places.

3.6 Visitor use

NPWS parks provide a range of recreational and tourism opportunities for visitors from low-key relaxation and renewal to active pursuits compatible with park values. NPWS aims to ensure that visitors enjoy, experience and appreciate the parks while at the same time conserving and protecting park values.

Copeland Tops State Conservation Area provides for a range of recreational opportunities. These include low-key recreational activities such as bushwalking and nature appreciation, as well as more active pastimes like horse riding and mountain bike riding. Visitation is primarily concentrated in the Mountain Maid Mine precinct, including the Hidden Treasure Day Use Area and the associated walking tracks. Visitation is currently below the capacity of the sites, with peaks in summer and autumn. The presence of mineshafts and adits throughout the park, associated with its mining history, creates potential hazards for visitors (see Section 3.7).

To facilitate the delivery of education programs in the Mountain Maid Mine precinct, an Education Centre was constructed in 2008. This is an open-sided, roofed structure with a small lockable office. At present it is used for the NPWS Discovery program, particularly for school groups, and by the volunteer program (see Section 3.7). There is scope for the structure to be utilised for activities unrelated to visitor education (see 'Leasing and licensing' below).

Surrounding areas managed by NPWS, other authorities and private operators in the region provide a range of additional recreational opportunities. Barrington Tops National Park and Barrington Tops State Conservation Area provide a wide range of recreational activities, from short walks to overnight camping trips in wilderness areas, mountain bike riding, horse riding on the Bicentennial National Trail and camping in formalised camping grounds. Woko National Park provides bushwalking and camping, and a number of camping grounds and picnic areas are provided in the state forests of the Barrington Tops.

Public vehicle access

Public road access to the park is primarily via the Scone Road, the main road between Gloucester and Scone. There is sealed road access suitable for two-wheel-drive vehicles, including buses, to the Mountain Maid Mine precinct along Copeland Road. This road terminates at a carpark at the Hidden Treasure Day Use Area, which currently has eight identified spaces for vehicles, a bus turnaround and bus parking space.

Other public roads within the park include four-wheel-drive roads in the north-west section of the park. Griffiths Trail, Sleepy Hollow Trail and Christmas Box Creek Trail form a loop drive that can be accessed via the Scone Road from the south or the Bowman River Road from the north.

Day use and camping

Day use areas, typically picnic facilities or sites for interpretation and education, are often the main destination for most visitors to parks. The Hidden Treasure Day Use Area is the focal point for visitors to the park and is the access point for the Basin Loop and Hidden Treasure walking tracks as well as the meeting point for guided tours around the historic Mountain Maid Mine. Facilities provided include car and bus parking, interpretation, barbecue, picnic table and toilets.

The number of visitors to the Mountain Maid Mine precinct is increasing, in part owing to the public tours and the increasing numbers of school groups undertaking NPWS Discovery excursions, which address the school curriculum (see Section 3.7).

There is no camping in the park near the Mountain Maid Mine precinct but camping is allowed at the Copeland Common approximately two kilometres north-east of Copeland. This plan proposes to establish basic picnicking, camping and car parking facilities at the Bowman River entry in the north of the park, to cater principally for cyclists, horse riders and bushwalkers. The development of this camping area will be subject to demand and an environmental impact assessment and be limited to the existing clearing. A new carpark is proposed for the southern end of Griffiths Trail.

Existing and proposed day use and camping facilities in the park are described in Table 2.

Table 2: Day use and camping areas in the park

Name of area and type	Setting	Vehicle access	Site features	General facilities to be provided
Hidden Treasure Day Use Area (existing)	Dry rainforest	2WD, sealed	Carpark (including bus parking) and Mountain Maid Mine precinct entry	Toilets (disabled access), interpretation shelter, barbecue, picnic shelter, walking track signage
Bowman River Entry (proposed camping area)	Cleared, rural setting	2WD, unsealed	Carpark and basic camping (proposed, commensurate with visitation)	Picnic table, toilet facilities, interpretative signage (commensurate with visitation), horse yards

Bushwalking

Bushwalking allows visitors to be in close contact with the environment and can increase understanding and enjoyment of parks and the environment. The park provides a range of bushwalking opportunities with varying degrees of social interaction, physical challenge and self-reliance, within a diversity of environmental settings. The walking tracks in the park (see Map 1 and Table 3) offer a range of walking experiences and standards. Australian walking

tracks are graded according to the Australian Walking Track Grading System (DSE no date), which identifies the suitability of a track for different user groups, as follows:

- Grade 1 – assisted disabled walkers (sealed path)
- Grade 2 – walkers with young children (generally formed tracks)
- Grade 3 – beginner walkers (generally formed tracks with some steep sections)
- Grade 4 – experienced walkers (generally rough tracks)
- Grade 5 – very experienced walkers with specialised skills (generally very rough tracks, no directional signage).

Access to the Mountain Maid Mine and the Mountain Maid Link Track is via guided tour only, owing to the historical significance of the site, the presence of artefacts along the walk, and public safety. The general public are able to access the Hidden Treasure and Basin Loop walking tracks and have access to other management trails within the park. The Hidden Treasure Walking Track is the park's most popular walking track and has a long history of use.

The Common Track is an unmarked route that begins at the northern end of Craddocks Creek Trail and ends on the boundary of private property (see Map 1). The route primarily follows ridgelines and is currently used by a commercial operator to provide guided walks for students and those undertaking the Duke of Edinburgh Award program with the agreement of the neighbouring landholder. General public access to the Common Track can only occur on that section within the park and members of the public interested in using the route should contact the NPWS Barrington Tops Office for further information.

Table 3: Bushwalking tracks in the park

Track name	Location	Setting	Distance	Current grade ^A	Proposed grade ^A
Hidden Treasure Track	Begins at the Hidden Treasure carpark	Dry rainforest	4.5 km loop	Grade 2 (graded track)	Grade 2 (graded track)
Basin Loop Track	Deviates north-west off the Hidden Treasure Track	Dry rainforest to wet sclerophyll forest to dry sclerophyll forest	7 km loop	Grade 3 (walking track)	Grade 2 (graded track)
Mountain Maid Link Track ^B	Begins at the Hidden Treasure carpark	Dry rainforest	1.2 km loop	Grade 2 (graded track)	Grade 1 (formed path)
Common Track	Begins at the north end of Craddocks Creek Trail	Open eucalypt forest	1.8 km one way	Grade 5 (unmarked route)	Grade 5 (unmarked route)

^A Based on the Australian Walking Track Grading System and the *Users Guide to the Australian Walking Track Grading System* (DSE no date).

^B Not open to the general public and accessible via guided tour only.

Cycling

Cycling is allowed along a number of roads and trails, as indicated on Map 1, consistent with NPWS policy and the *Sustainable Mountain Biking Strategy* (OEH 2011). Cycling in the park is currently at low to moderate levels but is likely to increase in line with current trends in mountain biking. Signage will be installed to indicate the routes that may be used. The trails available for cycling in the park offer challenging opportunities for experienced riders. The park does not contain any flat areas suitable for less experienced riders.

The roads available for cycling include Sleepy Hollow, Griffiths and Christmas Box Creek trails in the north-west of the park, which together form a loop ride. The use of this loop is likely to increase following the construction of the new parking area at the southern end of the loop (as shown on Map 1), which will provide a drop-off point for cyclists. The provision for camping and parking at the Bowman River entry, located at the northern end of the loop, will provide a base for cyclists riding this loop. As identified in Table 2, this camping area may be formalised commensurate with levels of use.

