



NSW NATIONAL PARKS & WILDLIFE SERVICE

Cottan-Bimbang National Park, Cottan-Bimbang State Conservation Area and The Cells State Conservation Area

Plan of Management



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Cover photo: Myrtle Scrub scenic drive, Cottan-Bimbang National Park. John Spencer/DPIE

This plan was adopted by the Minister for Energy and Environment on 28 May 2021.

The parks are in the traditional Country of the Dunghutti and Birpai Aboriginal peoples.

This plan of management was prepared by staff of the NSW National Parks and Wildlife Service (NPWS). NPWS would like to thank those people who took the time to make a submission on the draft version of this plan that was exhibited in 2017.

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1. Introduction

1.1 Location, reservation and regional setting

| Features | Description |
|----------------------|--|
| Location | Cottan-Bimbang National Park, Cottan-Bimbang State Conservation Area and The Cells State Conservation Area (referred to as the 'parks' in this plan) are located in the hinterland of the NSW Mid North Coast, approximately 70 kilometres west of Wauchope and 65 kilometres east of Walcha. The Oxley Highway dissects the parks (see Figure 1). |
| Area | <p>The parks comprise 35,492 hectares and include Cottan-Bimbang National Park (30,679 hectares), Cottan-Bimbang State Conservation Area (105 hectares), and The Cells State Conservation Area (4708 hectares).</p> <p>The parks also include several roads that are vested in the Minister under Part 11 of the <i>National Parks and Wildlife Act 1975</i> to ensure continued access to neighbouring land. These roads do not form part of the reserved area of the parks, but their management is subject to this plan and relevant legislation (see Section 5.1).</p> |
| Reservation dates | <p>Reservation details are as follows:</p> <ul style="list-style-type: none"> • Cottan-Bimbang National Park: January 1999 – 26,861 hectares; January 2003 – 3808 hectares (an adjustment to these additions of 10 hectares occurred in December 2003, bringing the total to 3818 hectares) • Cottan-Bimbang State Conservation Area: January 2003 – 105 hectares • The Cells State Conservation Area: January 2003 – 4708 hectares. <p>Cottan-Bimbang National Park was originally reserved as Doyles River National Park, being renamed by gazette notice in February 1999. 'Cottan-Bimbang' was nominated by members of the local Aboriginal community and is derived from a word for the walking-stick palm (<i>Linospadix monostachyos</i>), which grows in the park's warm temperate rainforests.</p> |
| Previous tenure | The parks were formerly part of Bulga, Brassey, Doyles River, Mount Seaview and Enfield state forests. They were reserved as a park as an outcome of the North East Regional Forest Agreement. |
| Regional context | |
| Biogeographic region | The parks are mostly located within the NSW North Coast biogeographical region (Thackway & Cresswell 1995), extending to the south-east edge of the New England Tablelands and including the ranges of the Great Escarpment. They are part of a system of conservation reserves that includes Mummel Gulf, Werrikimbe, Willi Willi, Tapin Tops, Biriwal Bulga and Oxley Wild Rivers national parks and Mount Seaview Nature Reserve. |
| Surrounding land use | The parks are bordered by state forest, national park, nature reserve and private property. The main industries in the area are timber harvesting, cattle grazing and dairy farming. Tourism is growing in the upper Hastings Valley, with several nearby properties offering farm tourism and recreation activities. |
| Other authorities | The parks are located within the administrative areas of the Birpai and Purfleet-Taree local Aboriginal land councils; the North Coast, Northern Tablelands and Hunter Local Land Services regions; and Port Macquarie-Hastings, Mid Coast and Walcha local government areas. |

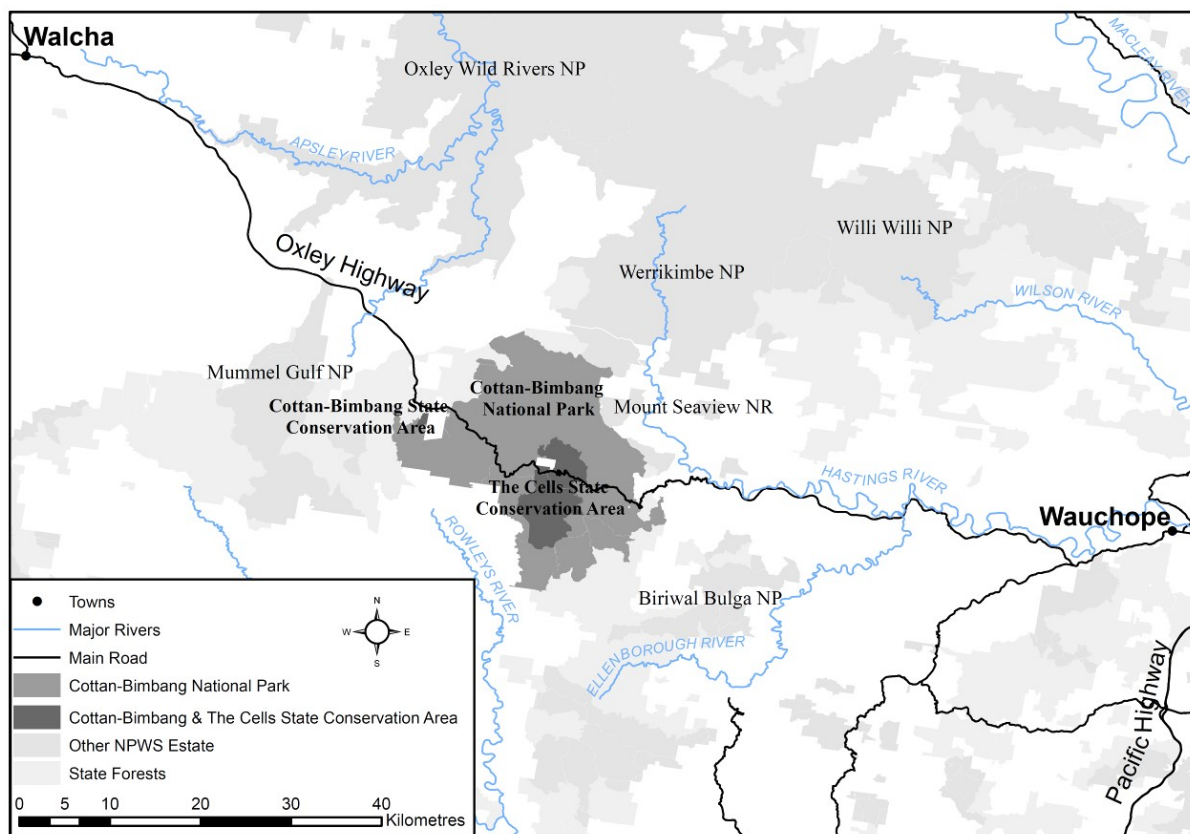


Figure 1 Regional location map

1.2 Statement of significance

The parks are significant due to a range of biological, landscape, catchment, wilderness, heritage, recreation and tourism values as outlined below.

The 2019–20 fires impacted extensive areas of the parks. At the time of finalising this plan, scientists were still working to understand the full impacts of the fires on park values.

Biological values

The parks are part of one of the largest contiguous areas of old-growth forest left in northern New South Wales. When considered with neighbouring Werrikimbe National Park and the adjacent protected areas of Willi Willi and Oxley Wild Rivers national parks, these areas are large enough to ensure the viability of the many species dependent on old-growth forest.

The parks contain a diversity of vegetation types, including extensive stands of rainforest, which have prompted them being considered as potential additions to the Gondwana Rainforests of Australia World Heritage property. The parks contain six threatened plant species and 33 threatened animal species. In particular, Cottan-Bimbang National Park represents an important population stronghold for the parma wallaby (*Macropus parma*).

Landscape and catchment values

There are seven major drainage systems within the parks, the majority of which drain to the Hastings and Manning rivers, two of the major rivers on the Mid North Coast. Due to the undisturbed nature of the parks, water quality in the creeks and rivers is generally very high. The parks are characterised by the varied and rugged wilderness landscape of the eastern fall of the New England Tablelands, ranging in elevation from 180 metres to 1208 metres

above sea level. They include examples of inverted topography (where the present ridge lines were once ancient river valleys).

The parks also provide major east–west and north–south wildlife corridors, encompassing significant ranges in elevation from the coast to the tablelands. These corridors have the potential to be an important factor in mitigating the effects of climate change by providing paths of migration for species vulnerable to predicted changes in habitat values and other environmental conditions.

Wilderness values

Approximately 10,400 hectares of Cottan-Bimbang National Park is declared wilderness. It is part of the Mount Seaview Wilderness Area, which also includes the neighbouring Mount Seaview Nature Reserve, and forms part of a continuous corridor of declared wilderness, including the Werrikimbe, Willi Willi, Kunderang and Macleay Gorges wilderness areas.

Aboriginal heritage

The parks fall within the tribal lands of the Birpai People and the Dunghutti People. The area would have been an important source of plant and animal foods, and materials for making tools and weapons. It is believed the area was also used as a trade or movement route by Aboriginal people to move between the coast and the tablelands. There are seven recorded Aboriginal sites within the parks.

Historic heritage

The parks contain heritage values associated with mining, timber-getting and early road building. Sections of the original convict-built road linking Port Macquarie and Walcha are still evident within the parks.

Recreation and tourism

The parks are rugged and remote, providing solitude and self-reliant recreation activities such as bushwalking, nature observation and remote camping. The public road network within the parks provides opportunities for four-wheel drive touring and access to two day use areas and an established camping area. The parks' location on the Oxley Highway provides opportunities to enhance the provision of information about their significant values.

Cottan-Bimbang National Park, Cottan-Bimbang State Conservation Area and The Cells State Conservation Area
Plan of Management

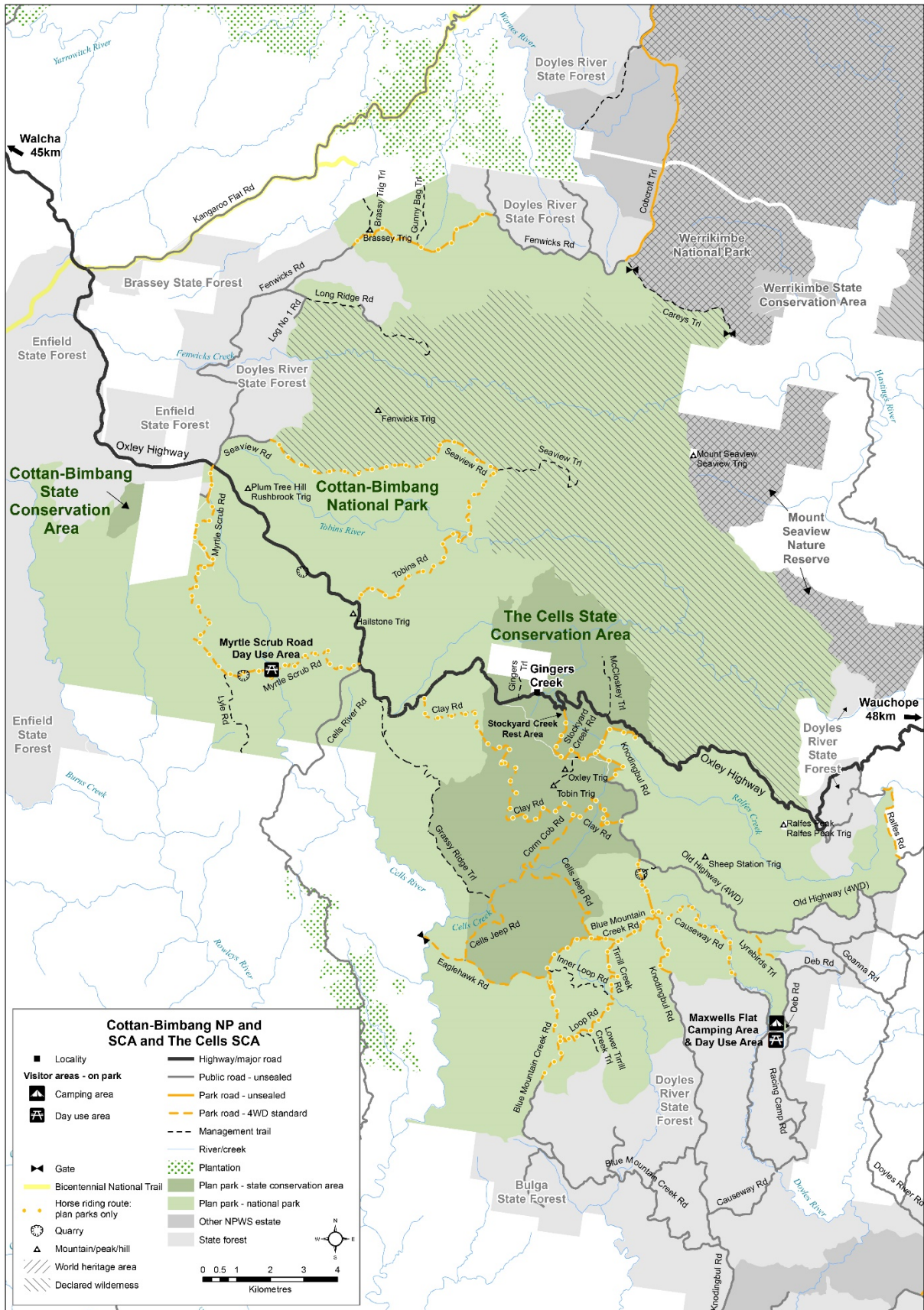


Figure 2 Cottan-Bimbang National Park, Cottan-Bimbang State Conservation Area and The Cells State Conservation Area

2. Management context

2.1 Legislative and policy framework

The management of national parks and state conservation areas in New South Wales is in the context of a legislative and policy framework, primarily the National Parks and Wildlife Act and Regulation, the *Biodiversity Conservation Act 2016*, *Wilderness Act 1987* and the policies of the NSW National Parks and Wildlife Service (NPWS).

