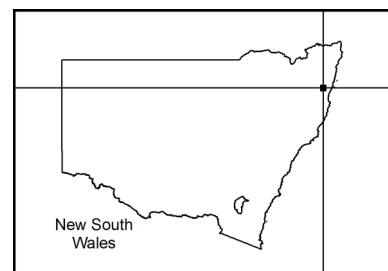




Plan of Management



Cascade National Park, Junuy Juluum National Park and Cascade State Conservation Area



**CASCADE NATIONAL PARK,
JUNUY JULUUM NATIONAL PARK
AND
CASCADE STATE CONSERVATION AREA
PLAN OF MANAGEMENT**

NSW National Parks and Wildlife Service

December 2011

This plan of management was adopted by the Minister for the Environment on 12 December 2011.

Acknowledgments

The NSW National Parks and Wildlife Service (NPWS) acknowledges that the planning area lies within the traditional lands of the Gumbaynggirr Aboriginal people.

This plan of management is based on a draft plan prepared by the staff of the North Coast Region of the NPWS, part of the Office of Environment and Heritage, Department of Premier and Cabinet.

FRONT COVER: Antarctic Beech in Junuy Juluum NP by Anton Ingarfield, NPWS.

For additional information or any inquiries about these parks or this plan of management, contact the NPWS Dorrigo Plateau Area Office at the Rainforest Centre, Dorrigo National Park (PO Box 170, Dorrigo NSW 2453) or by phone on (02) 6657 2309.

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FOREWORD

Cascade National Park, Junuy Juluum National Park and Cascade State Conservation Area are located 10 kilometres north of Dorrigo in north-east NSW. The parks have a combined area of approximately 5,000 hectares.

The parks contain moist forest ecosystems, including large areas of rainforest and an area of endangered Lowland Rainforest. They also contain one endangered and three rare plant species, and fourteen threatened animal species.

The parks also contain a range of historic sites of local significance associated with the former Dorrigo branch railway, and a network of timber tramlines associated with local timber mills which are part of a group of timber tramways considered to be of state heritage significance.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park and state conservation area. A draft plan of management for Cascade and Junuy Juluum National Parks and Cascade State Conservation Area was placed on public exhibition from 20 February until 25 May 2009. The submissions received were carefully considered before adopting this plan.

The plan contains a number of actions to achieve the State Plan 2021 goal to protect our natural environment, including research to increase knowledge of native flora and fauna distribution and conservation needs, and actions to assist the recovery of threatened species and to control introduced plants and animals. The plan also includes actions to enhance recreational opportunities, including development of a new circuit walking track in Junuy Juluum National Park and development of interpretative material and facilities in conjunction with the Cascade Environmental Education Centre.

This plan of management establishes the scheme of operations for Cascade National Park, Junuy Juluum National Park and Cascade State Conservation Area. In accordance with section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.



Robyn Parker MP
Minister for the Environment

1. THE PLANNING AREA

The area covered by this plan includes Cascade and Junuy Juluum national parks (referred to as 'the parks' in this plan) and Cascade State Conservation Area (collectively referred to as 'the planning area'). The planning area is located approximately 10 kilometres north of Dorrigo (30°20.4'S, 152°42.6'E), in north-east NSW (see Map, centre pages).

Cascade National Park is approximately 3620 hectares in size and encompasses land that was formerly part of Wild Cattle Creek State Forest. Junuy Juluum National Park is approximately 945 hectares in size and prior to gazettal was Bielsdown State Forest. The parks were formally reserved on 1 January 1999, as part of the process leading up to the North East Regional Forest Agreement. Among other things, the Regional Forest Agreement aimed to establish a comprehensive, adequate, and representative reserve system in the forests of NSW, consistent with the objectives of the National Forest Policy Statement. Cascade State Conservation Area covers 412 hectares adjacent to the western border of Cascade National Park. It was created on 1 January 2003 over land that was formerly part of Wild Cattle Creek State Forest.

The planning area lies within the traditional lands of the Gumbaynggirr Aboriginal people. The name 'Junuy Juluum' is derived from the local Gumbaynggirr language and means 'small mountain' (Morelli 2008), referring to Mount Champion which is a dominant feature of the park. Cascade National Park is named for the former small timber town near the park, which is now the location for an environmental education centre owned and managed by the NSW Department of Education and Training (DET). Cascade National Park surrounds (but does not include) the village of Briggsvale, which was also the site of a large timber mill. Briggsvale village and mill lie on land that is still part of Wild Cattle Creek State Forest.