Other routes available for cycling are Broadbents and Craddocks Creek trails in the south and east of the park. The surface conditions on these trails have been assessed as being stable with low erosion potential and there is little risk of conflict with other users.

Some cycling currently occurs along the Basin Loop Track, particularly along the Old Copeland Road section. This use is considered inappropriate as it poses potential conflict with bushwalkers who frequent this track.

Horse riding

Horse riding is a popular recreational activity that has cultural associations for many Australians. The *Strategic Directions for Horse Riding in NSW National Parks* (OEH 2012) provides a process for providing riding opportunities in eight priority regions in New South Wales.

Horse riding opportunities are being implemented in selected national parks across NSW in accordance with the NPWS *Horse Riding Policy*. Horse riding, like some other recreational activities, can have adverse impacts on park values if done in inappropriate locations or without suitable management arrangements. Horse riding currently occurs in the park on the Basin Loop and Hidden Treasure walking tracks, Broadbents Trail, and the loop from the Bowman River entry to Christmas Box Creek Trail onto Griffiths Trail and then down Sleepy Hollow Trail back to the Bowman River (see Map 1).

Horse riding along the Hidden Treasure and Basin Loop walking tracks is considered inappropriate as it conflicts with the numbers of bushwalkers who use these tracks. These tracks provide popular, short and longer walks respectively, and hence are identified as specific walking tracks in the park on which horse riding is prohibited. Another major constraint on horse riding in the Hidden Treasure precinct is the lack of parking for horse floats in the carpark at the Hidden Treasure Day Use Area or provision for the unloading of horses in this area.

There is a stockyard at the Bowman River entry to the park that straddles the boundary of the park and partly encroaches onto neighbouring private property. It is proposed to encourage park visitors participating in horse riding to use this stockyard for their horses. A gate or similar structure is required to be added to the stockyard to ensure there is no encroachment of visitors' horses onto private property.

As with cycling, horse riding along Sleepy Hollow, Griffiths and Christmas Box Creek trails is considered appropriate since these roads are not frequented by walkers and their surface is stable, which lessens erosion potential. Sleepy Hollow, Griffiths and Christmas Box Creek trails also provide a loop. The provision for car parking and camping at the Bowman River entry, along with the existing horse yards, will enhance use of this site as a base for horse riders (see Map 1). Facilities provided at this location will be limited to those listed in Table 2, commensurate with levels of usage and demand.

Broadbents Trail is also used by horse riders and, although used by bushwalkers, there are currently no conflicting use issues. Horse riding may continue on this trail and will also be allowed on Craddocks Creek Trail.

Group activities

Group activities can provide opportunities for people who would otherwise not be able to experience the park and can promote environmental understanding and support for conservation. However, large groups can have an adverse environmental impact and can restrict opportunities or enjoyment of independent visitors.

For the purposes of managing visitor impacts in this park, non-commercial organised group activities in the park involving more than 15 people will require NPWS consent. Organised competitive events involving any number of participants, including competitive cycling or horse riding events, will also require consent. Organised group activities of any size that are of a commercial nature require licensing under the National Parks and Wildlife Act. All group activities must be consistent with the management principles for the park and be compatible with its natural and cultural heritage values.

There are currently two commercial tourism operators licensed to operate in the park. Commercial activities predominantly include guided walks with school groups, and birdwatching tours throughout the walking track and management trail network. A number of other commercial licences have been granted and lapsed over time, mostly for bushwalking and mountain bike riding.

There is scope for additional commercial operators to use the park for appropriate activities such as guided walks, cycling, drives and horse riding, and also for group activities unrelated to visitor education to use the Education Centre. Applications will be assessed in accordance with relevant NPWS policies and procedures.

There has been interest in undertaking **fossicking** within the park. This is not a use that existed in the park at the time of reservation. Apart from gold panning conducted as part of licensed tours, fossicking permits had not been issued when the park was a state forest. Owing to the potential impacts on park values, these restrictions on fossicking will be maintained. Subject to conditions of the NPWS *Fossicking Policy* (OEH 2017b) and this plan of management, consent to fossick may be granted for gold panning or similar activity conducted as part of an organised educational tour. Any consent to fossick will require an appropriate level of environmental assessment and will need to be consistent with the NPWS *Fossicking Policy*. Any consent would also define areas where fossicking may occur and any restrictions on equipment or techniques. Off-creek troughs next to the education centre have been constructed to mitigate impacts from the gold panning in approved tours.

Leasing and licensing

Section 151A of the National Parks and Wildlife Act sets out the purposes for which reserved land may potentially be leased or licensed, namely specified 'general purposes' relating to management of the parks, purposes related to sustainable visitor or tourist use and enjoyment of parks, or for the adaptive re-use ('adaptive re-use' as defined by the National Parks and Wildlife Act) of an existing building or structure, or the use of a modified natural area. The purposes for each park must be identified in its plan of management.

The structures located in the Mountain Maid Mine precinct, including the Mountain Maid Link Track, the Education Centre and their immediate surrounds, are identified as being suitable for leasing for use, or modification for adaptive re-use, for the purposes listed in Table 4.

Table 4: Structures in the Mountain Maid Mine precinct

Structure	Purposes for which the structure may be used
Caretaker's Cottage	Education, restaurant or kiosk
Caretaker's Shed	Education, interpretation, display

Compressor Shed	Education, interpretation, display
Crusher Shed	Education, interpretation, display
Education Centre	Education, restaurant or kiosk, artistic or health or wellbeing activities
Mountain Maid Link Track	Education, interpretation, display

Issues

- There is currently no formalised carpark at the Bowman River entry to the park or at the intersection of Griffiths Trail and Scone Road.
- The stockyard at the Bowman River entry extends onto private property.
- A number of trails lead into or through private property and these cannot be promoted for public use.
- There are issues associated with cycling and horse riding on walking tracks in and around the Mountain Maid Mine precinct, particularly the Hidden Treasure and Basin Loop tracks. These activities conflict with use of these areas by walkers.
- Fossicking is not generally permitted in NPWS parks because of its impact on land stability, cultural heritage and native plants and animals, including threatened species. The endangered stuttering frog (*Mixophyes balbus*), which is known from the park, inhabits creek lines and adjoining areas so is particularly prone to disturbance (see Section 3.3). There are also safety issues for fossickers associated with the numerous mineshafts and adits (mine entrances and tunnels) throughout the park (see Section 3.7).
- The Mountain Maid Mine precinct is currently operating below its potential in terms of visitation levels.

Desired outcomes

- Visitor use is appropriate and ecologically sustainable.
- Visitor opportunities encourage appreciation and awareness of the park's values and its conservation, especially in relation to the goldmining heritage of the site.
- Negative impacts of visitors on park values are minimised.
- Facilities and activities are planned and managed to provide a satisfying visitor experience and minimise impacts and potential conflicts between users.
- Group activities facilitate a quality experience for participants, enhancing their understanding and appreciation of the natural and cultural heritage values of the park, and have minimal impacts on other users.

Management responses

- 3.6.1 Provide public vehicle access as shown on Map 1. Install gates and signs as necessary to restrict unauthorised access to management trails.
- 3.6.2 Monitor the environmental and social impacts of visitor use and recreation and implement measures where necessary (including temporary trail closures) to address unacceptable environmental or social impacts.

Day use and camping

- 3.6.3 Manage day use and camping areas in accordance with the facilities listed in Table 2. Progressively formalise the site at the Bowman River entry and install facilities, subject to environmental impact assessment, demand and use of the site.
- 3.6.4 Provide a basic carpark at the Bowman River entry and at the intersection of Griffiths Trail and Scone Road, appropriate for the number of visitors.
- 3.6.5 Provide interpretive and safety information and information about minimal impact use as part of the proposed visitor facilities at the Bowman River entry.