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 assessment of 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 potential to contain historical archaeological relics. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* may apply in relation to actions that impact 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, 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 Cottan-Bimbang National Park, Cottan-Bimbang State Conservation Area or The Cells 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

National parks

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

Under the National Parks and Wildlife Act (section 30E), national parks are managed to:

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

The primary purpose of national parks is to conserve nature and cultural heritage. Opportunities are provided for appropriate visitor use in a manner that does not damage conservation values.

State conservation areas

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 the undertaking of 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 primarily where mineral values preclude reservation as 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 in which the status of Cottan-Bimbang and The Cells state conservation areas remained unchanged.

In the long term, subject to the outcomes of future five-yearly reviews, the state conservation areas may be classified as national parks. Therefore management of these areas will also be guided by the management principles for national parks as far as possible.

Wilderness

The north-east section of Cottan-Bimbang National Park was declared in 2003 as part of the Mount Seaview Wilderness under the Wilderness Act. Wilderness areas are large areas of land that, together with their native plant and animal communities, are in an essentially natural state or are capable of being restored to such a state. Under the Wilderness Act (section 9), wilderness areas are managed to:

- restore (if applicable) and to protect the unmodified state of the area and its plant and animal communities
- preserve the capacity of the area to evolve in the absence of significant human interference
- permit opportunities for solitude and appropriate self-reliant recreation (whether of a commercial nature or not).

Management of natural and cultural heritage, introduced species and fire is carried out in wilderness areas as in other parts of the parks, but with special attention to minimising impacts on wilderness values.

Gondwana Rainforests of Australia World Heritage property

The significant rainforest values of the parks have led to them being considered as a potential addition to the Gondwana Rainforests of Australia World Heritage property (Gondwana Rainforests). The Gondwana Rainforests (previously known as the Central Eastern Rainforest Reserves of Australia, or CERRA) include representative areas of the major stands of rainforest located between Newcastle and Brisbane, including Barrington Tops, Werrikimbe, Willi Willi, Dorrigo, Border Ranges and Lamington national parks (see Section 3.2).

World Heritage management principles and responsibilities are detailed in the Australian World Heritage Intergovernmental Agreement. It includes agreement to manage World Heritage properties in accordance with the World and National Heritage provisions of the Environment Protection and Biodiversity Conservation Act and in accordance with Australia's obligations under the World Heritage Convention to identify, protect, conserve, present and transmit to future generations Australia's cultural and natural heritage of outstanding universal value. Management arrangements must also ensure the integrity and authenticity of World Heritage properties at the time of their inscription are maintained.

Given the potential listing of the parks as part of this property, the strategic overview for management of the Gondwana Rainforests (CERRA 2000) has been considered in the preparation of this plan.

2.3 Specific management directions

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

manage the parks using a subcatchment management approach to maintain water quality in the headwaters of major rivers

protect and manage the Aboriginal cultural values through consultation with Aboriginal communities regarding the protection of known values and the identification of additional values

protect and manage the historic values associated with early European settlement and use of the area by recording sites and undertaking an assessment to determine their significance

manage fire regimes to ensure rainforest communities are protected

protect other natural values, especially areas of old-growth forest, wilderness values and habitat for threatened species, by limiting disturbance, implementing control programs for pest species, and where necessary mitigating the impacts of dieback

provide only low-key visitor opportunities with limited facilities

improve community understanding of the significant values of the parks through the installation of interpretive signs and/or provision of information

monitor the ecological effects of fire in the parks, particularly the response of significant plant species, to assist in post-fire recovery efforts.

3. Values

This plan aims to conserve both natural and cultural values of the parks. The location, landforms and plant and animal communities of an area have determined how it has been used and valued by Aboriginal and non-Aboriginal people. These values may be attached to the landscape as a whole or individual components, such as plant and animal species used by Aboriginal people. This plan of management aims to conserve both natural and cultural values. To make the document clear and easy to use, various aspects of natural heritage, cultural heritage, threats and ongoing use are dealt with individually, but their interrelationships are recognised.

3.1 Geology, landscape and hydrology

The parks have a rugged landscape of sedimentary geology with a mixture of undulating tablelands and steeply incised drainage systems. Elevations range from 180 metres above sea level, where Tobins River exits the park in the east, to 1208 metres above sea level at Plum Tree Hill in the western part of the park (SFNSW 2000). The parks consist mostly of slopes between 10 and 30 degrees with over 40% having a slope greater than 18 degrees.

The numerous rivers and ridge lines in the parks are examples of inverted topography, where the present ridge lines were once ancient river valleys. The inverted topography developed after lava from the Walcha Volcano flowed into the region's river valleys, where it cooled to form thick layers of basalt that is resistant to weathering. Over millions of years the surrounding ridges, with little or no basalt protecting them, eroded away more quickly leaving the ancient river valleys higher than the surrounding area. Traces of river sediment and basalt occur along some of the long ridge lines in the parks, roughly indicating the flow paths of the ancient rivers (Temby 1990).

The area's geology is primarily sedimentary or metamorphic derivatives of sedimentary rocks, mainly of Lower Devonian origin (York 1992). Undifferentiated clastic sediment underlies the majority of the parks and is characterised by sandstone, schist, phyllite, slate, chert, jasper, metabasites and amphibolite. The Myra Beds consisting of jasper, chert and argillite comprise a small area on the eastern boundary of the parks near the boundary with the northern section of Mount Seaview Nature Reserve.

The Werrikimbe Volcanics dominated by ignimbrite overlay an area in the north near the boundary with Werrikimbe National Park. Tertiary basalt from the Comboyne Basalt Formation overlays several areas in the west, including along the western boundary near the Oxley Highway, along Seaview Road and in the vicinity of Fenwicks Trig.

The complex geology of the area has resulted in several soil types which support a wide and diverse range of ecosystems. Throughout the area the soils are mainly shallow and rocky. The main soil types are structured subplastic and superplastic clays which are typically well-structured and not highly erodible. However, their skeletal nature across the steeper slopes in the parks makes them more susceptible to erosion if disturbed.

The parks have a wet and humid environment, with an average annual rainfall (recorded at Mount Seaview) of 1740 millimetres. The majority of the parks' area is in the Hastings (approximately 61%) and Manning (approximately 38%) river catchments. A small area (about 1%) drains into the Macleay River.

Fenwicks Creek, Ralfes River, Doyles River and Tobins River are major tributaries of the Hastings River; and Rowleys River, Cells River, Cells Creek and Tirril Creek are major tributaries of the Manning River. A series of fast-flowing creeks, many of which are ephemeral, provide habitat for many aquatic species. They also provide a water supply for

neighbouring properties. Due to the undisturbed nature of the parks, water quality in the creeks and rivers is very high.

Issues

- Soil erosion risk is greatest on steeper slopes.
- Disturbed areas, particularly roads, quarries, and old mining sites, can cause erosion and degrade water quality in streams.
- Landslips along the Oxley Highway have the potential to affect park values (see Section 5.1).
- Frequent or severe fire can decrease ground cover and promote erosion.
- The 2019–20 fires impacted extensive areas of the parks. At the time of finalising this plan, scientists were still working to understand the full impacts of the fires on water quality in the parks.
- Fire suppression activities can create disturbance, erosion and degrade water quality.
- Visitor use (particularly the use of vehicles on trails and crossings during and following periods of wet weather) may cause erosion and degrade water quality (see Section 3.6).

Desired outcomes

- Soil erosion is minimised.
- Water quality and the health of streams in the parks are maintained or improved, where possible.
- No new roads or vehicle trails are developed (see Section 3.6 and 5.1).

Management response

- 3.1.1 Ensure management activities (road maintenance, fire suppression, road closures, quarry management etc.) are carried out in a manner that minimises soil erosion and water pollution (see also Section 5).
- 3.1.2 Monitor disturbed areas and manage any areas showing signs of erosion to mitigate impacts and, where possible, restore natural values.
- 3.1.3 Continue to support and work with Local Land Services and local and state road authorities to manage landslips and soil erosion.
- 3.1.4 During and after periods of wet weather, restrict access to the public road network to prevent damage and/or to ensure safety.

3.2 Native plants

Plant surveys have been undertaken in the past before harvesting operations (when the parks were state forests) and during the Lower North East Comprehensive Regional Assessment (NPWS 1999). A more recent survey targeting the north-west of Cottan-Bimbang National Park was undertaken in 2007 (Copeland 2007).

The diversity of vegetation communities, ranging from wet swamp to high elevation rainforest, reflects the variety of soils, terrain (elevation, slope and aspect) and rainfall of the area. Twenty-seven vegetation communities (ecosystems) are modelled to occur within the parks (NPWS 2003a, 2003b). The dominant forest ecosystems are listed in Table 1 and described below.

Rainforest occurs extensively throughout the parks and represents over 40% of the vegetation present. Rainforest communities are described according to Baur (1979) and Floyd (1990). Subtropical rainforest types occur predominantly as large stands in the central section, in the catchment of Cells Creek. Warm temperate rainforest occurs along creek lines at moderate elevations. Dry rainforest with myrtle species occurs as narrow bands fringing many of the creeks and smaller tributaries. Rainforest stands below 600 metres elevation and is considered part of an endangered ecological community under the Biodiversity Conservation Act, that is, Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions.

Table 1 Dominant forest ecosystems in the parks

| Forest ecosystem ¹ | Area (ha) | Area (%) |
|--|-----------|----------|
| Rainforest | 14,430 | (41%) |
| Diehard Stringybark – New England Blackbutt | 5,032 | (14%) |
| Moist Escarpment New England Blackbutt | 3,215 | (9%) |
| Mid North Coast Wet Brushbox – Tallowwood – Blue Gum | 2,635 | (7%) |
| Open Ribbon Gum | 2,428 | (7%) |
| Grassy New England Blackbutt – Tallowwood – Blue Gum | 1,392 | (4%) |
| High Elevation Moist Open Tallowwood – Blue Gum | 1,377 | (4%) |
| Central Mid Elevation Sydney Blue Gum | 1,304 | (3%) |

1 Forest ecosystems are described in NPWS (1999).

Rainforests are significant because they maintain huge numbers of plant and animal species and represent unique evolutionary processes (Kitching et al. 2010). Adjacent protected areas containing rainforest (namely Mount Seaview Nature Reserve and Werrikimbe, Willi Willi and Oxley Wild Rivers national parks) are listed on the World Heritage list as part of the Gondwana Rainforests. The addition of rainforest in the parks to the Gondwana Rainforests World Heritage property has been a long-standing suggestion because, in addition to the high proportion of rainforest present and the condition and values of that rainforest, it is an important link between the already listed but disjunct sections of Mount Seaview Nature Reserve (IUCN 1993). The potential addition of these rainforests to the World Heritage property is being considered by the NSW and Australian governments and would then be subject to a nomination from the Australian Government to the World Heritage Committee.

The two major ecosystems that occur at the higher elevations (above 800 metres above sea level and generally as large stands on the plateau north of the Oxley Highway) are Diehard Stringybark – New England Blackbutt and Open Ribbon Gum. The Open Ribbon Gum ecosystem occurs at the very highest elevations, mostly at 1000 metres above sea level or higher. Moist Escarpment New England Blackbutt ecosystem occurs in the gullies and slopes predominantly in the north-east section. Tallowwood (*Eucalyptus microcorys*) and occasionally Sydney blue gum (*E. saligna*) occur as subdominants. Grassy New England Blackbutt – Tallowwood – Blue Gum is also patchily distributed in the north-east sections associated with Fenwicks Creek and Tobins River. Mid North Coast Wet Brushbox – Tallowwood – Blue Gum occurs along the area of the Oxley Highway east of Gingers Creek and has a well-developed rainforest understorey. The south-west section is dominated by High Elevation Moist Open Tallowwood – Blue Gum and Central Mid Elevation Sydney Blue Gum.

Much of the vegetation is relatively undisturbed. Extensive stands of old-growth forest (almost 50% of the parks' area) have been mapped and include the entire catchments of Fenwicks Creek and Tobins Creek in the east, the catchment of Rowleys River in the west,

and parts of the catchment of the Cells River in the south-west (NPWS 2003a, 2003b). Old-growth forest is important for biodiversity because many of its structural attributes (e.g. hollows in trees) provide important wildlife habitat, and some plants and animals are restricted to forest in the old-growth stages (JANIS 1997). Old-growth forests also have high aesthetic and cultural values.

Past logging activities, including the creation of logging trails and log dumps, have disturbed vegetation in other parts of the parks. Most of these disturbed areas are regenerating naturally. There are a number of small exotic pine plantations occurring in and near park boundaries (see Section 4.1).

An area of 61 hectares of Escarpment Red Gum forest ecosystem, dominated by forest red gum (*E. tereticornis*), has been identified in the parks. This ecosystem is regionally significant because it is considered under-represented in the reserve system in New South Wales.

The wide diversity of vegetation communities protected in the parks support a rich assembly of vascular plants, including six threatened plant species listed under the Biodiversity Conservation Act. A further three species are predicted to occur in the parks (see Table 2).