The planning area also includes two Ministerial roads within Cascade National Park and one within Cascade State Conservation Area that are retained as Crown land but vested in the Minister administering the *National Parks and Wildlife Act 1974* (NPW Act) for the purposes of Part 11 of the Act. These roads were excluded from the gazetted park area to ensure the continuation of access arrangements that existed at the time of gazettal. One of the Ministerial roads comprises Lloyds Siding Road and part of Briggsvale Road and may be required to access a section of Wild Cattle Creek State Forest. The others are a short section of the Megan-Briggsvale Road in Cascade National Park and part of the Lower Bielsdown Road through Cascade State Conservation Area to allow these roads to continue to function as public roads. Although not part of the gazetted park, the management of these roads is subject to the provisions of this plan and the NPW Regulation.

The majority of Megan-Briggsvale Road through Cascade National Park and a short access road in the south of the park lie on Crown land subject to the *Crown Lands Act 1989* rather than a public road reserve. This road corridor was formerly dedicated as state forest but that tenure was revoked by gazette notice in 1930. Almost all of the Lower Bielsdown Road through Cascade State Conservation Area and all of Billings Road in the west of Junuy Juluum National Park lie on Council public road reserves which do not form part of the planning area. A number of other Crown road reserves occur in the eastern portion of Cascade National Park. Most are not constructed and are unlikely to be needed in the future as they only serve to access

undeveloped parts of the park. These road reserves also do not currently form part of the planning area.

The planning area is bounded by state forests and by private property, the latter predominantly being used for grazing. The route of the private Dorrigo branch railway line bisects Cascade National Park and lies adjacent to part of its northern boundary. The land on which the railway line is situated is owned by the Dorrigo Steam Railway and Museum Ltd.

The planning area lies within a large vegetated corridor linking the Dorrigo Plateau to the coast. This corridor plays a significant role in improving the conservation values of the landscape as a whole, providing a range of climatic settings and vegetation communities, which in turn provide habitat and movement routes for a diversity of native fauna (Scotts 2003). Other parks in the vicinity include Dorrigo National Park to the south (part of the Gondwana Rainforests World Heritage property), Nymboi-Binderay National Park and State Conservation Area to the north-west and Bindarri National Park to the east of the planning area (see Map).

The planning area is within the areas of the Dorrigo Plateau and Coffs Harbour local Aboriginal land councils, Bellingen Shire, the Northern Rivers Catchment Management Authority and the North Coast Livestock Health and Pest Authority.

2. MANAGEMENT CONTEXT

2.1 Legislative and Policy Framework

The management of national parks and state conservation areas in NSW is in the context of a legislative and policy framework, primarily the NPW Act, the NPW Regulation, the *Threatened Species Conservation Act 1995* (TSC Act) and the policies of the National Parks and Wildlife Service (NPWS). These policies arise from the legislative background and internationally accepted principles of park management, and relate to nature conservation, Aboriginal and historic heritage conservation, recreation, commercial use, research and communication.

Other legislation, international agreements and charters may also apply to management of the area. In particular, the *Environmental Planning and Assessment Act 1979* (EPA Act) may require the assessment and mitigation of environmental impacts of works proposed in this plan. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) also applies in relation to actions that may impact on threatened species listed under that Act, or other matters of national environmental significance.

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

2.2 Management Principles and Directions

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

- conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and maintain natural landscapes;
- conserve places, objects, features and landscapes of cultural value;
- protect the ecological integrity of one or more ecosystems for present and future generations;
- promote public appreciation and understanding of the parks' 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 reuse) of any buildings or structures or modified natural areas having regard to conservation of natural and cultural values; and
- provide for appropriate research and monitoring.

State conservation areas are reserved under the NPW Act to protect and conserve areas: that contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance; that are capable of providing opportunities for sustainable visitor or tourist use and enjoyment, the sustainable use of buildings and structures or research; and that are capable of providing opportunities for uses permitted under other provisions of the Act. Under the Act, 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 NPW 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 reuse) 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; and
- provide for appropriate research and monitoring.