Bushwalking

- 3.6.6 Maintain bushwalking facilities and opportunities as described in Table 3 but do not promote use of the Common Track.
- 3.6.7 Upgrade the Basin Loop Track to improve visitor safety.
- 3.6.8 Upgrade the access into the Mountain Maid Mine precinct to provide disabled access.

Cycling and horse riding

- 3.6.9 Allow cycling and horse riding on Griffiths, Christmas Box Creek, Sleepy Hollow, Broadbents and Craddock's Creek trails, as shown on Map 1. Do not allow cycling or horse riding on any other tracks and trails in the park.
- 3.6.10 Install and maintain signage indicating which trails are available for cycling and horse riding.
- 3.6.11 In consultation with the neighbouring landholder, install a gate or similar structure in the stockyard at the Bowman River entry to delineate the park boundary.
- 3.6.12 Allow camping with horses at the Bowman River entry using the stockyards provided in the park. Do not allow camping with horses elsewhere in the park.

Group activities

- 3.6.13 Make provision for organised group visits, subject to monitoring of numbers and other conditions if necessary to minimise impacts.
- 3.6.14 Require any organised groups exceeding 15 people to obtain NPWS consent. Consents may be issued with conditions to protect park values.
- 3.6.15 Require organised competitive events of any size to obtain NPWS consent. Permit such events, including competitive horse riding and cycling events, subject to limits on numbers and other conditions if necessary to minimise impacts.
- 3.6.16 Conduct tours to the Mountain Maid Mine and along the Mountain Maid Link Track (including under the banner of the NPWS Discovery program) or license suitably accredited operators to conduct such tours.
- 3.6.17 Issue consent for fossicking in the park only if it is gold panning or a similar activity conducted as part of an organised educational tour and if it is consistent with the NPWS *Fossicking Policy*. Do not permit other forms of fossicking.
- 3.6.18 Monitor commercial and non-commercial group activities for cumulative impacts, safety requirements, quality of information being given and compliance with licence or

consent conditions. Licences or consents may be cancelled if there is a breach of the conditions.

Leasing and licensing

3.6.19 Consider and, if appropriate, enter into appropriate leasing or licensing arrangements for areas in the Mountain Maid Mine precinct for the purposes outlined in Table 4.

3.7 Information and education

Providing relevant information to the community assists in the protection of natural and cultural heritage, promotes support for conservation, and increases the enjoyment and satisfaction of visitors.

The Mountain Maid Mine precinct provides an excellent opportunity for visitors to gain an insight into goldmining and the techniques historically used at this site, as well as the park's rainforest setting. Its interpretative value is currently realised by conducting NPWS Discovery tours. As discussed in Section 3.6, an Education Centre has been constructed in the Mountain Maid Mine precinct to provide a classroom setting for these tours. This is used particularly for school groups. Since October 2010, the number of visitors on guided tours in the park has averaged approximately 800 per year.

A partnership has been established between the Gloucester Visitor Information Centre and NPWS that allows volunteer tour guides to conduct public tours of the site. The Gloucester Visitor Information Centre currently takes bookings for small group tours two days a week. This allows the Discovery program to focus on conducting school group tours and larger group programs. School packages have been formulated to address the syllabus requirements relating to rainforest and goldmining history.

There is potential for a wide variety of tours and packages to be provided to the public via the Discovery program. However, there is currently no strategy in place to determine the opportunities available and the promotion required to market the activities. To this end, a visitor management plan is required for the park.

Interpretive signage has recently been installed in the carpark at Hidden Treasure Day Use Area and along the Hidden Treasure and Basin Loop walking tracks. This signage includes information on the natural and cultural resources of the park, location information and maps of the walking tracks. All tracks and trails within the park are signposted, indicating the trail name only. Regulatory symbols have not currently been installed on all signs.

There are numerous mineshafts and adits throughout the park associated with the mining history of the park. Shafts and adits are a potential risk to visitors and staff. Some shafts and adits have been mapped, but it is impractical and cost-prohibitive to identify and map them all. In areas of high visitation, some shafts and adits have had gates and grids installed. Signage has been installed at all entrances to the park to highlight the safety issue and inform visitors to remain on the tracks, trails and roads.

Issues

- The Mountain Maid Mine precinct presents an invaluable resource for visitation, interpretation and education on a range of values, but current interpretation is occurring without a clear interpretation strategy. The Discovery program, for example, does not currently include Aboriginal heritage as a theme for interpretation.
- There is an opportunity to provide information displays in the Crusher Shed in the Mountain Maid Mine precinct to assist in interpreting the values of the equipment on display and to add a further point of interest.

- There is potential for higher levels of visitor use, as the area is currently under its operational capacity. A visitor management plan is required to investigate and coordinate opportunities for encouraging greater visitation, including the provision of additional services and facilities and promotional activities.
- As discussed in Section 3.6, there may be opportunities to enter into leasing or licensing arrangements for some aspects of visitor management, including provision of guided tours, or for educational, interpretive and other services in the structures of the Mountain Maid Mine precinct.
- Bushwalkers are occasionally observed walking dogs in the park. Domestic pets can be a threat to native animals and can disrupt other people's enjoyment of parks. Owing to these threats it is NPWS policy that pets are not permitted in state conservation areas.
- Firewood collection has been an issue in the park, particularly along Griffiths and Broadbents trails. Firewood collection is not permitted within the park.
- Unregistered and unlicensed motorbike riding occurs throughout the park.

Desired outcomes

- The park attracts more visitors, through both the Discovery program and a wider range of opportunities made available throughout the park.
- The park meets its potential to provide interpretation on a range of values, including Aboriginal heritage.
- In conjunction with management of visitor use, opportunities for leasing and licensing are explored (see Section 3.6).
- The likelihood of an injury due to trips or falls into shafts or adits is minimised.
- The walking of dogs, collection of firewood and illegal motorbike riding in the park are reduced and ideally eliminated.

Management responses

- 3.7.1 Encourage involvement of the local Aboriginal community in the development of material and programs for interpretation of Aboriginal culture.
- 3.7.2 Prepare and implement an interpretative strategy and visitor management plan for the park.
- 3.7.3 Provide and maintain appropriate interpretive, directional and regulatory signage within the park.
- 3.7.4 Actively promote tours in the park, such as those conducted by the NPWS Discovery program and commercial operators.
- 3.7.5 Install and maintain gates and grids over mining shafts and adits in locations of high visitation to minimise the likelihood of injury.
- 3.7.6 Maintain signs warning of the hazards associated with mining shafts and adits, instructing visitors to use only established tracks, trails and roads.
- 3.7.7 Install regulatory signage prohibiting walking of dogs in the park.
- 3.7.8 Monitor firewood collection and illegal motorbike riding and undertake additional regulatory enforcement at appropriate times as required.

4. Threats

4.1 Pests

Pest species are plants, animals and pathogens that have negative environmental, economic and social impacts. Commonly they are introduced species, but can include native species not endemic to a location. Pests can have impacts across the range of park values, including on biodiversity, cultural heritage and catchment and scenic values. Weeds and pests recorded from the park, or nearby but may enter or represent a threat to the park, are listed in Table 5.