Table 2 Significant plant species known or predicted to occur in the parks

| Scientific name | Common name | Conservation status ¹ | Presence in parks |
|--|----------------------------|----------------------------------|-------------------|
| <i>Acacia tessellata</i> | | R | Known to occur |
| <i>Acianthus apprimus</i> | | R | Known to occur |
| <i>Acomis acoma</i> | | R | Predicted |
| <i>Bertya brownii</i> | | R | Known to occur |
| <i>Chiloglottis platyptera</i> | Barrington Tops ant orchid | V | Known to occur |
| <i>Chiloglottis sphyrnoides</i> | A bird orchid | R | Known to occur |
| <i>Coronidium elatum</i> subsp. <i>minus</i> (previously <i>Helichrysum</i> sp. 'Point Lookout') | Mountain everlasting daisy | R | Known to occur |
| <i>Cryptocarya nova-anglica</i> | Mountain laurel | R | Known to occur |
| <i>Cynanchum elegans</i> | White-flowered wax plant | E# | Predicted |
| <i>Pterostylis elegans</i> | Elegant greenhood | V | Known to occur |
| <i>Dodonaea megazyga</i> | | R | Known to occur |
| <i>Eucalyptus largeana</i> | Craven grey box | R | Predicted |
| <i>Eucalyptus scias</i> subsp. <i>apoda</i> | Large-fruited red mahogany | R | Known to occur |
| <i>Euphrasia ciliolata</i> | Polblue eyebright | V | Known to occur |
| <i>Goodenia fordiana</i> | | R | Known to occur |
| <i>Grevillea linsmithii</i> | | R | Known to occur |
| <i>Hibbertia hexandra</i> | Tree guinea flower | E | Known to occur |
| <i>Marsdenia liisae</i> | Large-flowered milk vine | R | Known to occur |
| <i>Melaleuca groveana</i> | Grove's paperbark | V | Known to occur |
| <i>Parsonsia dorrigoensis</i> | Milky silkpod | V# | Predicted |

| Scientific name | Common name | Conservation status ¹ | Presence in parks |
|---------------------------------|------------------|----------------------------------|-------------------|
| <i>Sarcochilus fitzgeraldii</i> | Ravine orchid | V# | Predicted |
| <i>Schistotylus purpuratus</i> | | R | Known to occur |
| <i>Rhodamnia rubescens</i> | Scrub turpentine | E | Known to occur |

Sources: BioNet (OEH 2020), accessed at www.bionet.nsw.gov.au; Copeland 2007; NPWS 2003a, 2003b.

1 Status: V = vulnerable under Biodiversity Conservation Act; E = endangered under Biodiversity Conservation Act;
= species listed as nationally threatened under the Environment Protection and Biodiversity Conservation Act;
R = species considered rare or threatened using the criteria of Briggs and Leigh (1996).

The records of *Schistotylus purpuratus* and *Euphrasia ciliolata* are particularly significant as they were thought to be restricted to the Barrington Tops area before being found during a 2007 survey (Copeland 2007). Although not listed as rare or threatened, an undescribed orchid (known as *Pterostylis* sp. aff. *barringtonensis*) that appears to be restricted to the escarpment east of Walcha may also be of conservation significance (Copeland 2007).

In addition to species recorded in the parks, there are a number of other significant species predicted to occur as listed in Table 2 (NPWS 2003a, 2003b). All of these species have suitable habitat modelled in one or more of the catchments of Fenwicks and Ralfes creeks and Tobins River.

Strategies for the recovery of threatened species, populations and ecological communities are set out in a statewide *Biodiversity Conservation Program* (DPIE 2019). These actions are 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 (DPIE 2020a). Individual recovery plans may need to be prepared for threatened species listed under the Environment Protection and Biodiversity Conservation Act to consider management needs in more detail.

Issues

- The most significant issues affecting the management of the parks' vegetation are weed invasion (including from nearby plantations of exotic species), fire and dieback (see Section 4).
- There are some previously disturbed areas; however, most are regenerating naturally.
- Extensive areas of the parks were impacted by the 2019–20 fires. At the time of finalising this plan, scientists were still working to understand the full impacts of the fires on the parks' values.
- Further research is needed to better understand the significant native vegetation in the parks.

Desired outcomes

- All plants and ecological communities are conserved.
- Negative impacts on threatened species are minimised.
- The habitat and populations of all threatened plant species are protected and maintained.
- Structural diversity and habitat values are maintained and restored in degraded areas.
- Knowledge and understanding of the parks' vegetation communities, especially rainforest communities, is improved.

- The area of rainforest is maintained and its natural succession and regeneration is allowed for.

Management response

- 3.2.1 Support the identification and implementation of recovery actions for threatened species, populations and ecological communities present in the parks in accordance with the *Biodiversity Conservation Program*.
- 3.2.2 Undertake or encourage targeted surveys for threatened plant species and communities that occur or are likely to occur in the parks.
- 3.2.3 Undertake rainforest surveys to determine the current extent and distribution of rainforest communities.
- 3.2.4 Undertake a comprehensive vegetation survey in order to improve understanding of the vegetation communities across the parks and inform management actions.

3.3 Native animals

The parks have been well surveyed for vertebrate animal species, as part of pre-logging surveys and environmental impact assessments (when the area was state forest), the North East Forest Biodiversity Study (conducted in the early 1990s), and the Comprehensive Regional Assessment leading to the Regional Forest Agreement. Surveys targeting the rufous scrub-bird (*Atrichornis rufescens*) were conducted in 2002 (Bischoff 2003).

With a high diversity of forests and landforms, and the presence of undisturbed creeks and streams, the parks provide important habitat for populations of threatened and significant birds, frogs, reptiles, bats and other mammals. The large area of old-growth forest provides important habitat for arboreal mammals, bats and birds that require large areas of relatively undisturbed forest, hollows for nesting, ground logs, multi-age vegetation structure, diverse shrub strata, deep leaf litter, shedding bark and abundant invertebrates.

Over 200 native animal species have been recorded in the parks, including 33 threatened species, and a further 11 threatened species are predicted to occur (see Table 3).

Table 3 Threatened animal species known or predicted to occur in the parks

| Scientific name | Common name | Conservation status ¹ | Presence in the parks |
|--|------------------------|----------------------------------|-----------------------|
| Amphibians | | | |
| <i>Litoria daviesae</i> | Davies' tree frog | V | Known to occur |
| <i>Litoria subglandulosa</i> | Glandular frog | V | Predicted |
| <i>Mixophyes balbus</i> ² | Stuttering frog | E# | Known to occur |
| <i>Philoria sphagnicolus</i> | Sphagnum frog | V | Known to occur |
| Reptiles | | | |
| <i>Hoplocephalus stephensii</i> | Stephens' banded snake | V | Known to occur |
| Birds | | | |
| <i>Atrichornis rufescens</i> | Rufous scrub-bird | V | Known to occur |
| <i>Artamus cyanopterus cyanopterus</i> | Dusky woodswallow | V | Known to occur |
| <i>Atrichornis rufescens</i> | Rufous scrub-bird | V | Known to occur |

| Scientific name | Common name | Conservation status ¹ | Presence in the parks |
|--|---------------------------|----------------------------------|-----------------------|
| <i>Burhinus grallarius</i> | Bush stone-curlew | E | Predicted |
| <i>Calyptorhynchus lathamii</i> | Glossy black-cockatoo | V | Known to occur |
| <i>Coracina lineata</i> | Barred cuckoo-shrike | V | Predicted |
| <i>Daphoenositta chrysoptera</i> | Varied sittella | V | Known to occur |
| <i>Hirundapus caudacutus</i> | White-throated needletail | NA# | Known to occur |
| <i>Glossopsitta pusilla</i> | Little lorikeet | V | Known to occur |
| <i>Lophoictinia isura</i> | Square-tailed kite | V | Predicted |
| <i>Melanodryas cucullata cucullata</i> | Hooded robin | V | Predicted |
| <i>Ninox connivens</i> ³ | Barking owl | V | Predicted |
| <i>Ninox strenua</i> ² | Powerful owl | V | Known to occur |
| <i>Pachycephala olivacea</i> | Olive whistler | V | Known to occur |
| <i>Petroica boodang</i> | Scarlet robin | V | Known to occur |
| <i>Petroica phoenicea</i> | Flame robin | V | Known to occur |
| <i>Ptilinopus magnificus</i> | Wompoo fruit-dove | V | Known to occur |
| <i>Tyto novaehollandiae</i> ² | Masked owl | V | Known to occur |
| <i>Tyto tenebricosa</i> ² | Sooty owl | V | Known to occur |
| Mammals | | | |
| <i>Cercartetus nanus</i> | Eastern pygmy-possum | V | Known to occur |
| <i>Chalinolobus dwyeri</i> | Large-eared pied bat | V# | Predicted |
| <i>Dasyurus maculatus</i> | Spotted-tailed quoll | V# | Known to occur |
| <i>Falsistrellus tasmaniensis</i> | Eastern false pipistrelle | V | Known to occur |
| <i>Macropus parma</i> | Parma wallaby | V | Known to occur |
| <i>Miniopterus australis</i> | Little bentwing-bat | V | Known to occur |
| <i>Mormopterus norfolkensis</i> | Eastern freetail-bat | V | Known to occur |
| <i>Myotis macropus</i> | Southern myotis | V | Known to occur |
| <i>Petauroides volans</i> | Greater glider | NA# | Known to occur |
| <i>Petaurus australis</i> ² | Yellow-bellied glider | V | Known to occur |
| <i>Petaurus norfolcensis</i> | Squirrel glider | V | Predicted |
| <i>Phascogale tapoatafa</i> | Brush-tailed phascogale | V | Known to occur |
| <i>Phascolarctos cinereus</i> ² | Koala | V# | Known to occur |
| <i>Phoniscus papuensis</i> | Golden-tipped bat | V | Known to occur |
| <i>Planigale maculate</i> | Common planigale | V | Predicted |
| <i>Potorous tridactylus</i> | Long-nosed potoroo | V# | Known to occur |
| <i>Pseudomys oralis</i> ² | Hastings River mouse | E# | Known to occur |
| <i>Pteropus poliocephalus</i> ³ | Grey-headed flying-fox | V# | Predicted |
| <i>Scoteanax rueppellii</i> | Greater broad-nosed bat | V | Known to occur |

| Scientific name | Common name | Conservation status ¹ | Presence in the parks |
|-----------------------------|----------------------|----------------------------------|-----------------------|
| <i>Thylogale stigmatica</i> | Red-legged pademelon | V | Predicted |

Source: BioNet (OEH 2020), accessed at www.bionet.nsw.gov.au; SFNSW 2000.

- 1 Status: V = vulnerable under Biodiversity Conservation Act; E = endangered under Biodiversity Conservation Act; NA = not listed under Biodiversity Conservation Act; # = species listed as nationally threatened under the Environment Protection and Biodiversity Conservation Act.
- 2 Recovery plan has been prepared for species.
- 3 Draft recovery plan has been prepared.

The parks represent core habitat for a number of mammals and support high numbers of the threatened parma wallaby, spotted-tailed quoll, yellow-bellied glider, koala and greater glider.

The most significant is the parma wallaby, for which the parks represent an important population stronghold (NPWS 2003a). Once thought to be extinct, the parma wallaby has a scattered distribution along the Great Dividing Range from Gosford to the Queensland border and favours wet sclerophyll forests, and occasionally rainforests, with a thick shrubby understorey and associated grassy patches (Van Dyck & Strahan 2008).

Other threatened mammal species predicted to occur throughout the parks (but currently only known from a few locations) include the eastern pygmy-possum, long-nosed potoroo and the endangered Hastings River mouse.

The parks are particularly important for the high number and diversity of significant bat species. They provide high quality foraging habitat as well as a diversity of roosting environments such as tree hollows and crevices, mine shafts and bridges. In addition to the threatened bat species recorded (see Table 3) a further five regionally significant species are known to occur, the most frequently recorded being the eastern forest bat (*Vespadelus pumilus*), the eastern horseshoe-bat (*Rhinolophus megaphyllus*) and the white-striped freetail-bat (*Austronomus australis*).

The area is a hotspot for gliders because of the relatively large number of hollow-bearing trees. The predominance of old-growth forest also makes the parks a haven for large forest owls, especially the powerful owl and sooty owl which have been recorded on a number of occasions and for which there are extensive areas of suitable habitat.

The parks are of high conservation value to birds largely dependent on rainforest habitat. These include the olive whistler, and the regionally significant paradise riflebird (*Ptiloris paradiseus*) and pale-yellow robin (*Tregellasia capito*). The vulnerable wompoo fruit-dove visits the area seasonally and the rufous scrub-bird has been recorded in these parks. Rufous scrub-birds are now generally only found in high rainfall areas above 600 metres elevation, but formerly occurred in the lowlands of the Richmond and Tweed rivers in northern New South Wales. In the parks, populations of this species are likely to be low in number and disjunct, and further surveying is required to determine numbers and distribution.

A series of fast-flowing creeks, many of which are ephemeral, provide habitat for many species of frog, including four threatened species listed in Table 3 and the regionally significant Pearson's green tree frog (*Litoria pearsoniana*).

The parks provide important habitat for the regionally significant Murray's skink (*Eulamprus murrayi*), southern angle-headed dragon (*Hypsilurus spinipes*) and the red-tailed calyptotis (*Calyptotis ruficauda*), all of which have been recorded several times. The threatened Stephen's banded snake has also been recorded.

Scotts (2003) identified the parks as key habitat areas, which are areas of predicted high conservation value for priority forest animals. The parks also form part of a regional corridor

providing landscape connectivity and facilitating native animal movement in and between predicted habitats. It encompasses an important link from the mid to higher elevation forests of the Great Escarpment. At the broader level, the parks are part of an east–west link, from the coastal forests to the higher elevation forests of the escarpment and tablelands, as well as a north–south link along the Great Escarpment to Werrikimbe National Park and the Bulga Plateau.

The parks, as well as neighbouring state forests, have also been identified as habitat for dingos (*Canis lupus dingo*) and are considered important for the conservation of dingos in New South Wales (see Section 4.1). To date, however, sampling of dingo DNA in the parks has been limited.

As for threatened plants, strategies for the recovery of threatened species and populations are set out in the Biodiversity Conservation Program with priorities determined by the *Saving our Species* program (DPIE 2020a). Individual recovery plans may also be prepared for nationally listed threatened species. Recovery plans were previously prepared for some state-listed species found in the parks. Those species with recovery plans are indicated in Table 3.

Issues

- The most significant threats to the parks' native animal populations include habitat degradation from inappropriate fire regimes and predation and competition by pest animals (see Section 4).
- Maintenance of habitat values is particularly important, especially for species dependent on old-growth habitat and rainforest.
- Further research is needed to better understand the significant native animal and habitat values in the parks.