Section 47M of the NPW Act requires a review of the classification of state conservation areas every five years, in consultation with the Minister administering the *Mining Act 1992*. In the long term, subject to the outcome of future five year reviews, it is intended that Cascade State Conservation Area will be added to Cascade National Park.

2.3 Specific Management Directions

In addition to the principles in Section 2.2, the management of the Cascade and Junuy Juluum national parks, as well as Cascade State Conservation Area, will be subject to the following specific directions:

- protection of the physical, biological, heritage and scenic features of the planning area, as part of the system of reserves on the eastern escarpment of the Great Dividing Range in north-east NSW;
- protection of plants of high conservation value, in particular Dorrigo laurel (*Cryptocarya dorrigoensis*), Dorrigo waratah (*Alloxylon pinnatum*), Pink cherry (*Austrobuxus swainii*) and Dorrigo daisy bush (*Olearia flocktoniae*);
- protection of the suite of rare and threatened animals of high conservation value known to occur in the planning area; and
- provision of low-level recreation opportunities, limited to natural surface walking tracks, to complement the larger range of recreational facilities and opportunities provided in the nearby Nymboi-Binderay National Park.

3. NATURAL AND CULTURAL HERITAGE VALUES

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

3.1 Landform, Geology, Soils and Hydrology

The planning area is characterised by rolling to steep hills with narrow crests. Cascade National Park and Cascade State Conservation Area are situated on the eastern Dorrigo Plateau at an elevation of between 500 to 850 metres above sea level. Junuy Juluum National Park is centrally dominated by Mount Campion at 949 metres.

The geology is from the late Carboniferous period (approximately 300 million years ago). Cascade National Park is dominated by metasediments of the Brooklana Bed, which comprises thinly bedded siliceous mudstone and siltstone, with minor occurrences of wacke, chert, jasper and metabasalt. In contrast, Junuy Juluum National Park is dominated by the Moombil Siltstone, which comprises black massive siltstone, rare lithofeldspathic wacke and granule conglomerate. The physical characteristics of the bedrocks can change over short distances but are typically moderate to highly fractured and deformed. The surface rocks are shallow (in general less than one metre in depth) and typically ferruginated and kaolinised.

Cascade State Conservation Area is prospective for copper, gold and base metals. The Paddys Plain copper-gold-antimony prospect is located on the western margin of the area and a major mineralised corridor transecting the area hosts numerous known deposits outside the conservation area. Of particular note is the Wild Cattle Creek antimony deposit just to the north of Cascade State Conservation Area which is considered to be the largest individual antimony occurrence in Australia (Gilligan *et al.* 1992) and is the subject of an Exploration Licence which includes most of Cascade State Conservation Area.

The overlying soils are moderately deep to deep, well drained, stony yellow earths on crests and red earths on mid and foot slopes. The soils are strongly acidic, of low fertility with high to very high subsoil erodibility.

The eastern and northern parts of Cascade National Park are drained by a number of creeks, including Morora, Mobong, Cascade and Downfall creeks, into the Bobo River which forms part of the park's eastern boundary. The state conservation area and the western part of the park drain into Wild Cattle Creek. Junuy Juluum National Park is bounded to the south by Mathews Creek, which drains into the Bielsdown River, as does Pine Creek in the north-western corner of the park. A small part of the park drains into Wild Cattle Creek via Tin Pot Creek. The Bobo River, Wild Cattle Creek and the Bielsdown River eventually drain into the Nymboida River, part of the Clarence River catchment. The Nymboida River is the source for the Clarence and Coffs Harbour Regional water scheme.

The planning area experiences high rainfall of between 1600 to 2000 millimetres per annum, which can occur in highly erosive rain events, often associated with East Coast Lows.

3.2 Native Plants

The planning area is characterised by moist forest ecosystems, with Junuy Juluum National Park and the western part of Cascade National Park being predominantly rainforest. Rainforest in the planning area is typically a mixture of warm temperate rainforest and subtropical rainforest forms, and dominated by coachwood (*Ceratopetalum apetalum*), crabapple (*Schizomeria ovata*) and booyong (*Heritiera actinophylla*), with smaller areas supporting hoop pine (*Araucaria cunninghamii*), Antarctic beech (*Nothofagus moorei*) and combinations of subtropical dominants. Those rainforest stands below 600 metres in altitude are considered to be part of the Lowland Rainforest Endangered Ecological Community.