Table 5: Weed and pest animals expected to occur in the park

Common name	Scientific name	Status ^A	Comment
Weeds			
Arsenic bush (also known as winter or smooth senna)	<i>Senna septemtrionalis</i>		Scattered populations throughout the park
Asparagus	<i>Asparagus</i> spp.	WoNS, R	Isolated populations restricted to small areas
Blackberry	<i>Rubus fruticosus</i> agg.	WoNS	Isolated populations restricted to small areas
Black-eyed Susan	<i>Thunbergia alata</i>		Isolated populations restricted to small areas
Crofton weed	<i>Ageratina adenophora</i>	C	Isolated populations restricted to small areas
Giant Parramatta grass	<i>Sporobolus fertilis</i>	R	Isolated populations restricted to small areas
Japanese honeysuckle	<i>Lonicera japonica</i>		Occurs in the surrounding landscape
Lantana	<i>Lantana camara</i>	WoNS	Isolated populations restricted to small areas
Madeira vine	<i>Anredera cordifolia</i>	WoNS	Minor infestation along Sleepy Hollow Trail
Mistflower	<i>Ageratina riparia</i>	C	Scattered populations throughout the park
Moth vine	<i>Araujia sericifera</i>	C	Isolated populations restricted to small areas
Turkey rhubarb	<i>Acetosa sagittata</i>		Established widespread populations
Pasture grasses	(various)		Scattered populations throughout the park
Thistles	(various)		Scattered populations throughout the park
Pest animals			
Red fox	<i>Vulpes vulpes</i>	D	Scattered populations throughout the park
Feral cat	<i>Felis catus</i>	D	Scattered populations throughout the park

Feral pig	<i>Sus scrofa</i>	D	Scattered populations throughout the park
Rabbit	<i>Oryctolagus cuniculus</i>	D	Isolated populations restricted to small areas
Wild dogs	<i>Canis lupus</i> subspp.	D	Scattered populations throughout the park

^A Status:

WoNS Declared Weed of National Significance

R Regional priority weed (Hunter LLS 2017)

D Regional priority pest animal (Hunter LLS 2018).

The *Biosecurity Act 2015* and its regulations provide specific legal requirements for the response, management and control of biosecurity risks, including weeds and pest animals. These requirements apply equally to public and privately-owned land. Under this framework, Local Land Services has prepared regional strategic weed management plans and regional strategic pest animal management plans for each of its 11 regions, including the Hunter Region (Hunter LLS 2017 and Hunter LLS 2018).

The plans identify priority weeds and pest animals in each of the regions, plus the appropriate management response for the region (i.e. prevention/alert, eradication, containment or asset protection). These priorities will be implemented via the relevant NPWS pest management strategy.

NPWS prepares regional pest management strategies that identify the operations and control actions undertaken by NPWS to meet the priorities from regional strategic pest and weed management plans. This also includes other important programs such as the *Biodiversity Conservation Program* (see Sections 3.2 and 3.3). The regional pest management strategy identifies priority pest species and control programs for this park. Key priorities listed in the pest management strategy includes wild dogs, lantana, crofton weed and Madeira vine.

The overriding objective of the pest management strategy is to minimise adverse impacts of introduced species on biodiversity and other park and community values while complying with legislative responsibilities. The strategy also identifies where other site- or pest-specific plans or strategies need to be developed to provide a more detailed approach.

Lantana is a vigorous invader of disturbed areas, often forming dense thickets. It is spread mainly by birds and thrives in warm environments with high rainfall where it grows along forest edges, penetrates disturbed rainforest and invades open eucalypt woodlands and pastures. Lantana has been declared a noxious weed throughout New South Wales and is also listed as a Weed of National Significance. Control programs for lantana and Madeira vine have taken place in the park at sites adjoining Sleepy Hollow Trail (both species) and Broadbents Trail (lantana only) to reduce their spread through the park. The invasion, establishment and spread of lantana and the invasion and establishment of exotic vines and scramblers are listed as key threatening processes under the Biodiversity Conservation Act.

Wild dogs are known to occasionally occur within the park. Wild dogs, including dingos (*Canis lupus dingo*), feral dogs (*Canis lupus familiaris*) and hybrids of the two, are subject to a pest control order made under the *Local Land Services Act 2013*. NPWS therefore has a statutory obligation to control wild dogs on its estate.

Dieback

Over-abundant populations of native bell miners are associated with a form of eucalypt dieback, which has been listed as a key threatening process under the Biodiversity Conservation Act. Bell miner associated dieback is currently spreading rapidly through sclerophyll forests in New South Wales. It is generally characterised by trees that are

stressed and dying in response to high populations of psyllids and other sap-sucking insects, the over-abundance of bell miners and the alteration of the forest structure. Affected areas often have depleted canopies and mid-storeys, and dense shrubby understoreys are often replaced by lantana or vine thickets.

The aggressive behaviour of bell miners drives away insectivorous birds that would otherwise help to control insect numbers. Weed invasion, drought, logging, soil nutrient changes and poor fire and grazing regimes are also implicated in the spread of bell miner associated dieback (BMAD Working Group 2004).

This form of dieback is recorded from a number of sites in the park where it is primarily affecting regrowth of Sydney blue gum (*Eucalyptus saligna*) where there is a dense understorey consisting mostly of native species. The *Regional Pest Management Strategy* includes actions for identifying the presence and assessing the impact of bell miner associated dieback.

Desired outcomes

- Negative impacts of pest species on park values are stable or diminishing.
- Pest plants and animals are controlled and where possible eliminated.
- Bell miner associated dieback is appropriately managed.

Management responses

- 4.1.1 Manage pest species in line with relevant pest management strategies, with priority given to the control of lantana, crofton weed, Madeira vine and wild dogs.
- 4.1.2 Seek the cooperation of neighbours in implementing weed and pest control programs. Undertake control in cooperation with Hunter Local Land Services, Council and relevant community groups.
- 4.1.3 Monitor priority weeds and their impacts. Treat any new outbreaks where possible.
- 4.1.4 Monitor the extent and spread of dieback in the park and implement priority control measures when and if available as per the regional pest management strategy.

4.2 Fire

The primary objectives of NPWS fire management are to protect life, property, community assets and cultural heritage from the adverse impacts of fire, while also managing fire regimes in parks to maintain and enhance biodiversity. NPWS also assists in developing fire management practices that contribute to conserving biodiversity and cultural heritage across the landscape and implements cooperative and coordinated fire management arrangements with other fire authorities, neighbours and the community (OEH 2013c).

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 fire has been listed as a key threatening process under the Biodiversity Conservation Act.

The fire history of the park is well documented from 2000. This information is captured in a geographical information system to allow for detailed fire planning, including the planning of prescribed burns. Vegetation and topography has a large influence on fire behaviour. The dry rainforest within the park poses a low fire risk, however, the risk increases on the edge of ecotones where the vegetation transitions to dry sclerophyll forest. Most fires have been north of the Scone Road.

A strategy that defines the fire management approach for the park has been prepared (DEC 2006) and is regularly updated. This strategy outlines key assets within and adjoining the park, including sites of natural and cultural heritage, fire management zones and fire control advantages, such as management trails and water supply points. Vulnerable assets within the park include the buildings in the Mountain Maid Mine precinct, Mountain Maid Link Track and bridges on the park's tracks and trails. Fire also poses a risk to the ecological values of the park's rainforests, which are considered an asset vulnerable to fire.

The fire management strategy identifies two strategic fire management zones. One is between Marshs Trail and the Scone Road in the south-east of the park and the other is north of Christmas Box Creek Trail in the north-west of the park. The purpose of a strategic fire management zone is to reduce the speed and intensity of bushfires and reduce the potential for spot fires to develop. The rest of the park is currently zoned as land management zones, the objective of which is to conserve biodiversity and protect cultural heritage.