Desired outcomes

- Populations of all native animals are conserved.
- Negative impacts on threatened species are minimised.
- The habitat and populations of all threatened animal species are protected and maintained.
- Structural diversity and habitat values are restored in degraded areas.

Management response

- 3.3.1 Support the identification and implementation of recovery actions for threatened species and communities present in the parks in accordance with the *Biodiversity Conservation Program*.
- 3.3.2 Undertake or encourage targeted surveys for priority threatened animal species that occur or are likely to occur in the parks.
- 3.3.3 Undertake or encourage surveys and DNA sampling of dingo populations in the parks to determine their purity and numbers.

3.4 Aboriginal heritage

The parks lie in the traditional Country of the Birpai and Dunghutti tribal nations. The land, water, plants and animals in a landscape are central to Aboriginal spirituality and contribute to Aboriginal identity. Aboriginal communities associate natural resources with the hunting

and gathering of foods and medicines, and also caring for the land, passing on cultural knowledge, kinship systems and strengthening social bonds. Aboriginal heritage and connection to nature are inseparable and need to be managed in an integrated manner across the landscape.

Studies on the nearby New England Tablelands show that Aboriginal groups have been in the area for at least 4200 years (Godwin 1985). The area would have been an important source of plant and animal foods and materials for making tools and weapons (including slate, chert and jasper deposits). It is believed the area was also used as a trade or movement route by Aboriginal people to move between the coast and the tablelands, along a path similar to the convict-built road that later linked Port Macquarie and Walcha.

The pattern of Aboriginal occupation and use of the upper Hastings River system was a complex one. Aboriginal groups moved from the coastal hinterlands to the tablelands during summer months and returned to the coast for the winter. Observations also suggest that some groups remained in the upper gorge areas for up to four months during spring, and a small group of Aboriginal people known as the Winmurra were permanent residents of the foothill and gorge country.

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. The parks contain seven recorded Aboriginal sites, mostly artefact scatters and modified trees located on ridge lines and spurs near existing roads and trails. Several ceremonial sites are known south of the parks and it is possible that more sites exist in the parks.

While 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. Aboriginal communities will be consulted and involved in the management of Aboriginal sites, places and related issues; and in relation to the promotion and presentation of Aboriginal culture and history.

Issues

- It is likely that more Aboriginal sites exist in the parks but have not been found due to a lack of comprehensive and systematic surveys.
- Important Aboriginal sites and values may be inadvertently disturbed during management operations if not identified.
- The name 'Cottan-Bimbang' is derived from an Aboriginal word, however, it may not have the correct spelling and has not been accepted by some members of the Aboriginal community.

Desired outcomes

- Significant Aboriginal places, values and landscapes are identified and protected.
- There is cooperative management of Aboriginal places and objects with the Aboriginal community and relevant agencies.
- Cultural activities allow the Aboriginal community to connect with Country while ensuring that natural values are protected.
- Understanding of the Aboriginal values of the parks is improved.

Management response

- 3.4.1 Continue to consult and involve the Birpai and Purfleet-Taree local Aboriginal land councils, the Elders of the Birpai and Dunghutti peoples and other relevant Aboriginal

community organisations and custodial families in the management of the parks, including the management of Aboriginal sites, and cultural and natural values.

- 3.4.2 Undertake an archaeological survey and cultural assessment prior to all works with the potential to impact Aboriginal sites or values.
- 3.4.3 In consultation with the local Aboriginal communities, collate information about areas and sites of spiritual and cultural significance.
- 3.4.4 Encourage and support Aboriginal communities to undertake interpretation of Aboriginal culture in the area.
- 3.4.5 Work with the members of the relevant Aboriginal communities to determine if the existing name is appropriate and, if not, to identify an appropriate name to replace 'Cottan-Bimbang'. If a new name is agreed, seek to rename Cottan-Bimbang National Park and State Conservation Area in accordance with the NPWS Naming Policy.
- 3.4.6 Permit Aboriginal people to carry out cultural activities related to maintenance of traditional links to Country. Any such activities must comply with relevant legislation and NPWS policies and may be subject to NPWS consent (and any relevant conditions).

3.5 Historic heritage

Cultural heritage comprises places and items that may have historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance to present and future generations. NPWS conserves the significant heritage features located in NSW parks and reserves.

The parks have a rich European heritage. Known historic items and sites in the parks reflect the area's history of early road building, timber-getting and mining.

John Oxley was the first explorer to venture through the top of the Hastings Valley in 1818 and probably traversed the northern and north-east parts of the parks while navigating to Mount Seaview and the coast. Settlement of the Hastings Valley began in the 1820s. A convict-built road linking Port Macquarie with Walcha was opened in 1841 and provided access to the upper reaches of the Hastings River and was a vital trade link to the New England Tablelands. Sections of this road are still present in the parks and can be seen as stone walls or embankments and stone cairns (Hollis 2002). Other early roads in the parks were built by cedar-getters to access timber and transport it to the coast.

The present-day Oxley Highway was opened in 1928 and logging of rainforest species like coachwood, corkwood, sassafras and rosewood soon followed, with sawmills established at Myrtle Scrub, Stockyard Creek and Glen Oxley. During World War II, logging intensified for the war effort. In 1945 forestry camps and other facilities were established in the parks. The logging of hardwoods began in the late 1950s and intensified in the 1960s.

There are 13 bridges in the parks that are of high local historic value. These are located along Myrtle Scrub, Causeway, Seaview and Tobins roads. A further three have heritage potential but are yet to be assessed. A heritage assessment report provides recommendations for the appropriate maintenance, replacement and archival recording of the significant bridges of the parks (Umwelt Environmental Consultants 2004). The bridges located on Tobins and Seaview roads were impacted by the 2019–20 fires and need to be replaced.

A gravel 'Chinaman' or 'staging' from which bulldozers pushed gravel into waiting trucks is located in the north of the park and is thought to be associated with the construction of

Seaview Road and other nearby roads to facilitate previous logging operations in the area. Unfortunately, this was also impacted by the 2019–20 fires.

The remains of three forestry camps are known in the parks. While no significant historic structures survive in the vicinity of these camps, some foundations of the buildings and the remains of some machinery and other equipment are evident. A shelter is located at one of the former camps (Forestry Camp number 2) and is used for management purposes (see Section 5.2). A fourth forestry camp was established just north of Seaview Road, though no evidence of the buildings associated with this camp has been found to date.

The parks also include the remains (foundations and machinery) of the Gamms Sawmill and the Commonwealth (or Slazengers) Sawmill, and substantial evidence of a coachwood nursery that operated between 1949 and 1954. A number of small plantations occur in and near the parks, including experimental plots that may be of historic significance (see Section 4.1). The sites of protests and blockades that protected stands of old-growth forest in these parks from intensive harvesting operations may also have some historic significance.

Mining is another industry which has historic value for the parks. The main mining periods in the parks were between 1895 and 1900, during the 1930s and between 1954 and 1966. Gold was the focus of this mining activity, with manganese also mined. These mines were not greatly successful and were generally small claims, exploring surface veins and alluvial traces. Many of the mining artefacts now found in parks are from the later period of exploration, and include horizontal and vertical mine shafts, stone mining refuse and abandoned mining machinery, including a crusher plant.

The majority of the historic items and sites found in the parks have not been assessed to determine their historic significance, with the exception of the bridges. An assessment of significance is required before decisions are made about the future management of those items. Should any be found to be of significance, a conservation management plan (for places of national, 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 and works.

Issues

- The significance of known sites of historic heritage such as forestry camp remains, roads, mine sites and bridges in The Cells State Conservation Area is not known.
- Some items are showing signs of natural deterioration.
- It is possible that some sites, especially those associated with mining, may pose a risk to visitor safety (see Section 3.6).

Desired outcomes

- Significant historic features are identified and are appropriately conserved and managed.
- Negative impacts on historic heritage values are minimised.
- Understanding of the cultural values of the parks is improved.

Management response

- 3.5.1 Record and assess potential historic sites to determine their significance, especially those in the Cells Creek and Causeway Road areas. Where historic significance assessments indicate a need, prepare and implement a conservation management plan or heritage action statement.
- 3.5.2 Provide interpretation of the known historic values in the area (see Section 3.7).

- 3.5.3 Implement the recommendations contained in the bridge heritage report and, where assessments indicate, extend them to include the bridges located in the state conservation areas.
- 3.5.4 Replace or repair bridges, including those impacted by the 2019–20 fires, in line with the heritage assessment report recommendations (Umwelt Environmental Consultants 2004).

3.6 Visitor use

NPWS parks and reserves provide a range of visitor experiences. NPWS aims to ensure that visitors enjoy, experience and appreciate the parks while park values are conserved and protected. The parks experience low levels of visitation. Current visitation is generally for four-wheel driving, picnicking, camping, bushwalking and nature study. The parks provide these opportunities in a natural, rugged and remote setting in a diversity of landscapes.

Within the parks is an area of declared wilderness. Wilderness areas have high environmental quality and an absence of modern society's sounds, smells, and sights. Wilderness areas provide a sense of naturalness and remoteness from urban or rural development, and opportunities for self-reliance, adventure, challenge and exploration. Facilities, signposting and other management devices are generally avoided in wilderness unless essential for public safety, management operations or environmental protection.

A summary of the recreation activities permitted in the parks and any conditions that apply is provided in Table 4 and discussed below.

Other areas managed by NPWS, other authorities and private operators in the region provide opportunities for a range of nature-based recreation activities. NSW Roads and Maritime Services (formerly Roads and Traffic Authority) manages picnic facilities on the Oxley Highway at the Stockyard Creek Rest Area. A privately owned café, accommodation and petrol station is located on private property at Gingers Creek. Other visitor opportunities close to the parks are provided at New Country Swamp in Mummel Gulf National Park (15 kilometres to the west), at Cobcrofts in Werrikimbe National Park (5 kilometres to the north) and at Dingo Tops in Tapin Tops National Park (20 kilometres to the south).

Table 4 Recreation activities, their location and conditions of use

| Activities | Locations | Conditions applying ¹ |
|--------------------------------------|---|---|
| Picnicking | <ul style="list-style-type: none"> Myrtle Scrub Day Use Area Maxwells Flat Day Use Area Throughout the parks (subject to conditions) | <ul style="list-style-type: none"> Picnicking elsewhere in the parks is permitted, provided no wood fires are lit. Firewood collection is not permitted. |
| Camping | <ul style="list-style-type: none"> Maxwells Flat Camping Area Remote area camping throughout the parks | <ul style="list-style-type: none"> Camping at Maxwells Flat Camping Area is for a maximum of 2 weeks at any one time. Remote camping is permitted providing it is not within 200 metres of an existing visitor facility or roads open to the public, no wood fires are lit and it is for one night only in any one location. Firewood collection is not permitted. |
| Vehicle access – two- and four-wheel | <ul style="list-style-type: none"> Park roads as listed in Table 5 and shown on Figure 2 | <ul style="list-style-type: none"> During dry conditions only; signs may be erected to close roads during wet weather. |

| Activities | Locations | Conditions applying ¹ |
|--|--|---|
| driving and motorbike riding | | <ul style="list-style-type: none"> • Drivers must be appropriately licensed and vehicles registered. • Group limits apply (see below). |
| Nature study and/or cultural awareness | <ul style="list-style-type: none"> • Throughout the area | <ul style="list-style-type: none"> • Group limits may apply (see below). |
| Horse riding | <ul style="list-style-type: none"> • Approved routes shown on Figure 2 | <ul style="list-style-type: none"> • Permitted on designated roads only. • Group limits may apply (see below). |
| Cycling (see Figure 2) | <ul style="list-style-type: none"> • All park roads and management trails not in the wilderness area | <ul style="list-style-type: none"> • Permitted on the roads and trails (not in the wilderness) unless otherwise signposted. • Not permitted off designated roads and trails. |
| Remote area bushwalking | <ul style="list-style-type: none"> • Throughout the parks | <ul style="list-style-type: none"> • Walkers are encouraged to contact the local NPWS offices before undertaking activities in the wilderness area. • Use of minimal impact bushwalking. |
| Car rallies | <ul style="list-style-type: none"> • Unsealed road in the parks | <ul style="list-style-type: none"> • Transport stages only (requires consent under the National Parks and Wildlife Regulation, additional conditions will apply). |
| Fossicking | <ul style="list-style-type: none"> • The Cells SCA only | <ul style="list-style-type: none"> • Subject to environmental impact assessment. Requires consent under the National Parks and Wildlife Regulation. Sluicing will not be permitted. |
| Recreational fishing | <ul style="list-style-type: none"> • Rivers and streams in the parks | <ul style="list-style-type: none"> • Subject to licensing and conditions set by the relevant regulatory authority. |
| Group activities | <ul style="list-style-type: none"> • Throughout the parks (restrictions apply in the wilderness area) | <ul style="list-style-type: none"> • Wilderness: A group size limit of 10 people is permitted without NPWS consent. Larger groups of up to 15 people may be permitted with NPWS consent. • Non-wilderness: All group activities must be in accordance with the National Parks and Wildlife Regulation, and all groups larger than 30 people require consent (additional conditions will apply). |
| Commercial recreation | <ul style="list-style-type: none"> • Subject to licensing and conditions | <ul style="list-style-type: none"> • Must be ecologically sustainable. • Must have a licence under the National Parks and Wildlife Act (additional conditions apply). • Must be consistent with the conditions in this table applying to non-commercial activities. |

¹ For any activity, group limits and requirements for consent may apply.

Visitor access

Park roads are managed for public use, primarily to access visitor facilities and points of interest. The parks are ideally located between the coast and the tablelands, and the park road network offers a number of scenic and recreational driving opportunities of varying standards and conditions (see Figure 2 and Table 5).

Some of the park roads are only suitable for use during periods of dry weather, and may be temporarily closed to public access during or following periods of wet weather. Public access

to the parks also includes a number of roads that are excluded from the parks and maintained by other authorities (see Figure 2 and Section 5.1).