Areas of tall wet sclerophyll forest occur in the planning area, including associations dominated by brushbox (*Lophostemon confertus*), tallowwood (*Eucalyptus microcorys*) and Sydney blue gum (*E. saligna*). These often have a rainforest understorey. Cascade National Park also contains small areas of tall open forest dominated by ferny blackbutt (*E. campanulata*) with a grassy understorey.

Plantations of native indigenous hardwoods were established in the eastern part of Cascade National Park, in the vicinity of Briggsvale Road and the Bobo River, when it was still state forest. These now support a complex understorey and are largely indistinguishable from surrounding native forest. An area of former pasture on the south-western edge of Junuy Juluum National Park is being revegetated and requires ongoing control of introduced grasses.

Five rare or threatened Australian plant species (Briggs & Leigh 1996) are known to occur in or adjacent to the planning area, with one of these also listed as endangered under the TSC Act. Dorrigo laurel (*Cryptocarya dorrigoensis*) is found in parts of the parks, especially in the blue gum forest. It is a small tree restricted to the eastern Dorrigo area and is considered rare. Dorrigo waratah (*Alloxylon pinnatum*) is another rare plant that occurs scattered through the forest. It is a small to medium-sized rainforest tree that occurs in the Dorrigo area, in the coastal foothills between the Bellinger Valley and Woolgoolga, and as a disjunct population on the McPherson Range along the border of New South Wales and Queensland. The rare pink cherry (*Austrobuxus swainii*) can be a large tree in mature rainforest, but is also common as a small tree in the understorey of eucalypt forest on parts of the Dorrigo Plateau. Apart from the Dorrigo area, it also occurs in the far north-east of NSW and far southern Queensland.

Dorrigo daisy bush (*Olearia flocktoniae*) is a small to medium shrub growing up to 2.5 metres high. The species is a pioneer species, which favours disturbed locations such as roadsides where it is found throughout Cascade National Park. It is listed under both the TSC Act and EPBC Act as endangered. A draft recovery plan for this species has been prepared (DEC 2004) which provides direction for monitoring and protecting road-side populations.

Large-flowered milkvine (*Marsdenia liisae*) has been recorded on private land situated between the two parks and is highly likely to occur within the planning area. Considered rare, it occurs in small populations scattered between the Hastings River and the Nightcap Range.

3.3 Native Animals

The vegetation communities in the planning area provide a range of habitats for a diverse assemblage of native animals. Fauna surveys were first carried out in the area in 1948-49 (OVHS 2007) and some systematic surveys have been conducted in the western half of Cascade National Park and adjacent to Junuy Juluum National Park (Cox 2003).

Based on survey effort and opportunistic sightings, 14 threatened species (listed in Table 1) are known to occur in the planning area. A diverse and healthy forest structure is required for the continued survival of these species. The threatened bird species recorded in the planning area are dependent on rainforest, or wet sclerophyll forest with a rainforest understorey, for roosting, nesting and feeding. The threatened bat species present in the planning area require hollows in trees as primary roosting habitat. The planning area is particularly important for the conservation of upland forest frog species. Little is known about the habitat requirements of these species other than their preference for higher altitude rainforest streams and bogs, and surrounding foraging habitat in leaf litter. The value of the planning area as habitat for these threatened species is enhanced by the connection between the parks provided by wildlife corridors across intervening private land (Cox 2003), some of which is protected by voluntary conservation agreements.

The Priorities Action Statement prepared under the TSC Act identifies recovery actions and priorities for threatened species within NSW. In addition, a recovery plan has been approved for the yellow-bellied glider (NPWS 2003), and a recovery plan has been prepared for the koala (DECC 2008a). The Priorities Action Statement and recovery plans will be used to guide management of threatened species in the planning area.

The NPWS recognises pure-bred dingoes (*Canis lupus dingo*) as a native high order predator. The NPWS also recognises the value of viable dingo populations in enhancing ecological function, regulating other abundant species (such as eastern grey kangaroos (*Macropus giganteus*)) and displacing foxes (*Vulpes vulpes*). The parks are considered to contain high quality dingo habitat and have been listed under Schedule 2 of the Wild Dog Control Order made under the *Rural Lands Protection Act 1998* (RLP Act). In areas listed under the Schedule, conservation of dingoes may occur, although wild dogs must also be controlled (see Section 4.1).