There is one helipad within the park (off Christmas Box Creek Trail), which will be maintained for use, mainly for fire management purposes. There are a number of other helipads close to the park (see DEC 2006).

NPWS maintains cooperative arrangements with surrounding landowners and the Rural Fire Service (RFS) and is actively involved with the local bush fire management committee. Cooperative arrangements include fire planning, fuel management and information sharing. Hazard reduction programs, ecological burning proposals and fire trail works are submitted annually to the bush fire management committee.

Desired outcomes

- Negative impacts of fire on life, property and the environment are minimised.
- The potential for spread of bushfires on, from, or into the park is minimised.
- Fire regimes are appropriate for conservation of the park's native plant and animal communities.

Management responses

- 4.2.1 Implement the fire management strategy for the park, and review and update this strategy as required.
- 4.2.2 Continue to be involved in the local bush fire management committee and maintain cooperative arrangements with local RFS brigades, other fire authorities and surrounding landowners with regards to fuel management and fire suppression.
- 4.2.3 Ensure fire regimes are appropriate for the protection of habitat values, for plant species and communities, especially dry rainforest, and allow for natural succession and regeneration.
- 4.2.4 Avoid the use of heavy machinery for fire suppression other than where appropriate on existing fire management trails or on old timber snigging trails that remain clearly delineated. Do not construct new trails.
- 4.2.5 Rehabilitate areas disturbed by fire suppression operations as soon as practical after a fire.

4.3 Climate change

Human-induced climate change is listed as a key threatening process under the Biodiversity Conservation Act (NSW SC 2000) and the associated loss of habitat is listed under the Environment Protection and Biodiversity Conservation Act (TSSC 2001).

The latest information on projected changes to climate are from the NSW and ACT Regional Climate Modelling (NARClim) project (OEH 2014). The climate projections for 2020–39 are described as ‘near future’; and projections for 2060–79 are described as ‘far future’. The snapshot shown in Table 6 is for the NARClim Hunter Region, which includes Copeland Tops State Conservation Area (OEH 2014).

The projected increases in temperature, number of hot days and severe fire weather days (OEH 2014) are likely to lead to greater intensity and frequency of fires and more severe short-term droughts across the region surrounding the park (DECCW 2010). Higher rainfall in autumn is likely to lead to increased river runoff and water availability resulting in more frequent flooding and increased erosion (DECCW 2010).

Climate change may also affect biodiversity significantly by changing the size of populations and the distribution of species and altering the geographical extent and species composition of habitats and ecosystems. Species most at risk are those unable to migrate or adapt, particularly those with small populations or with slow population growth rates.

Table 6: Hunter climate change snapshot

Projected temperature changes	
Maximum temperatures are projected to increase in the near future by 0.4–1.0°C	Maximum temperatures are projected to increase in the far future by 1.6–2.6°C
Minimum temperatures are projected to increase in the near future by 0.5–0.9°C	Minimum temperatures are projected to increase in the far future by 1.5–2.5°C
The number of hot days (i.e. > 35°C) will increase	The number of cold nights (i.e. < 2°C) will decrease
Projected rainfall changes	
Rainfall is projected to decrease in spring and winter	Rainfall is projected to increase in autumn
Projected changes to Forest Fire Danger Index	
Average fire weather is projected to increase in summer, spring and winter	Severe fire weather days are projected to increase in summer and spring

Source: OEH (2014).

The potential impacts of climate change on the park itself are difficult to assess since they will depend on the compounding effects of other pressures, such as barriers to migration and pressure from introduced animals. It is likely that the park’s rainforest communities will be adversely affected by increased frequency of fires.

Programs to reduce the pressures arising from other threats, such as habitat fragmentation, invasive species, bushfires and pollution, will help reduce the severity of the effects of climate change.

Desired outcomes

- The effects of climate change on natural systems are minimised.

Management response

- 4.3.1 Continue existing fire, pest and weed management programs to increase the park's ability to cope with future disturbances, including climate change, and encourage research into appropriate indicators to monitor the effects of climate change.

5. Management operations and other uses

5.1 Management facilities and operations

In order to protect the park's values, provide opportunities and facilities for visitors and facilitate management operations it is important to build and maintain appropriate infrastructure for the park. For the park, this infrastructure is predominately the network of management trails but also includes boundary fences and quarries.

The network of management trails in the park, along with the park road network, is maintained and regularly used for fire and pest species management. In accordance with NPWS policy, vehicle use of management trails is restricted to NPWS authorised activities, such as essential park management and emergency response. Several of the park's management trails continue onto neighbouring lands.

The park contains two quarries (see Map 1). The Copeland Main Road Quarry (off Scone Road) is regularly used as a gravel resource for maintaining roads and trails within the park. The quarry is registered with the resource regulatory authority and a quarry management plan has been prepared. North Griffith Trail Quarry is not currently used, but it may be used in the future if required.

Issues

- North Griffith Trail Quarry is not currently registered but will need to be registered and a quarry management plan prepared before it can be used.
- Straying stock are occasionally found in the park.
- Part of the Hidden Treasure Day Use Area lies on land that is a council road reserve. NPWS is working with local council (the authority for the road reserve) to close the road reserve officially under the *Roads Act 1993* and to add the land to the park, along with the road reserve for the Old Copeland Road section for the Basin Loop Track (see Map 1).
- Part of the Old Copeland Road section of the Basin Loop Track appears to deviate from its road reserve, crossing into both park and neighbouring private property. NPWS is currently working with local council to resolve the status of the road and its reserve.

Desired outcomes

- Management trails are appropriately maintained.
- Quarries and other management facilities are retained but have minimal impacts on the park's values.
- Boundary fences are adequate to keep stock out of the park.
- Land that is managed as park is formally reserved as park.

Management responses

5.1.1 Maintain the network of management trails shown on Map 1. Install gates and signs for management trails where necessary to prevent unauthorised public access.

5.1.2 Implement the quarry management plan for the Copeland Main Road Quarry.

5.1.3 Retain the North Griffith Trail Quarry for use when required, and register the quarry with the resource regulatory authority when the quarry needs to be reactivated.

- 5.1.4 Encourage construction and maintenance of boundary fences to exclude stock from the park. If necessary, provide assistance in accordance with NPWS policy to achieve effective stock-proof fencing.
- 5.1.5 Assist local council in closing the council road reserves indicated on Map 1 and add these areas to the park.
- 5.1.6 Resolve the status of the section of Basin Loop Track, which appears to partly traverse private property, and seek long-term access arrangements (e.g. easement) to formalise public and management access.

5.2 Non-NPWS uses and operations

Sleepy Hollow Trail is not part of the reserved area of park; it is Crown land vested in the Minister under Part 11 of the National Parks and Wildlife Act to ensure continued access to neighbouring land. Sleepy Hollow Trail provides residents of the Bowman River Road area with road access to Gloucester during periods when the Bowman River Road is inaccessible due to floods. During these periods some residents may need to move pets or livestock along Sleepy Hollow Trail. This is consistent with the NPWS *Pets in Parks Policy* (NPWS 2017). No pets or livestock are otherwise allowed in the park.

The Copeland Trigonometrical Station (trig) is located on a small inholding of Crown land that is surrounded by the park. Access to the trig is through the park via a management trail. An agreement between NPWS, the former Crown Lands Office and the former Central Mapping Authority provides for continued right of access to the station for survey purposes.

There is a small and isolated section of park north of the Upper Bowman Road (between the road and the Bowman River) that is cleared and fenced into the neighbouring grazing property. There needs to be long-term resolution of the management of these lands, consistent with the National Parks and Wildlife Act.