The main roads providing access to the parks are Knodingbul Road and Myrtle Scrub Road to the south of the Oxley Highway. Myrtle Scrub Road forms a 14-kilometre scenic loop drive, but can be rough and dangerous in the wet and is often only suitable for use by all-wheel drive vehicles in dry weather. Fenwicks Road to the north is mostly four-wheel drive accessible with some sections that are two-wheel drive.

Other roads in the parks require a four-wheel drive vehicle. Cells Jeep Road and Corn Cob Road provide the main access to the Cells Creek area. Causeway Road provides access to Maxwells Flat Camping Area and Day Use Area. Tobins and Seaview roads provide four-wheel drive access north of the Oxley Highway

Table 5 Public vehicle access roads

| Road standard/name | Access description |
|--------------------------------|--|
| Two-wheel drive access | |
| Cells River Road | Access to private property |
| Knodingbul Road | Main access to the southern portion of the parks |
| Stockyard Creek Road | Access from Stockyard Creek Rest Area onto Knodingbul Road |
| Four-wheel drive access | |
| Blue Mountain Creek Road | Access into the Cells Creek area and to state forest |
| Causeway Road ¹ | Access to Maxwells Flat Camping Area and Day Use Area |
| Cells Jeep Road ¹ | Main access into Cells Creek |
| Corn Cob Road ¹ | Access to Cells Jeep Road and Cells Creek |
| Clay Road ¹ | Access to Corn Cob Road and Cells Creek |
| Eaglehawk Road | Access to Cells Creek and private property |
| Fenwicks Road | Mostly runs through state forest. Access to the northern part of the parks and to Werrikimbe National Park |
| Loop Road ¹ | Alternate link with Blue Mountain Creek Road |
| Lyrebirds Trail | Link to Deb Road and the Old Highway |
| Myrtle Scrub Road ¹ | 14-km scenic driving loop from the Oxley Highway |
| Old Highway | Access to private property |
| Seaview Road | Access to the northern part of the parks and Tobins Road |
| Tobins Road | Access to the northern part of the parks and Seaview Road |

¹ Roads may be temporarily closed to public access during or following periods of wet weather.

Occasionally tour buses access the southern part of the parks via Knodingbul Road. Car rallies occur in neighbouring areas of state forest, and sections of the parks have been used as a transport stage for rally vehicles in the past. Four-wheel driving and trail bike riding are popular in the parks, particularly in the Cells Creek area.

As discussed in Section 5.1, all roads and trails in the parks provide access for firefighting and other management purposes. Vehicle use of those trails not listed in Table 5 is restricted to authorised management purposes only. While not open for public vehicle access, they will generally be open to walkers throughout the parks and to cyclists outside the wilderness

area unless signage indicates otherwise (see cycling section below for further details on where cycling is permitted).

Camping and day use

Day use areas, typically picnic facilities or sites for interpretation and education, are the main destination for the vast majority of visitors to the parks. There are two day use areas, both located in the national park. Provision of camping sites and facilities in the park allows visitors to have a more in-depth experience. The park offers opportunities for camping at Maxwells Flat.

Myrtle Scrub Day Use Area is located on the Cells River, and basic facilities are provided. Maxwells Flat Camping Area and Day Use Area, located in the south-east portion of the park, are situated along the Doyles River. Fireplaces and a toilet are provided. Firewood collection is not permitted in the parks.

The Cells Creek area (where Grassy Ridge Trail crosses Cells Creek) is a popular four-wheel drive destination that has been used for day use and occasional camping. However, access to the area is via steep four-wheel drive roads that can become slippery and impassable during wet weather due to the clay nature of the soils. Heavy rainfall can also lead to some roads being completely cut off by flood waters in the Cells Creek area. Signage has been installed to advise visitors that access to the Cells Creek area is restricted to four-wheel drive vehicles during dry weather only. It is impractical to maintain a camping area at this location, and NPWS encourages visitors to camp at Maxwells Flat Camping Area, which has reliable vehicle access and existing visitor facilities.

While NPWS acknowledges that most visitors to the Cells Creek area are responsible, there have been occasions where visitors have accessed the area during or after prolonged wet weather. This has resulted in erosion and damage to access roads and creek crossings, and required expensive remedial works to address erosion and reinstall appropriate drainage.

A timber and corrugated iron structure that pre-dates reservation of the parks is located beside the Cells Creek area and has been used for shelter by overnight campers. The structure does not comply with NPWS facility guidelines and is considered unlikely to be of heritage significance. However, NPWS recognises that some four-wheel drive clubs have an affinity with the structure.

Some four-wheel drive clubs have expressed an interest in helping NPWS to advocate responsible use of the Cells Creek area, and to assist with trail and site maintenance, including the ongoing maintenance of the structure adjacent to the Cells Creek area.

The parks include a number of places without facilities where visitors can stop for picnics. The parks also include many places remote from roads, particularly in the wilderness, suitable for bush camping, subject to conditions as listed in Table 4.

Bushwalking

Bushwalking allows visitors to be in close contact with the environment and generally increase understanding and enjoyment of parks and the environment. There are no designated walking tracks in the parks. Bushwalkers can use the road and trail network as well as walk off trails.

Cycling

Cycling occurs at relatively low levels in the parks. In accordance with NPWS policy and the *Sustainable Mountain Biking Strategy* (OEH 2011a) the parks offer opportunities for cycling

along the management trail and park road network (see Figure 2). Cycling is not allowed off the road or trail surface.

Under NPWS policy, cycling is only allowed on management trails in wilderness areas where it will not degrade natural or cultural heritage values. The management trails (Long Ridge Road and Seaview Trail) in the wilderness area are not extensive, there is no known history of cycling in this area and opportunities for cycling are provided elsewhere in the parks. As such, cycling will not be permitted in the wilderness area.

Horse riding

Horse riding is a popular recreation activity that has cultural associations for many Australians. The NPWS *Strategic Directions for Horse Riding in NSW National Parks* (OEH 2012a) provides a framework to improve riding opportunities in eight priority regions in New South Wales, including the Lower North Coast and Northern Tablelands regions. Horse riding opportunities in numerous national parks in these regions have been progressed, including nearby Mummel Gulf National Park and also Bago Bluff National Park, located close to Wauchope.

The Bicentennial National Trail provides opportunities for horse riding and passes through nearby Mummel Gulf National Park and across to the western edge of Werrikimbe National Park and through Oxley Wild Rivers National Park. It passes to the north but does not enter the Cottan-Bimbang parks (see Figure 2). Further opportunities for horse riding in the area are provided in the nearby Biriwal Bulga National Park.

Horse riding in national parks provides an opportunity for horse riders to experience national parks and appreciate their natural heritage. However, like all recreation activities, horse riding may have adverse impacts on park values if undertaken in inappropriate locations or without management arrangements in place.

Horse riding is allowed on public roads in accordance with NSW road rules. Consistent with this plan, horse riding will only be allowed in the parks on designated sections of park road indicated in Figure 2. Horse riders should follow the *NPWS Code of Practice for Horse Riding in Parks* (OEH 2014).

Group activities

Group activities can provide opportunities for people who would otherwise not be able to experience the parks and can promote environmental understanding and support for conservation. Large groups can have an environmental impact and can restrict opportunities for independent visitors.

Non-commercial large-scale organised group activities require consent under the National Parks and Wildlife Regulation (see Table 4 for group size limits). Organised group activities of a commercial nature require licensing under the National Parks and Wildlife Act. All activities must be consistent with the management principles for the park or area and be compatible with the natural and cultural heritage values of the parks. Applications are assessed in accordance with relevant NPWS policies and procedures.

Non-commercial organised group activities currently occurring in the parks include tours by local four-wheel drive clubs and motorcycle clubs. There are currently no commercial tourism operators licensed to operate in the parks. Previously, commercial four-wheel drive tag-along tours were licensed in the parks and it is possible there may be future demand for such activities. Four-wheel drive group activities can degrade natural values, particularly in environmentally sensitive areas such as creek crossings. Large numbers of vehicles may also contribute to the spread of weeds.

Other uses

Fossicking is a recreational activity involving the small-scale search for minerals, gemstones or mineral-bearing material from the surface (or by digging from the surface) with handheld implements. Fossicking is generally not permitted in parks without consent because it can pose unacceptable risks to natural and cultural heritage (OEH 2018). As fossicking mainly takes place along river and creek banks, disturbance of soils and erosion can lead to impacts on aquatic habitats, vegetation and fauna such as native fish (NSW Industry & Investment 2019).

The NPWS policy allows for limited fossicking opportunities in parks with consent, subject to an appropriate environment and risk assessment level. The assessment needs to consider if the activity poses unacceptable risks to visitor safety or to park values, including threatened native plants and animals, Aboriginal cultural heritage, World Heritage values, wilderness, catchment integrity and water quality.

The parks were formerly part of the Bulga, Brassey, Doyles River, Mount Seaview and Enfield state forests. There was some history of recreational fossicking in the area while it was state forest with this focused on the area that is now The Cells State Conservation Area. There is no evidence that fossicking occurred in the area contained within Cottan-Bimbang National Park or Cottan-Bimbang State Conservation Area. Access into these areas is limited due to the steep terrain that can be dangerous inaccessible in the wet. There are also safety issues associated with disused mine shafts that may pose a risk to visitor safety.

Given the important Aboriginal cultural heritage values, significant catchment values and associated stream ecology in these parks, particularly in the catchments of Fenwicks and Ralfes creeks and Tobins River, recreational fossicking will only be allowed to continue to occur in the Cells State Conservation Area using handheld metal detectors and pans. Sluicing associated with previous fossicking activity in this area caused environmental impacts and will therefore not be permitted. Fossickers must follow the low impact requirements of the Mining Regulation 2016 and the NPWS Fossicking policy (OEH 2018). NPWS will monitor any environmental impacts caused by this recreational activity and may not provide consent if adverse impacts are detected.

The rivers and streams within the parks offer opportunities for recreational fishing for Australian bass, brown and rainbow trout. All fishing activities in NSW waters are regulated under the *Fisheries Management Act 1994*. Recreational fishing must be in accordance with licence conditions specified by the regulator. To help protect the platypus (*Ornithorhynchus anatinus*) and other wildlife, no nets (except landing nets used exclusively for this purpose) or traps are allowed.

Issues

- Erosion and other impacts from fossicking activities pose a threat to the park's significant values, including water quality, stream ecology and threatened species.
- There have been incidences of visitors accessing the Cells Creek area during wet weather and causing erosion and damage to access roads and creek crossings.
- There have been incidences of illegal use of the parks associated with unregistered trail bikes and unauthorised access to management trails.
- Some park signs have been vandalised in the past.
- Disused mine shafts may pose a risk to visitor safety.
- Large groups can affect wilderness and other natural values and restrict opportunities for independent visitors.

Desired outcomes

- Visitor use is ecologically sustainable.
- The parks continue to provide opportunities for remote nature-based recreation in an unmodified environment with minimal disturbance to wilderness and natural and cultural values.
- Group activities have minimal effect on wilderness, natural and cultural values and other users.
- Group activities provide an enjoyable and enriching experience for participants, enhancing their understanding and appreciation of the parks' natural and cultural heritage value.

Management response

- 3.6.1 To protect catchment and other values, leave the wilderness area and the Tobins River, Ralfes Creek and Fenwicks Creek catchments undisturbed, and do not promote recreational use in these areas (see Section 3.1).
- 3.6.2 Allow visitor use of the parks in accordance with Table 4 and Figure 2.
- 3.6.3 Allow public vehicle access on park roads listed in Table 5 and shown on Figure 2.
- 3.6.4 Monitor the environmental and social impacts of visitor use and recreation, and implement measures where necessary (including temporary road and trail closures) to address unacceptable environmental or social impacts.
- 3.6.5 Seek to develop a memorandum of understanding with local four-wheel drive clubs to advocate responsible use of the Cells Creek area and to assist with track and site maintenance.
- 3.6.6 Identify the Cells Creek area (i.e. where Grassy Ridge Trail crosses Cells Creek) for low-key (minimal impact) day use and monitor its use. If visitors accessing the area during or after prolonged wet weather cause erosion or other damage, implement measures (including keyed access) in consultation with local four-wheel drive clubs. Basic facilities may be provided subject to use.
- 3.6.7 Complete a risk assessment of derelict mines and implement any recommendations. Block access to mine sites in the interim if needed, ensuring any barriers required to address risks to human safety still permit access for bats.
- 3.6.8 Monitor commercial and non-commercial group activities, if any, with respect to cumulative impacts, safety requirements, and compliance with licence or consent conditions. Licences or consents may be cancelled if there is a breach of the conditions.
- 3.6.9 Fossicking will be permitted in The Cells State Conservation Area, subject to requirements under the NPWS fossicking policy. Fossicking is only permitted on the surface and not in old mine shafts.

3.7 Information and education

Interpretive information can help to protect natural and cultural heritage, promote support for conservation, and increase visitors' enjoyment and satisfaction. Currently, only limited interpretive information is provided about the parks.

The parks' location on the Oxley Highway provides suitable sites for providing information about exploring and appreciating the parks. In particular, the Roads and Maritime Services Stockyard Creek Rest Area, located just off the Oxley Highway, is a popular rest area for

motorists and an ideal location for interpretive displays. The privately owned Gingers Creek Café, also a popular rest stop for visitors to the area, provides another opportunity for presenting information about the parks.

Interpretive information about the parks should aim to increase awareness of their cultural and conservation values and visitor opportunities and provide general information about orientation and regulations. Themes that could be covered in interpretive displays, printed materials or on the NPWS visitor website include:

- the parks' Aboriginal heritage and historic heritage
- the parks' role in protecting rainforest, wilderness, old-growth, threatened species, ecological communities and catchments
- visitor opportunities.

The 14-kilometre Myrtle Scrub Road scenic loop currently has minimal directional signage. Information and improved signposting could help to increase visitors' appreciation of the area. There is also limited directional signage in the Cells Creek area. Regulatory signage is needed at the intersections of management trails to discourage unauthorised access (see Section 5) and gates may be needed too.