Table 1 Threatened animals known from the planning area

Common name	Scientific name	Status under the TSC Act
<u>Amphibians</u> sphagnum frog stuttering frog giant barred frog pouched frog	<i>Philoria sphagnicolus</i> <i>Mixophyes balbus</i> <i>Mixophyes iteratus</i> <i>Assa darlingtoni</i>	Vulnerable Endangered # Endangered # Vulnerable
<u>Birds</u> sooty owl powerful owl wompoo fruit-dove	<i>Tyto tenebricosa</i> <i>Ninox strenua</i> <i>Ptilinopus magnificus</i>	Vulnerable Vulnerable Vulnerable
<u>Mammals</u> eastern pygmy-possum spotted-tailed quoll koala yellow-bellied glider red-legged pademelon eastern false pipistrelle greater broad-nosed bat	<i>Cercartetus nanus</i> <i>Dasyurus maculatus</i> <i>Phascolarctos cinereus</i> <i>Petaurus australis</i> <i>Thylogale stigmatica</i> <i>Falsistrellus tasmaniensis</i> <i>Scoteanax rueppellii</i>	Vulnerable Vulnerable # Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable

Also listed as threatened under the Commonwealth EPBC Act

3.4 Aboriginal Heritage

Known occupation of the region dates back to approximately 6500 years before present, as evidenced by stone tools and meal bone remnants excavated from a rock shelter on the southern bank of the Clarence River west of Grafton (McBryde 1966).

The planning area is part of the 'jagun' or territory of the Gambalamam clans of the Gumbaynggirr. The area was occupied seasonally by small, highly mobile hunting groups traversing up the Orara and Nymboida valleys from the floodplain of the Clarence River (Belshaw 1978). These groups would burn the grasslands and drier forests to facilitate travel and improve successful hunting of larger game such as wallabies and kangaroos. The forests of the area would have been used more seasonally to gather a range of resources such as rainforest fruits.

Aboriginal communities have an association and connection to the land and water. The land and water biodiversity values within a whole landscape context are central to Aboriginal spirituality and contribute to Aboriginal people's identity. Aboriginal communities associate natural areas with the use and enjoyment of valued foods and medicines, caring for the land, passing on cultural knowledge and strengthening social bonds. Aboriginal heritage and nature are inseparable from each other and need to be managed in an integrated manner across the landscape.

3.5 Historic Heritage

The non-Aboriginal heritage of the region can be roughly divided into three phases: the contact period from the early 1830s until the mid-1840s; the pioneer settlement and timber industry until the 1970s; and the environmental conservation movement from the late 1980s until the late 1990s.

Contact Period

From around 1832 until 1836, an escaped convict from the Moreton Bay penal settlement named Richard Craig is believed to have lived with the Gumbaynggirr of the Clarence River. He is thought to have made seasonal hunting trips with the group to the Dorrigo Plateau, which may have included the planning area.

Pioneer Settlement and Timber Industry Period

In 1893 the Dorrigo Mountain Road was opened and in 1905 the Crown Lands Bill was introduced to allow the 'opening up' of the Dorrigo Scrub for dairying and cropping. The Cascade area was subdivided into 35 blocks averaging 200 acres, primarily for dairying and small crop farming. Billings Road on the western boundary of Junuy Juluum National Park was at this time used to transport dairy produce between the farms and Dorrigo.

In 1906 the first red cedar (*Toona ciliata*) was logged in the areas of the present Cascade and Junuy Juluum national parks. In 1915 the logging of hoop pine began at Mount Campion. The surrounding forest was dedicated as Bielsdown State Forest in 1917. This is now part of Junuy Juluum National Park. The original part of Wild Cattle Creek State Forest was also dedicated in 1917. As the timber industry grew, all but one of the settler blocks around Cascade were resumed and dedicated as part of Wild Cattle Creek State Forest in the 1920s and 1930s.