Exploration for minerals and petroleum, as well as mining and petroleum production, are permissible uses within state conservation areas. As described in Section 3.5, there has been a lengthy history of mining and exploration within the current park boundaries, mostly in and around the Mountain Maid Mine precinct. There is an active goldmine in the park north of Scone Road covered by a mining lease that is current until 2022.

Mining and petroleum activities in the state, including mineral exploration and mine site rehabilitation, are regulated by the NSW Government. NPWS will work with the resource regulatory authority to ensure that exploration and production proposals in state conservation areas comply with all statutory requirements, including any necessary environmental impact assessments and approvals. This cooperative approach is outlined in a memorandum of understanding.

Several sites in the park require mine rehabilitation and stabilisation works owing to their impacts on park values and the risk they pose to visitor safety. The resource regulatory authority has approached NPWS about funding possible rehabilitation of eligible sites in the park.

Desired outcomes

- Private property access rights continue and have minimal impact on park values.
- The impacts of mining and mineral exploration activities on the park are minimised.

Management responses

- 5.2.1 Permit animals to be transported within vehicles on Sleepy Hollow Trail, provided there are no other practical alternative routes, in accordance with the National Parks and Wildlife Regulation and NPWS *Pets in Parks Policy*. The vehicles must not stop and the animals must not leave the vehicle within the park.
- 5.2.2 Continue to provide access to Copeland trig in accordance with existing or future formal agreements between NPWS and the relevant agencies.
- 5.2.3 Resolve future management of the isolated section of park between the Upper Bowman Road and the Bowman River.
- 5.2.4 Liaise with existing mining lessees to develop and implement a practical framework of access and management arrangements (consistent with the memorandum of understanding between NPWS and the resource regulatory authority) to ensure the safety of lessees, visitors and staff, and to minimise impacts on the natural and cultural values of the park.
- 5.2.5 Allow rehabilitation and safety works for old mining sites subject to funding and appropriate environmental assessment.

6. Implementation

This plan of management establishes a scheme of operations for the park. Implementation of this plan will be undertaken within the annual program of the NPWS Lower North Coast Region.

Identified activities for implementation are listed in Table 7. Relative priorities are allocated against each activity as follows:

- **High priority** activities are imperative to achieve the objectives and desired outcomes, and must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.
- **Medium priority** activities are necessary to achieve the objectives and desired outcomes but are not urgent.
- **Low priority** activities are desirable to achieve the objectives and desired outcomes but can wait until resources are available.
- **Ongoing** activities are undertaken on an annual basis or in response to an issue that arises.

This plan of management does not have a specific term and will stay in force until amended or replaced in accordance with the National Parks and Wildlife Act.

Table 7: Summary of management responses

Plan reference	Management response	Priority
3.1	Geology, landscape and hydrology	
3.1.1	Ensure management activities including maintenance of roads, road closures and quarry management are carried out in a manner that minimises soil erosion and water pollution.	Ongoing
3.1.2	Manage recreational and other uses to minimise erosion, changes to soil structure and degradation of catchment values.	Ongoing
3.1.3	Prohibit the extraction of clay, rock and gravel from the park, except where the material will be used for works within the park.	Ongoing
3.2	Native plants	
3.2.1	Implement relevant actions set out in the <i>Biodiversity Conservation Program</i> or any recovery plans for threatened species or communities in the park.	Ongoing
3.2.2	Undertake or encourage a comprehensive vegetation survey of the park (subject to available resources), with priority given to identifying, mapping and recording threatened and significant plants species and ecological communities.	Low
3.2.3	Monitor the rehabilitation of previously disturbed areas and undertake active revegetation where needed, using local native species. Priority to be given to rehabilitating the cleared land in the vicinity of Christmas Box Creek Trail.	Medium
3.2.4	Ensure staff and volunteers are trained in the identification of the white-flowered wax plant and other significant species, and their appropriate management.	Medium

Plan reference	Management response	Priority
3.3	Native animals	
3.3.1	Implement relevant actions set out in the <i>Biodiversity Conservation Program</i> or any recovery plans for threatened species in the park.	Ongoing
3.3.2	Undertake surveys of micro-bats and other fauna in the park as funding allows and ensure results are recorded in appropriate wildlife and other databases.	Low
3.3.3	Encourage other research that fills gaps in knowledge and is relevant to the management of the park's populations of native animals.	Ongoing
3.4	Aboriginal heritage	
3.4.1	Continue to consult and involve the Forster Local Aboriginal Land Council, relevant Elders groups, other relevant Aboriginal community organisations and custodial families in the management of their Country, including the management of Aboriginal sites, places and cultural and natural values.	Ongoing
3.4.2	Encourage a systematic archaeological survey and cultural assessment of the park in consultation with the appropriate Aboriginal community members and organisations.	Low
3.4.3	Undertake an archaeological survey and cultural assessment before undertaking any works with the potential to affect Aboriginal sites or values.	Ongoing
3.5	Shared heritage	
3.5.1	Update and finalise the Mountain Maid Conservation Management Plan to reflect completed actions and incorporate new information obtained via the oral history recordings and the survey of movable cultural heritage. Implement the conservation management plan for the Mountain Maid Mine precinct.	Medium
3.5.2	Undertake a historical assessment of the Bowman cottage, outhouse and any other mining relics located in the park to determine their significance. Should an item be found to be of significance, prepare and implement a conservation management plan or heritage action statement to guide future management.	Medium
3.5.3	Subject to the outcomes of the historical assessment of the Bowman cottage, consider the removal of the cottage.	Medium
3.5.4	Undertake an archaeological survey and cultural assessment before any works with the potential to impact on historical sites and places.	Ongoing
3.6	Visitor use	
3.6.1	Provide public vehicle access as shown on Map 1. Install gates and signs as necessary to restrict unauthorised access to management trails.	Ongoing
3.6.2	Monitor the environmental and social impacts of visitor use and recreation and implement measures where necessary (including temporary trail closures) to address unacceptable environmental or social impacts.	Ongoing
3.6.3	Manage day use and camping areas in accordance with the facilities listed in Table 2. Progressively formalise the site at the Bowman River entry and install facilities, subject to environmental impact assessment, demand and use of the site.	Ongoing

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Plan reference	Management response	Priority
3.6.4	Provide a basic carpark at the Bowman River entry and at the intersection of Griffiths Trail and Scone Road, appropriate for the number of visitors.	Low
3.6.5	Provide interpretive and safety information and information about minimal impact use as part of the proposed visitor facilities at the Bowman River entry.	Medium
3.6.6	Maintain bushwalking facilities and opportunities as described in Table 3 but do not promote use of the Common Track.	Ongoing
3.6.7	Upgrade the Basin Loop Track to improve visitor safety.	Medium
3.6.8	Upgrade the access into the Mountain Maid Mine precinct to provide disabled access.	Low
3.6.9	Allow cycling and horse riding on Griffiths, Christmas Box Creek, Sleepy Hollow, Broadbents and Craddocks Creek trails, as shown on Map 1. Do not allow cycling or horse riding on any other tracks and trails in the park.	Ongoing
3.6.10	Install and maintain signage indicating which trails are available for cycling and horse riding.	Ongoing
3.6.11	In consultation with the neighbouring landholder, install a gate or similar structure in the stockyard at the Bowman River entry to delineate the park boundary.	Low
3.6.12	Allow camping with horses at the Bowman River entry using the stockyards provided in the park. Do not allow camping with horses elsewhere in the park.	Ongoing
3.6.13	Make provision for organised group visits, subject to monitoring of numbers and other conditions if necessary to minimise impacts.	Ongoing
3.6.14	Require any organised groups exceeding 15 people to obtain NPWS consent. Consents may be issued with conditions to protect park values.	Ongoing
3.6.15	Require organised competitive events of any size to obtain NPWS consent. Permit such events, including competitive horse riding and cycling events, subject to limits on numbers and other conditions if necessary to minimise impacts.	Ongoing
3.6.16	Conduct tours to the Mountain Maid Mine and along the Mountain Maid Link Track (including under the banner of the NPWS Discovery program) or license suitably accredited operators to conduct such tours.	Ongoing
3.6.17	Issue consent for fossicking in the park only if it is gold panning or a similar activity conducted as part of an organised educational tour and if it is consistent with the NPWS <i>Fossicking Policy</i> . Do not permit other forms of fossicking.	Ongoing
3.6.18	Monitor commercial and non-commercial group activities for cumulative impacts, safety requirements, quality of information being given and compliance with licence or consent conditions. Licences or consents may be cancelled if there is a breach of the conditions.	Ongoing
3.6.19	Consider and, if appropriate, enter into appropriate leasing or licensing arrangements for areas in the Mountain Maid Mine precinct for the purposes outlined in Table 4.	Medium