Issues

- There is currently limited interpretation of the parks' natural and cultural values.
- Directional and regulatory signage in the parks needs to be improved.

Desired outcomes

- There is widespread community understanding and appreciation of the parks' natural and cultural values.
- Visitors are aware of the recreation opportunities and can easily find their way to facilities.
- Visitors are aware of the regulations that apply to the parks.
- The parks are a useful educational resource for local schools and community organisations.

Management response

- 3.7.1 Provide additional directional signposting at Cells Creek.
- 3.7.2 Liaise with the relevant road authority to provide directional signage along the Oxley Highway at both intersections with Myrtle Scrub Road.
- 3.7.3 Place orientation and interpretive signs at the Stockyard Creek Rest Area in consultation with the relevant road authority.
- 3.7.4 Consult with the owners of the Gingers Creek Café about the possibility of providing an information display or other access to information at the café.
- 3.7.5 Involve the local Aboriginal community in the development of materials and programs for interpretation of Aboriginal culture.
- 3.7.6 Provide information that will support educational use of the parks by schools, community groups and individuals.

4. Threats

4.1 Pests

Pest species are plants and animals with negative environmental, economic, and social impacts; they are commonly introduced species. Pests can impact the range of park values, including biodiversity, cultural heritage, catchment, and scenic values.

The *Biosecurity Act 2015* and regulations provide specific legal requirements for the response, management and control of biosecurity risks, including weeds and pest animals. These requirements apply equally to both public land 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 Northern Tablelands, North Coast and Hunter regions, which covers the parks (see Northern Tablelands LLS 2017, 2018; North Coast LLS 2017, 2018; Hunter LLS 2017, 2018). These 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).

The NPWS Lower North Coast and Northern Tablelands regional pest management strategies (OEH 2012b, 2012c) identify pest species and priority programs for the parks. The overriding objective of these pest management strategies is to minimise adverse impacts of introduced species on biodiversity and other park and community values while complying with legislative responsibilities. The strategies also identify where other site-specific or pest-specific plans or strategies need to be developed to provide a more detailed approach. Reactive programs may also be undertaken in cooperation with neighbouring land managers in response to emerging issues.

Weeds

The strategies identify a number of significant weed species for the parks (Table 6).

Table 6 Weeds recorded in the parks

| Common name | Scientific name | Occurrence |
|------------------|---|--------------------------------------|
| Aquatic weeds | (Various species) | Isolated populations |
| Blackberry | <i>Rubus fruticosus</i> agg. ^{1 2} | Isolated populations along rivers |
| Exotic grasses | Especially Coolatai grass ^{3 4} (<i>Hyparrhenia hirta</i>) | Isolated populations along Oxley Hwy |
| Exotic pine | (Various species) ⁵ | Isolated populations |
| Herbaceous weeds | Especially crofton weed ^{5 6} (<i>Ageratina adenophora</i>) | Isolated populations |
| Lantana | <i>Lantana camara</i> ^{1 2} | Isolated populations |

1 Weed of National Significance (Australian Government 2012).

2 State-level priority weed (Hunter LLS 2017, North Coast LLS 2017, Northern Tablelands LLS 2017).

3 Additional species of concern (Northern Tablelands LLS 2017).

4 Regional priority weed (Hunter LLS 2017).

5 Regional priority weed (North Coast LLS 2017).

6 Additional species of concern (Hunter LLS 2017).

In addition, Saint John's wort (*Hypericum perforatum*) is a serious agricultural and environmental weed that occurs in close proximity and is considered to pose a threat to Cottan-Bimbang National North Coast Park. It is, therefore, a priority to monitor for new infestations.

Weed species have the ability to alter vegetation structure and mostly occur in disturbed areas along roads and previously logged areas. Priorities for control in the parks include blackberry, crofton weed and Coolatai grass. Currently, annual spraying control programs are conducted in the parks for blackberry and also for lantana.

The invasion, establishment and spread of lantana (NSW SC 2006) and the invasion of native plant communities by exotic perennial grasses (NSW SC 2003) are listed as key threatening processes under the Biodiversity Conservation Act.

There is historical evidence of many native and exotic plantings in the parks, many likely to have been part of forestry trials that aimed to examine growth rates and viability among the planted species. Some of these plantings still persist in the parks.

A small area of a native rainforest species, coachwood (*Ceratopetalum apetalum*), exists as remnants from an old forestry nursery in Cottan-Bimbang National Park. Native plantings are not considered a priority for management because they can often develop into healthy native forests unaided. Some additional planting may be required to enhance biodiversity in areas of monoculture. The area of coachwood in the parks may be of historical significance when considered in association with the nursery remains. There are a number of other native hardwood plantings documented in Cottan-Bimbang National Park which need further investigation.

A small exotic pine plantation (less than 1 hectare) exists north of the Oxley Highway near Fenwicks Trig, and another two areas of pine are located in the south close to the old nursery site. In addition, there are small plantings of pine trees at a former mill site in the road reserve of the Oxley Highway. The majority of exotic pine plantations consist of radiata pine (*Pinus radiata*) and slash pine (*P. elliotii*).

Exotic pines can affect the biodiversity and aesthetic values of the parks, and seedlings (pine wildlings) can spread out from plantation areas and invade the surrounding native forest. All but one of the exotic pine plantations located in the parks have been assessed as a low priority for management because they do not appear to be spreading to adjacent areas. While the remaining area has not been fully assessed to date, it also does not appear to be spreading to adjacent areas of native forest. Plantations of exotic species such as *Pinus* spp. will, however, be considered for removal and rehabilitation (NPWS 2010).

Introduced animals

The pest management strategies identify significant introduced animal species for the parks (North Coast LLS 2018, Hunter LLS 2018, Northern Tablelands LLS 2018).

Table 7 Introduced animals known to occur in the parks

| Common name | Scientific name | Occurrence |
|-------------|-------------------------------|----------------------------------|
| Feral deer | (Various) | Isolated populations |
| Feral dog | <i>Canis lupus familiaris</i> | Widespread populations (in part) |
| Feral cat | <i>Felis catus</i> | Scattered populations |
| Wild pig | <i>Sus scrofa</i> | Scattered populations |
| Red fox | <i>Vulpes vulpes</i> | Scattered populations |

In addition to the pest animal species known to occur in the parks, feral cattle (*Bos taurus*), introduced rodents (various species) and feral hives of European honeybees (*Apis mellifera*) are also predicted to occur.

Key threatening processes related to pest animal species known to occur in the parks include:

- predation and hybridisation by feral dogs (NSW SC 2009)
- predation, habitat degradation, competition and disease transmission by feral pigs (NSW SC 2004b; TSSC 2001b)
- predation by feral cats (DoAWE 2019; NSW SC 2000c)
- herbivory and environmental degradation caused by feral deer (NSW SC 2004a)
- predation by the European red fox (DoAWE 2019; NSW SC 1998).

Pests have been identified as having an impact on the parks' threatened animal species. Priorities for control in the parks include wild dogs and foxes. Wild pigs are also currently controlled through a combination of trapping, poisoning and shooting.

Wild dogs (*Canis lupus* sub spp.) are known to occur in the parks. Wild dogs, a term which includes dingos as well as feral dogs and their hybrids, are listed as priority pest species in the regional strategic pest animal management plans relevant to the parks (LLS 2018a,b). Under these plans, NPWS has an obligation to suppress and destroy wild dogs on the lands it manages to prevent stock losses on neighbouring lands. The dingo, however, plays a key ecological role in natural ecosystems and the balance between wild dog management and dingo conservation is an important consideration in the region (LLS 2018a).

As discussed in Section 3.3, some public lands, including the parks covered by this plan and neighbouring state forests, are considered important for the conservation of dingos in New South Wales. The NSW Wild Dog Management Strategy (DPI 2017) promotes a balance between managing wild dogs in areas where they have negative impacts and preserving the ecological role of dingos. The conservation of dingos is listed as one of the goals of the strategy. It is achieved via wild dog management plans, which focus control on areas where the risk of negative impacts are greatest, and not undertaking control in other parts of the landscape with a low risk of negative impacts from wild dogs, to allow dingos to fulfil their natural ecological role.

There are a number of state forests adjoining the parks, and these may be subject to designation as conservation hunting reserves under the *Game and Feral Animal Control Act 2002*. Hunting activity on state forests is subject to licence and permit requirements from the Forestry Corporation of NSW. In some places, the boundary of the parks is not clearly marked on ground.

Dieback

Overabundant populations of native bell miners (*Manorina melanophrys*) and psyllids are associated with a form of eucalypt dieback, which has been listed as a key threatening process under the Biodiversity Conservation Act (NSW SC 2008). 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 presence of bell miners and the alteration of the forest structure (with depleted canopy and mid-storeys and replacement of understoreys with dense shrubby vegetation, often dominated by lantana or vine thickets).

The presence 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 have also been implicated in the spread of this form of dieback (BMAD Working Group 2004).

Bell miner associated dieback is recorded from a number of sites where it is primarily affecting regrowth Sydney blue gum with a dense understorey mostly consisting of native species. It is currently present at Cells Creek, near the Stockyard Creek Rest Area along the Oxley Highway and along sections of Knodingbul Road. During the 1980s, it was recorded in a number of other locations that appear to be regenerating, with rainforest tree species replacing the dead eucalypts.

The NPWS regional pest management strategies include control priorities for identifying the presence of bell miner associated dieback and assessing the impact of this form of dieback at particular sites, including in the western part of Cottan-Bimbang National Park. Where the impact is significant, or could potentially become significant, site management plans will be prepared.

There are currently strategic programs involving NPWS and other land managers to investigate appropriate methods, such as intensive lantana removal and the strategic application of fire, to control the damaging environmental impacts of bell miner associated dieback.

Phytophthora cinnamomi is a soil-borne pathogen that infects the roots of a large range of plant species. In some circumstances may contribute to plant death where there are other stresses present such as waterlogging, drought and perhaps wildfire (NSW SC 2002). *P. cinnamomi* may spread from infected roots to roots of healthy plants and may be dispersed in flowing water, such as storm run-off, as well as in soil and mud carried by vehicles, animals and walkers. Dieback caused by *P. cinnamomi* is currently listed as a key threatening process under the Biodiversity Conservation Act (NSW SC 2002) and the Environment Protection and Biodiversity Conservation Act (DoAWE 2019).

P. cinnamomi has been found in a number of locations in nearby Werrikimbe and Mummel Gulf national parks. Consequently, vehicle movement and earthmoving machinery entering the parks from affected areas is of concern. Protocols and procedures for containing the spread of *P. cinnamomi* in Werrikimbe and Mummel Gulf national parks are currently in place.

Myrtle rust is a plant disease caused by the exotic fungus *Austropuccinia psidii*. It was first detected on the NSW Central Coast in 2010 and has established through coastal New South Wales from the Shoalhaven River north into Queensland. Myrtle rust infects young actively growing shoots, leaves, flower buds and fruits of plants in the family Myrtaceae, including eucalypts. It may cause significant mortality among younger plants reducing recruitment into adult populations.

Myrtle rust is spread by the transport of spores by wind, animals and human activity, and is considered to be widely distributed in the Port Macquarie-Hastings local government area but has not been detected in the parks to date. The NPWS regional pest management strategies include measures to address myrtle rust infestations, and a statewide management plan for national park estate has been prepared (OEH 2011b).

Desired outcomes

- Negative impacts of introduced species on park values are stable or diminishing.
- Dieback caused by *Phytophthora cinnamomi*, bell miner associated dieback or myrtle rust is minimised.
- Pine wildlings are prevented from spreading into the adjacent native forest.
- There is improved understanding of the extent and impact of pest species in the parks.

Management response

4.1.1 Manage pest species in accordance with relevant pest management strategies.

- 4.1.2 Ensure pest control is targeted towards animals, plants and communities most at threat. Give priority to pest animal control programs benefiting the parma wallaby.
- 4.1.3 Seek the cooperation of neighbours in implementing weed and pest control programs. Undertake control in cooperation with Local Land Services; Port Macquarie-Hastings, Mid-Coast and Walcha councils; and the Forestry Corporation.
- 4.1.4 Undertake wild dog control in the parks in cooperation with neighbours, and in accordance with wild dog management plans.
- 4.1.5 Monitor the extent and spread of dieback in the parks and implement priority control measures contained in the relevant pest management strategy in relation to bell miner associated dieback.
- 4.1.6 Monitor the parks for the presence of *Phytophthora cinnamomi*. If found, implement protocols and procedures to contain the spread. This may include the closure of roads and management trails to quarantine areas affected or potentially affected by *P. cinnamomi*.
- 4.1.7 Monitor the parks for the presence of myrtle rust. If found, implement measures in accordance with relevant pest management strategies.
- 4.1.8 Monitor native plantations in the parks to ensure biodiversity values are being restored.
- 4.1.9 Monitor all exotic pine plantations to detect spread into adjoining areas. Where they are assessed to be invading native forest areas, remove and rehabilitate pine plantations in accordance with relevant pest management strategies.
- 4.1.10 Liaise with the relevant road authority regarding the control of exotic pines in the road reserve and immediately adjacent to the parks.

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 2013).

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 (NSW SC 2000b).

The fire history of the parks prior to NPWS ownership is only partially known. There have been a number of fires in the parks over the past 30 years, including some along the Oxley Highway, which are suspected to have been deliberately lit and some that have entered from the south-west that started from human ignition and lightning strikes.

Substantial areas of the parks were affected by the wildfires in late 2019 and early 2020, with the following approximate areas burnt:

- Cottan-Bimbang NP – 20,470 hectares (67% of the park)
- Cottan-Bimbang SCA – 56 hectares (53%)
- The Cells SCA – 2480 hectares (53%).

The parks were once considered not to be fire prone because of their location on the relatively high rainfall escarpment and the significant areas of rainforest. However, the

extreme conditions of late 2019 saw fire entering previously unburnt areas. At the time of finalising this plan of management, scientists were still working to understand the full impacts of the fires on the parks' values.