Plan reference	Management response	Priority
3.7	Information and education	
3.7.1	Encourage involvement of the local Aboriginal community in the development of material and programs for interpretation of Aboriginal culture.	Ongoing
3.7.2	Prepare and implement an interpretative strategy and visitor management plan for the park.	Medium
3.7.3	Provide and maintain appropriate interpretive, directional and regulatory signage within the park.	Ongoing
3.7.4	Actively promote tours in the park, such as those conducted by the NPWS Discovery program and commercial operators.	Ongoing
3.7.5	Install and maintain gates and grids over mining shafts and adits in locations of high visitation to minimise the likelihood of injury.	High
3.7.6	Maintain signs warning of the hazards associated with mining shafts and adits, instructing visitors to use only established tracks, trails and roads.	Ongoing
3.7.7	Install regulatory signage prohibiting walking of dogs in the park.	High
3.7.8	Monitor firewood collection and illegal motorbike riding and undertake additional regulatory enforcement at appropriate times as required.	Ongoing
4.1	Pests	
4.1.1	Manage pest species in accordance with the <i>Regional Pest Management Strategy</i> , with priority given to the control of lantana, crofton weed, Madeira vine and wild dogs.	Ongoing
4.1.2	Seek the cooperation of neighbours in implementing weed and pest control programs. Undertake control in cooperation with Hunter Local Land Services, MidCoast Council and relevant community groups.	Ongoing
4.1.3	Monitor priority weeds and their impacts. Treat any new outbreaks where possible.	Ongoing
4.1.4	Monitor the extent and spread of dieback in the park and implement priority control measures when and if available as per the <i>Regional Pest Management Strategy</i> .	Ongoing
4.2	Fire	
4.2.1	Implement the fire management strategy for the park, and review and update this strategy as required.	Ongoing
4.2.2	Continue to be involved in the local bush fire management committee and maintain cooperative arrangements with local RFS brigades, other fire authorities and surrounding landowners with regards to fuel management and fire suppression.	Ongoing
4.2.3	Ensure fire regimes are appropriate for the protection of habitat values, for plant species and communities, especially dry rainforest, and allow for natural succession and regeneration.	Ongoing
4.2.4	Avoid the use of heavy machinery for fire suppression other than where appropriate on existing fire management trails or on old timber snigging trails that remain clearly delineated. Do not construct new trails.	Ongoing

Plan reference	Management response	Priority
4.2.5	Rehabilitate areas disturbed by fire suppression operations as soon as practical after a fire.	Ongoing
4.3	Climate Change	
4.3.1	Continue existing fire, pest and weed management programs to increase the park's ability to cope with future disturbances, including climate change, and encourage research into appropriate indicators to monitor the effects of climate change.	Ongoing
5.1	Management facilities and operations	
5.1.1	Maintain the network of management trails shown on Map 1. Install gates and signs for management trails where necessary to prevent unauthorised public access.	Ongoing
5.1.2	Implement the quarry management plan for the Copeland Main Road Quarry.	Ongoing
5.1.3	Retain the North Griffith Trail Quarry for use when required, and register the quarry with the resource regulatory authority when the quarry needs to be reactivated.	Ongoing
5.1.4	Encourage construction and maintenance of boundary fences to exclude stock from the park. If necessary, provide assistance in accordance with NPWS policy to achieve effective stock-proof fencing.	Ongoing
5.1.5	Assist local council in closing the council road reserves indicated on Map 1 and add these areas to the park.	High
5.1.6	Resolve the status of the section of Basin Loop Track which appears to partly traverse private property, and seek long-term access arrangements (e.g. easement) to formalise public and management access.	High
5.2	Non-NPWS uses and operations	
5.2.1	Permit animals to be transported within vehicles on Sleepy Hollow Trail, provided there are no other practical alternative routes, in accordance with the National Parks and Wildlife Regulation and NPWS <i>Pets in Parks Policy</i> . The vehicles must not stop and the animals must not leave the vehicle within the park.	Ongoing
5.2.2	Continue to provide access to Copeland trig in accordance with existing or future formal agreements between NPWS and the relevant agencies.	Ongoing
5.2.3	Resolve future management of the isolated section of park between the Upper Bowman Road and the Bowman River.	Medium
5.2.4	Liaise with the existing mining lessees to develop and implement a practical framework of access and management arrangements (consistent with the memorandum of understanding between NPWS and the resource regulatory authority) to ensure the safety of lessees, visitors and staff, and to minimise impacts on the natural and cultural values of the park.	High
5.2.5	Allow rehabilitation and safety works for old mining sites subject to funding and appropriate environmental assessment.	Low