A fire management strategy that defines the fire management approach for the parks was prepared in 2005 (DEC 2005). The fire management strategy outlines the fire history of the parks, key assets in and adjoining the parks including sites of natural and cultural heritage value, fire management zones and fire control advantages such as management trails and water supply points. It also contains fire regime guidelines for conservation of the parks' vegetation communities. In particular, the strategy provides for the protection of cultural sites, catchment values, rainforest communities and old-growth forests across the majority of the parks. Only a few areas are to be managed as strategic fire advantage zones where overall fuel hazard will be maintained at levels to reduce fire intensity. The strategy also identifies a small zone straddling Knodingbul Road in the south of the park (Quarters Zone) where machinery is not permitted. If at all possible, containment lines are kept within individual catchments. This strategy will need to be reviewed and updated following the bushfires of 2019–20.

NPWS maintains cooperative arrangements with surrounding landowners and the Rural Fire Service, and is actively involved with both the New England Zone and Mid Coast District bush fire management committees. 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 committees.

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 native plant and animal communities.

Management response

- 4.2.1 Review and implement the fire management strategy for the parks and update as required at the start of each fire season.
- 4.2.2 Continue to be involved in the New England Zone and Mid Coast District bush fire management committees, and maintain cooperative arrangements with local Rural Fire Service brigades, Forestry Corporation and surrounding landowners in regard 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 rainforest, and allow for natural succession and regeneration.
- 4.2.4 Implement fire management works in the Mount Seaview Wilderness with minimal environmental impact in accordance with the NPWS Wilderness Policy.
- 4.2.5 Encourage research into the ecological effects of fire in the parks, particularly the response of significant plant species to fire, the fire requirements of rainforest communities, and the effects of fire intensity and season on recruitment of species across a range of communities.

4.3 Climate change

Human-induced climate change is listed as a key threatening process under the Biodiversity Conservation Act (NSW SC 2000a) and habitat loss caused by human-induced greenhouse gas emissions is listed under the Environment Protection and Biodiversity Conservation Act (TSSC 2001a).

The latest information on projected changes to climate are from the NSW and ACT Regional Climate Modelling (NARClim) project (DPIE 2020b, DPIE 2020c). The climate projections for 2020–2039 are described as ‘near future’; and projections for 2060–2079 are described as ‘far future’. The snapshot shown in Table 8 is for the North Coast and New England North West regions, which includes Cottan-Bimbang National Park and State Conservation Area and The Cells State Conservation Area.

Projections of future changes in climate include higher temperatures, changes in seasonal rainfall patterns and increased temperature extremes. Rainfall changes are also associated with changes in the extremes, such as floods and droughts, as well as secondary impacts such as water quality and soil erosion that occur as a result of changes to rainfall intensity. These changes are likely to lead to greater intensity and frequency of fires.

Climate change may significantly affect biodiversity by changing the size of populations and the distribution of species, modifying species composition, and altering the geographical extent of habitats and ecosystems. The potential impact of climate change is difficult to assess since it depends on the compounding effects of other pressures, particularly barriers to migration and pressure from feral animals. Species most at risk are those unable to migrate or adapt, particularly those with small population sizes or with slow growth rates.

Table 8 North Coast (and New England North West) regions 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 1.5–2.4°C (1.9–2.7°C in New England North West) |
| Minimum temperatures are projected to increase in the near future by 0.5–1.0°C | Minimum temperatures are projected to increase in the far future by 1.6–2.5°C (1.6–2.7°C in New England North West) |
| 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 winter | Rainfall is projected to increase in autumn and spring (autumn only in New England North West) |
| Projected Forest Fire Danger Index changes | |
| Average fire weather is projected to increase in summer and spring (and also winter in New England North West) | Severe fire weather days are projected to increase in summer and spring |

Source: DPIE 2020b, DPIE 2020c.

The parks provide major east–west and north–south wildlife corridors encompassing significant ranges in elevation from the coast to the tablelands. These corridors have the potential to be an important factor in mitigating the effects of climate change by providing paths of migration for species vulnerable to predicted changes in species composition and habitat values. A particular concern for the parks is the likely increase in heavy rain events and cyclonic winds associated with east coast lows (intense low-pressure systems), and the resulting negative impacts upon water quality in the creeks and streams in the parks.

Programs to reduce the pressures arising from other threats, such as habitat fragmentation, invasive species, bushfires and erosion, 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 parks' ability to cope with future disturbances, including climate change, and encourage research into appropriate indicators to monitor the effects of climate change.
- 4.3.2 Encourage research into the effects of climate change in the parks.

5. Management operations and other uses

5.1 Access

Roads and trails in the parks provide access for visitors as well as for management purposes. Maintaining roads requires a major commitment of resources. A number of roads and snigging tracks developed for past timber harvesting are no longer required for management and can contribute to erosion, the spread of weeds, provide movement corridors for dogs and foxes, provide opportunities for inappropriate recreation and detract from wilderness values.

A network of management trails is maintained and is regularly used for fire management and other operational activities, along with the park road network. In accordance with NPWS policy, vehicle use of management trails is only available for NPWS-authorized activities, such as essential park management and emergency response. The public's use of management trails is generally limited to bushwalking and cycling (see Section 3.6).

The parks include a number of 'ministerial roads'. These roads are vested in the Minister administering the National Parks and Wildlife Act on behalf of the Crown. They were retained as Crown land and not included in the reserved area of parks for the purpose of continuing access arrangements that existed immediately before the reservation of the parks. This primarily relates to use of these roads for timber hauling from the adjoining state forest and access to private property. While ministerial roads do not form part of the reserved parks, these roads are subject to the provisions of this plan and the National Parks and Wildlife Regulation.

Currently, all roads and trails in The Cells State Conservation Area and in the 2003 addition to Cottan-Bimbang National Park are ministerial roads. However, most do not provide access to lands outside the parks, so there is no continuing purpose for them to be excluded from the reserved area of park.

The ministerial roads for retention as vested land in the parks, and their purpose, are listed in Table 9.

Table 9 Ministerial roads to be retained in the parks

| Reserve | Road/ trail name | Access type ¹ | Purpose ² |
|-------------------|---|----------------------------|---|
| Cottan-Bimbang NP | Eaglehawk Rd | 4WD park road | Private property access |
| | Myrtle Scrub Rd (~500 m from Oxley Hwy only) | 4WD park road | Private property access/ Forestry Corporation access |
| | Knodingbul Rd | 2WD park road ³ | Forestry Corporation access |
| | Long Ridge Rd | Management trail | Forestry Corporation access |
| | Fenwicks Rd | 4WD park road | Forestry Corporation access |
| | Blue Mountain Creek Rd | 4WD park road | Private property access/ Forestry Corporation access |
| The Cells SCA | Blue Mountain Creek Rd | 4WD park road | Private property access/ Forestry Corporation access |
| | Eaglehawk Rd | 4WD park road | Private property access |
| | Knodingbul Rd | 2WD park road ³ | Forestry Corporation access |

1 The access type does not need to include access by the public where the purpose is solely for access for Forestry Corporation of NSW.

2 'Forestry Corporation access' includes staff of the Forestry Corporation of NSW or those authorised by the Forestry Corporation for management or harvesting purposes on nearby areas of state forest.

3 2WD access in dry weather only.

In addition to formally retaining ministerial roads as Crown land, the various pieces of Regional Forest Agreement legislation also provide for the general protection of private property access rights. Any roads that provide the only practical means of access to private property cannot be closed while that property remains in private ownership. However, any modification or upgrade of the road would be considered an activity and would only be permitted under the terms of a formal access agreement such as a licence.

The Oxley Highway is maintained by Roads and Maritime Services and traverses the parks east to west. The highway's 40-metre wide corridor is excluded from the parks. There have been instances where roadworks have encroached into the parks as a result of the steep and winding nature of the road, and some old quarry sites in the area are occasionally used by Roads and Maritime Services to stockpile materials associated with roadworks. Part of the rest area, including the shelter maintained by Roads and Maritime Services at Stockyard Creek, is located in the parks. Roads and Maritime Services works that impact the parks are subject to appropriate environmental impact assessment and NPWS consent.

A number of other public roads traverse the parks. The Old Highway, part of Knodingbul Road and small sections of Stockyard Creek Road, all of which are maintained by NPWS, are council roads. Cells River Road is a Crown road maintained by Walcha Council, while a small section of Myrtle Scrub Road is a Crown road managed by NPWS. There are also sections of Myrtle Scrub Road and of the Old Highway that are unformed and have been superseded by formed roads in more appropriate locations. Roads managed by other authorities that are outside, but provide access to the parks include sections of Fenwicks, Seaview, Deb and Knodingbul roads, which are managed by the Forestry Corporation.

No pets or stock are permitted to use park roads. The movement of animals on other public roads where they traverse the parks, or on roads that provide the only access to private property, is allowed as long as the animals remain in the vehicle. Access to private properties through the park on horseback or to muster straying stock requires written consent from NPWS.

Issues

- Additions to the parks have removed the need for some ministerial roads that were originally provided to ensure continued access arrangements.
- There is no formal arrangement for the maintenance of Crown and council roads in the parks.

Desired outcomes

- Management trails are appropriately maintained and gated where necessary.
- Private property access rights continue and have minimal impact on park values.

Management response

- 5.1.1 Maintain the network of management trails as shown on Figure 2.
- 5.1.2 Gate and/or signpost management trails where necessary to prevent unauthorised public access.
- 5.1.3 Pursue reservation of ministerial roads no longer required for access to adjacent private property or state forest as additions to Cottan-Bimbang National Park or The Cells State Conservation Area.
- 5.1.4 Close trails no longer required for management purposes in Ralfes Creek, Sheepstation Creek and Tobins River areas and assist natural regeneration if required.

- 5.1.5 Where a public road corridor is mainly unformed and no longer in use, seek to have the road closed and reserved as part of the parks.
- 5.1.6 Pursue and document agreements with Forestry Corporation, private property owners and councils as relevant regarding the maintenance of joint interest roads.
- 5.1.7 Formalise arrangements for the management of the Stockyard Creek Rest Area with Roads and Maritime Services.

5.2 Management facilities

Management facilities in the parks include a shelter, a helipad, a small dam and four quarries. The shelter, which includes a picnic table and water tank, is located at Forestry Camp Number 2 in Cottan-Bimbang National Park and is primarily used as a storage shed. Occasionally it is used to support overnight stays by staff or contractors undertaking management operations in the area.

Four quarries are located in the parks (NPWS 2001). Crushshell Quarry supplies gravel for roadworks in the parks, and is also used as a helicopter landing site and as a portable radio repeater site. The quarry is registered with the resource regulator and a quarry management plan has been prepared.

Quarries on Myrtle Scrub Road and Quarry Road have not been accessed for a number of years and are not currently registered. They have, however, been identified as potential sources of gravel for future roadworks in the parks. Eaglehawk Quarry is a disused quarry and is not required for management purposes.

A small dam is located within park near the Stockyard Creek Rest Area and is maintained as a water supply for fire management purposes.

Issues

- Eaglehawk Quarry and other disused quarries are not required for park management.
- Two quarries identified to supply gravel for future roadworks are not currently registered.
- There is a small problem with stock incursions from neighbouring areas of state forest held under occupational permits for grazing.

Desired outcomes

- Quarries and other management facilities have minimal impact on the parks' values.

Management response

- 5.2.1 Implement the quarry management plan and maintain locked gates on the access to Crushshell Quarry and helipad.
- 5.2.2 In liaison with the resource regulator, register the quarries on Myrtle Scrub and Quarry roads and prepare quarry management plans.
- 5.2.3 Complete a risk assessment of the disused quarry, and prepare and implement a safety management plan if required. Assist natural regeneration if required.
- 5.2.4 Encourage construction and maintenance of boundary fences to exclude stock from the parks. Fencing assistance may be provided in accordance with NPWS policy.

5.3 Other uses and operations

Apiary sites

Apiarists maintain honeybee hives, seasonally, at two sites within the parks. These sites were recognised as existing interests under the National Parks and Wildlife Act at the time of reservation and they are licensed in accordance with NPWS policy on beekeeping, which allows existing sites to continue subject to conditions, but does not allow any new or additional sites. The European honeybee (*Apis mellifera*) can have adverse impacts on some native plants and animals (Paton 1996), including poor flower pollination and competition with native nectar feeders.

Sites are limited in size and maintained by mowing or slashing. Access to apiary sites is via short trails from the Oxley Highway and Grassy Ridge Trail. While no problems are currently known in the parks, hive sites may cause unacceptable environmental impacts or user conflicts in the future. Where needed, NPWS will aim to negotiate relocation of hives to sites that allow the closure of trails or minimise the impact of the honeybees.

Mining and exploration

Exploration for minerals and petroleum, as well as mining and petroleum production, are permissible uses in state conservation areas. There has been a history of mineral exploration in these parks.

NSW Resources and Geoscience is the lead authority for mining and petroleum activities, including mineral exploration and mine site rehabilitation. NPWS and NSW Resources and Geoscience work together 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.

Trigonometric (trig) stations

Seven trigonometric (trig) stations are located in the parks. These are Tobin, Fenwicks, Brassey, Hailstone, Rushbrook, Oxley and Sheep Station trigs. Another station, Ralfes Peak Trig, is located in a Crown reserve of just over 4 hectares that is excluded from the parks. It is accessed through the parks from the Oxley Highway.

An agreement between NPWS and relevant land management authorities governs the management of trig stations within lands administered by NPWS, including rights of access to and occupation of all survey marks, subject to appropriate environmental impact assessment. Brassey and Rushbrook trigs are accessible by vehicles. Given the established access rights, there is potentially no need to retain the Crown reserve surrounding Ralfes Peak trig.

Telecommunication facilities

The Tobin Trig site in The Cells State Conservation Area (see Figure 2) has been identified by the NSW Telco Authority as the most appropriate location for a new facility as part of the NSW Government Radio Network (GRN). The proposed facility is part of the authority's *Critical Communications Enhancement Program* and aims to improve network coverage in this area.

The proposal is for the Tobin Trig site to be accessed via a former management trail that requires upgrading and maintenance. A gate will be installed to manage unauthorised access and the NSW Telco Authority will be responsible for maintaining the site,

management trail and the asset protection zone. The site is surrounded by fire-sensitive vegetation and threatened species and will need to be managed in line with the NPWS fire management strategy.

The proposal is subject to approval under the National Parks and Wildlife Act following detailed environmental impact assessment. Any additional users would require a licence under the Act and would also be subject to environmental impact assessment requirements.

There is no other telecommunication infrastructure within these parks.

Desired outcomes

- Apiary activities, mining and mineral exploration, telecommunication facilities and any other uses of the parks are managed to minimise impacts on natural and cultural values, visitor experiences, scenic values and park infrastructure.

Management response

- 5.3.1 Continue to license and manage the apiary sites in the parks in accordance with NPWS policy. If any site significantly compromises the environmental values of the area or leads to user conflicts, it will be relocated in consultation with the licensee.
- 5.3.2 Ensure applications for mining or mineral exploration in the state conservation areas are subject to environmental assessment in accordance with the memorandum of understanding between NPWS and NSW Resources and Geoscience.
- 5.3.3 In accordance with the agreement governing the management of trig stations, ensure any access or vegetation management associated with trig stations in the parks only occurs following appropriate environmental assessment.
- 5.3.4 In liaison with the relevant authority, seek reservation of the Crown reserve surrounding Ralfes Peak trig as an addition to the parks.
- 5.3.5 Subject to the environmental impact assessment, authorise the development and operation of a new telecommunication tower and associated infrastructure at Tobin Trig, and the maintenance of the access track off Stockyard Creek Road. No future extension to the approved footprint of the tower site will be allowed.

6. Implementation

This plan of management establishes a scheme of operations for the parks. Implementation of this plan will be undertaken in the annual program of the NPWS Lower North Coast and Northern Tablelands regions.

Activities for implementation are listed in Table 10. 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 become 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 10 Summary of management responses

| | Management response | Priority |
|---|---|----------|
| Geology, landscape and hydrology | | |
| 3.1.1 | Ensure management activities (road maintenance, fire suppression, road closures, quarry management etc.) are carried out in a manner that minimises soil erosion and water pollution (see also Section 5). | Ongoing |
| 3.1.2. | Monitor disturbed areas and manage any areas showing signs of erosion to mitigate impacts and, where possible, restore natural values. | Medium |
| 3.1.3 | Continue to support and work with Local Land Services and local and state road authorities to manage landslips and soil erosion. | Ongoing |
| 3.1.4 | During and after periods of wet weather, restrict access to the public road network to prevent damage and/or to ensure safety. | Ongoing |
| Native plants and animals | | |
| 3.2.1 & 3.3.1 | Support the identification and implementation of recovery actions for threatened species, populations and ecological communities present in the parks in accordance with the <i>Biodiversity Conservation Program</i> . | Medium |
| 3.2.2 | Undertake or encourage targeted surveys for threatened plant species and communities that occur or are likely to occur in the parks. | Medium |
| 3.2.3 | Undertake rainforest surveys to determine the current extent and distribution of rainforest communities. | Medium |
| 3.2.4 | Undertake a comprehensive vegetation survey in order to improve understanding of the vegetation communities across the parks and inform management actions. | Medium |
| 3.3.2 | Undertake or encourage targeted surveys for priority threatened animal species that occur or are likely to occur in the parks. | Medium |
| 3.3.3 | Undertake or encourage surveys and DNA sampling of dingo populations in the parks to determine their purity and numbers. | Low |

| Management response | | Priority |
|----------------------------|--|-----------------|
| Aboriginal heritage | | |
| 3.4.1 | Continue to consult and involve the Birpai and Purfleet-Taree local Aboriginal land councils, the Elders of the Birpai and Dunghutti peoples and other relevant Aboriginal community organisations and custodial families in the management of the parks, including the management of Aboriginal sites, and cultural and natural values. | Ongoing |
| 3.4.2 | Undertake an archaeological survey and cultural assessment prior to all works with the potential to impact Aboriginal sites or values. | Ongoing |
| 3.4.3 | In consultation with the local Aboriginal communities, collate information about areas and sites of spiritual and cultural significance. | Medium |
| 3.4.4 | Encourage and support Aboriginal communities to undertake interpretation of Aboriginal culture in the area. | Medium |
| 3.4.5 | Work with the members of the relevant Aboriginal communities to determine if the existing name is appropriate and, if not, to identify an appropriate name to replace 'Cottan-Bimbang'. If a new name is agreed, seek to rename Cottan-Bimbang National Park and State Conservation Area in accordance with the NPWS Naming Policy. | Medium |
| 3.4.6 | Permit Aboriginal people to carry out cultural activities related to maintenance of traditional links to Country. Any such activities must comply with relevant legislation and NPWS policies and may be subject to NPWS consent (and any relevant conditions). | Ongoing |
| Historic heritage | | |
| 3.5.1 | Record and assess potential historic sites to determine their significance, especially those in the Cells Creek and Causeway Road areas. Where historic significance assessments indicate a need, prepare and implement a conservation management plan or heritage action statement. | Medium |
| 3.5.2 | Provide interpretation of the known historic values in the area (see Section 3.7). | Medium |
| 3.5.3 | Implement the recommendations contained in the bridge heritage report and, where assessments indicate, extend them to include the bridges located in the state conservation areas. | Medium |
| 3.5.4 | Replace or repair bridges, including those impacted by the 2019–20 fires, in line with the heritage assessment report recommendations (Umwelt Environmental Consultants 2004). | Ongoing |
| Visitor use | | |
| 3.6.1 | To protect catchment and other values, leave the wilderness area and the Tobins River, Ralfes Creek and Fenwicks Creek catchments undisturbed, and do not promote recreational use in these areas (see Section 3.1). | Ongoing |
| 3.6.2 | Allow visitor use of the parks in accordance with Table 4 and Figure 2. | Ongoing |
| 3.6.3 | Allow public vehicle access on park roads listed in Table 5 and shown on Figure 2. | Ongoing |
| 3.6.4 | Monitor the environmental and social impacts of visitor use and recreation, and implement measures where necessary (including temporary road and trail closures) to address unacceptable environmental or social impacts. | Ongoing |
| 3.6.5 | Seek to develop a memorandum of understanding with local four-wheel drive clubs to advocate responsible use of the Cells Creek area and to assist with track and site maintenance. | Medium |

| Management response | | Priority |
|----------------------------------|---|----------|
| 3.6.6 | Identify the Cells Creek area (i.e. where Grassy Ridge Trail crosses Cells Creek) for low-key (minimal impact) day use and monitor its use. If visitors accessing the area during or after prolonged wet weather cause erosion or other damage, implement measures (including keyed access) in consultation with local four-wheel drive clubs. Basic facilities may be provided subject to use. | Low |
| 3.6.7 | Complete a risk assessment of derelict mines and implement any recommendations. Block access to mine sites in the interim if needed, ensuring any barriers required to address risks to human safety still permit access for bats. | High |
| 3.6.8 | Monitor commercial and non-commercial group activities, if any, with respect to cumulative impacts, safety requirements, and compliance with licence or consent conditions. Licences or consents may be cancelled if there is a breach of the conditions. | Ongoing |
| 3.6.9 | Fossicking will be permitted in The Cells State Conservation Area, subject to requirements under the NPWS fossicking policy. Fossicking is only permitted on the surface and not in old mine shafts. | Ongoing |
| Information and education | | |
| 3.7.1 | Provide additional directional signposting at Cells Creek. | Medium |
| 3.7.2 | Liaise with the relevant road authority to provide directional signage along the Oxley Highway at both intersections with Myrtle Scrub Road. | Low |
| 3.7.3 | Place orientation and interpretive signs at the Stockyard Creek Rest Area in consultation with the relevant road authority. | Medium |
| 3.7.4 | Consult with the owners of the Gingers Creek Café about the possibility of providing an information display or other access to information at the café. | Medium |
| 3.7.5 | Involve the local Aboriginal community in the development of materials and programs for interpretation of Aboriginal culture. | Medium |
| 3.7.6 | Provide information that will support educational use of the parks by schools, community groups and individuals. | Low |
| Pests | | |
| 4.1.1 | Manage pest species in accordance with relevant pest management strategies. | Ongoing |
| 4.1.2 | Ensure pest control is targeted towards animals, plants and communities most at threat. Give priority to pest animal control programs benefiting the parma wallaby. | Ongoing |
| 4.1.3 | Seek the cooperation of neighbours in implementing weed and pest control programs. Undertake control in cooperation with Local Land Services; Port Macquarie-Hastings, Mid Coast and Walcha councils; and the Forestry Corporation. | Ongoing |
| 4.1.4 | Undertake wild dog control in the parks in cooperation with neighbours, and in accordance with wild dog management plans. | Ongoing |
| 4.1.5 | Monitor the extent and spread of dieback in the parks and implement priority control measures contained in the relevant pest management strategy in relation to bell miner associated dieback. | Ongoing |
| 4.1.6 | Monitor the parks for the presence of <i>Phytophthora cinnamomi</i> . If found, implement protocols and procedures to contain the spread. This may include the closure of roads and management trails to quarantine areas affected or potentially affected by <i>P. cinnamomi</i> . | Ongoing |

| Management response | | Priority |
|----------------------------|---|-----------------|
| 4.1.7 | Monitor the parks for the presence of myrtle rust. If found, implement measures in accordance with relevant pest management strategies. | Ongoing |
| 4.1.8 | Monitor native plantations in the parks to ensure biodiversity values are being restored. | Low |
| 4.1.9 | Monitor all exotic pine plantations to detect spread into adjoining areas. Where they are assessed to be invading native forest areas, remove and rehabilitate pine plantations in accordance with relevant pest management strategies. | Medium |
| 4.1.10 | Liaise with the relevant road authority regarding the control of exotic pines in the road reserve and immediately adjacent to the parks. | Low |
| Fire | | |
| 4.2.1 | Review and implement the fire management strategy for the parks and update as required at the start of each fire season. | Ongoing |
| 4.2.2 | Continue to be involved in the New England Zone and Mid Coast District bush fire management committees, and maintain cooperative arrangements with local Rural Fire Service brigades, Forestry Corporation and surrounding landowners in regard 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 rainforest, and allow for natural succession and regeneration. | Ongoing |
| 4.2.4 | Implement fire management works in the Mount Seaview Wilderness with minimal environmental impact in accordance with the NPWS Wilderness Policy. | Ongoing |
| 4.2.5 | Encourage research into the ecological effects of fire in the parks, particularly the response of significant plant species to fire, the fire requirements of rainforest communities, and the effects of fire intensity and season on recruitment of species across a range of communities. | Medium |
| Climate change | | |
| 4.3.1 | Continue existing fire, pest and weed management programs to increase the parks' ability to cope with future disturbances, including climate change, and encourage research into appropriate indicators to monitor the effects of climate change. | Ongoing |
| 4.3.2 | Encourage research into the effects of climate change in the parks. | Medium |
| Access | | |
| 5.1.1 | Maintain the network of management trails as shown on Figure 2. | Ongoing |
| 5.1.2 | Gate and/or signpost management trails where necessary to prevent unauthorised public access. | Medium |
| 5.1.3 | Pursue reservation of ministerial roads no longer required for access to adjacent private property or state forest as additions to Cottan-Bimbang National Park or The Cells State Conservation Area. | Medium |
| 5.1.4 | Close trails no longer required for management purposes in Ralfes Creek, Sheepstation Creek and Tobins River areas and assist natural regeneration if required. | Low |
| 5.1.5 | Where a public road corridor is mainly unformed and no longer in use, seek to have the road closed and reserved as part of the parks. | Low |
| 5.1.6 | Pursue and document agreements with Forestry Corporation, private property owners and councils as relevant regarding the maintenance of joint interest roads. | Medium |

| Management response | | Priority |
|----------------------------------|--|-----------------|
| 5.1.7 | Formalise arrangements for the management of the Stockyard Creek Rest Area with Roads and Maritime Services. | Low |
| Management facilities | | |
| 5.2.1 | Implement the quarry management plan and maintain locked gates on the access to Crushshell Quarry and helipad. | High |
| 5.2.2 | In liaison with the resource regulator, register the quarries on Myrtle Scrub and Quarry roads and prepare quarry management plans. | Low |
| 5.2.3 | Complete a risk assessment of the disused quarry, and prepare and implement a safety management plan if required. Assist natural regeneration if required. | Medium |
| 5.2.4 | Encourage construction and maintenance of boundary fences to exclude stock from the parks. Fencing assistance may be provided in accordance with NPWS policy. | Medium |
| Other uses and operations | | |
| 5.3.1 | Continue to license and manage the apiary sites in the parks in accordance with NPWS policy. If any site significantly compromises the environmental values of the area or leads to user conflicts, it will be relocated in consultation with the licensee. | Ongoing |
| 5.3.2 | Ensure applications for mining or mineral exploration in the state conservation areas will be subject to environmental assessment in accordance with the memorandum of understanding between NPWS and NSW Resources and Geoscience. | Ongoing |
| 5.3.3 | In accordance with the agreement governing the management of trig stations, ensure any access or vegetation management associated with trig stations in the parks only occurs following appropriate environmental assessment. | Ongoing |
| 5.3.4 | In liaison with the relevant authority, seek reservation of the Crown reserve surrounding Ralfes Peak trig as an addition to the parks. | Medium |
| 5.3.5 | Subject to the environmental impact assessment, authorise the development and operation of a new telecommunication tower and associated infrastructure at Tobin Trig, and the maintenance of the access track off Stockyard Creek Road. No future extension to the approved footprint of the tower site will be allowed. | High |

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