References

- BMAD Working Group 2004, *Bell Miner Associated Dieback Strategy*, report by Bell Miner Associated Dieback Working Group, Coffs Harbour, NSW, www.environment.nsw.gov.au/resources/nature/BMADStrategy.pdf.
- Briggs JD & Leigh JH 1996, *Rare or Threatened Australian Plants*, CSIRO Publishing, Melbourne.
- DEC 2006, *Copeland Tops State Conservation Area Fire Management Strategy (Type 2)*, Department of Environment and Conservation (NSW), Sydney, www.environment.nsw.gov.au/firemanagement/CopelandTopsScaFms.htm
- DECC 2007, *Introducing the NSW Threatened Species Priorities Action Statement (PAS)*, Department of Environment and Climate Change, Sydney, www.environment.nsw.gov.au/resources/threatenedspecies/threatspecpas07168.pdf
- DECCW 2010, *NSW Climate Impact Profile: The impacts of climate change on the biophysical environment of New South Wales*, Department of Environment, Climate Change and Water NSW, Sydney, www.environment.nsw.gov.au/climatechange/20100171CImtChngNSW.htm
- DPI & OEH 2011, *Biodiversity Priorities for Widespread Weeds Statewide Framework*, NSW Department of Primary Industries and Office of Environment and Heritage, Orange, NSW.
- DSE no date, *Users Guide to the Australian Walking Track Grading System*, Department of Sustainability and the Environment (Vic.), Melbourne, www.ffm.vic.gov.au/recreational-activities/walking-and-camping/australian-walking-track-grading-system
- Ecotecture 2006, Draft Mountain Maid Conservation Management Plan, Unpublished report prepared for the NSW National Parks and Wildlife Service, Hunter Region, Ecotecture.
- NSW Government 2010, *Gloucester Local Environment Plan 2010*, compiled and maintained in a database of legislation by the Parliamentary Counsel's Office and published on the NSW legislation website, www.legislation.nsw.gov.au/#/view/EPI/2010/241
- Hunter LLS 2017, *Hunter Regional Strategic Weed Management Plan 2017 – 2022*, developed in partnership with the Hunter Regional Weeds Committee, Hunter Local Land Services, www.lls.nsw.gov.au/biosecurity/weed-control
- Hunter LLS 2018, *Hunter Regional Strategic Pest Animal Management Plan 2018-2023*, Hunter Local Land Services, https://centralwest.lls.nsw.gov.au/_data/assets/pdf_file/0004/820795/Hunter-Pest-Plan.pdf
- NPWS 2017, *Pets in Parks Policy*, NSW National Parks and Wildlife Service, Sydney, www.environment.nsw.gov.au/policies/pets-policy.htm
- NSW SC 2000, *Final Determination to List Anthropogenic Climate Change as a Key Threatening Process on Schedule 3 of the TSC Act*, NSW Scientific Committee, Sydney, www.environment.nsw.gov.au/threatenedspecies/HumanClimateChangeKTPListing.htm
- OEH 2011, *Sustainable Mountain Biking Strategy*, Office of Environment and Heritage NSW, Sydney, www.environment.nsw.gov.au/parkmanagement/SustainableMtBStrategy.htm
- OEH 2012, *Strategic Directions for Horse Riding in NSW National Parks*, Office of Environment and Heritage NSW, Sydney, www.environment.nsw.gov.au/policies/HorseRideStrat.htm
- OEH 2013a, *Saving our Species*, Office of Environment and Heritage, Sydney, www.environment.nsw.gov.au/savingourspecies/about.htm
- OEH 2013c, *Living with Fire in NSW National Parks: A strategy for managing bushfires in national parks and reserves 2012–2021*, revised edition, Office of Environment and Heritage, Sydney, www.environment.nsw.gov.au/resources/firemanagement/120690LiveFire.pdf

OEH 2014, *Hunter Climate Change Snapshot*, Office of Environment and Heritage, Sydney South, www.climatechange.environment.nsw.gov.au/Climate-projections-for-NSW/Climate-projections-for-your-region/Hunter-Climate-Change-Downloads

OEH 2017a, *Biodiversity Conservation Program*, Office of Environment and Heritage, www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/biodiversity-conservation-program

OEH 2017b, *Fossicking Policy*, NSW National Parks and Wildlife Service, Sydney, www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/fossicking

OHM Consultants 2007, *Mountain Maid Mine Collection Survey & Inventory*, Report to the Department of Environment and Climate Change (NSW).

OHM Consultants 2008, *Mountain Maid Gold Mine and Copeland Village Oral History: Final Report*, Report to the Department of Environment and Climate Change (NSW), OHM Consultants.

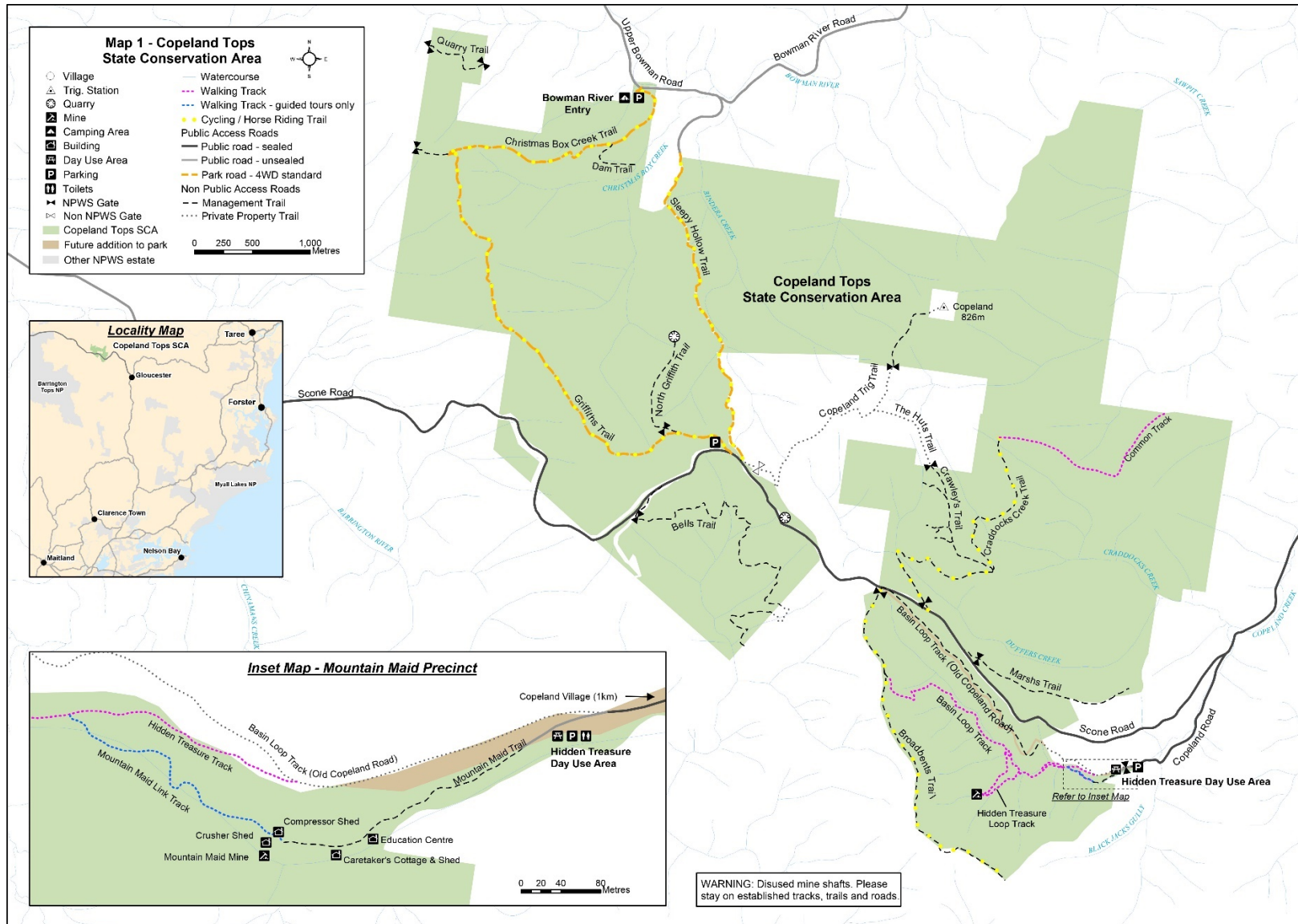
PlantNET 2018, *Eucalyptus largeana* Blakely, Royal Botanic Gardens and Domain Trust, Sydney, <http://plantnet.rbgsyd.nsw.gov.au>

Scotts D 2003, *Key Habitats and Corridors for Forest Fauna: A landscape framework for conservation in north-east New South Wales*, Occasional Paper 32, NSW National Parks and Wildlife Service, Hurstville, NSW.

TSSC 2001, *Commonwealth Listing Advice on Loss of Terrestrial Climatic Habitat Caused by Anthropogenic Emissions of Greenhouse Gases*, Threatened Species Scientific Committee, Canberra, www.environment.gov.au/cgi-bin/sprat/public/publicshowkeythreat.pl?id=7

Veness & Associates 1995, *Soil Report Gloucester/Chichester Forest Management Area*, Environmental Impact Study, Veness and Associates Pty Ltd and Forestry Commission of NSW, Pennant Hills (Sydney), NSW.

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Map 1 Copeland Tops State Conservation Area