To service the growing timber industry of the Dorrigo Plateau, construction of a railway branch line linking Dorrigo to the main North Coast Railway at Glenreagh commenced in 1914. Following interruptions, it was completed in 1924 (Paull 1988). This line passes through or along the boundary of both parks, with sidings at Briggsvale, Cascade and on the western side of the Bobo River (Brooklana Siding). A siding also originally existed on the eastern side of Morora Creek, initially known as Mulhearns Siding but then renamed as Lloyds Siding. Scheduled train services operated on the line until November 1972, although the line was temporarily reopened in the late 1980s following substantial repairs by army personnel and volunteers. The line was formally closed by the *Glenreagh to Dorrigo Railway (Closure) Act 1993* and ownership was then transferred to the Dorrigo Steam Railway and Museum Ltd.

By 1925, all available timber from the Mount Campion area had been taken and logging moved further north around Briggsvale and Cascade. A network of timber tramlines was constructed from the mills at these locations into the surrounding forest to assist in the extraction of timber. The remnants of these tramlines are visible within Cascade National Park, and neighbouring Wild Cattle Creek State Forest and Nymboi-Binderay National Park, although later logging and forestry operations destroyed most evidence of the lines close to the mills. The entire route of the tramways within and in the vicinity of the planning area has been mapped and recorded. The sections of tramway in Cascade and Nymboi-Binderay national parks are considered to be locally significant and representative examples of the timber tramways that operated in the Dorrigo Plateau in the period before World War II (Banksia Heritage + Archaeology 2005). It is also considered that the collection of the four historic logging tramways present in Cascade, Nymboi-Binderay and Dorrigo national parks is of state heritage significance as they form an early record of industrial endeavour within regional New South Wales (OHM Consultants 2006).

The introduction of the first caterpillar tractor in the area, by the Mulhearns in the early 1930s, allowed logging operations to move away from the tramline routes. Foresters turned their attention to the more abundant rainforest timbers, including

coachwood, and to hardwoods (such as tallowwood, blue gum and blackbutt). In 1943, the timber resources of the immediate area supported three mills at Cascade village, two at Briggsvale, one at Lloyds Siding and one at Brooklana Siding. Part of the Lloyds Siding village, which supported its own school between 1946 and 1960 (OVHS 2007), may lie in what is now Cascade National Park. In the village of Cascade, school buildings were constructed in 1937 although primary school lessons for local children had been held in the Cascade village hall since 1926. Enrolments peaked through the 1940s and 1950s, then declined until the school was closed in 1976 (Bridger 1997).

Timber extraction was significantly increased in the surrounding forests following the introduction of chainsaws in the early 1950s. Forest compartments were re-logged for the first time during this period and, to support the flagging timber resources, the first plantations of native and introduced pines were established near Cascade village with mixed success. By the mid 1980s, there were only a few mills sourcing timber from the planning area.

Environmental Conservation Period

The former Cascade Public School was considered as a possible Field Studies Centre by Dorrigo school teachers in the late 1970s (Bridger 1997). A series of walking tracks was established around Cascade village and into the surrounding state forest for the purposes of environmental education. In 1989, Cascade Field Studies Centre was formally established. Later renamed Cascade Environmental Education Centre, the facility continues to utilise the walking tracks now incorporated into Cascade National Park, in providing environmental education to visiting school groups.

Conservation proposals for the planning area were initiated by the Clarence Environment Centre and the North East Forest Alliance (NEFA) in the early 1990s. In 1991, Gilmour and Helman (1991) recommended that Bielsdown State Forest be protected as a flora reserve due to its rainforest and scenic values. In Wild Cattle Creek State Forest in 1994, NEFA attempted blockade action to protect old growth forest in the Downfall Creek area. While this action was not successful in preventing logging in the area in the short-term, NEFA's mapping of the extent of old growth forest within Wild Cattle Creek State Forest (NEFA 1994) was an important exercise which informed the forest assessment process and which, in turn, led to the gazettal of Junuy Juluum and Cascade national parks in 1999.

3.6 Recreation and Education

The parks are primarily accessed via Coramba Road, which heads north from the township of Dorrigo. This is a sealed road past Junuy Juluum National Park as far as Megan, after which it is unsealed and is known as the Megan-Briggsvale Road, continuing through Briggsvale to Cascade, where it ends at the intersection of Moses Rock Road and Morora Road. Junuy Juluum National Park and Cascade State Conservation Area are accessed from the Lower Bielsdown Road (see Map).

Public vehicle access within Cascade National Park is available along the Megan-Briggsvale Road and also Briggsvale Road. Public vehicle access within Junuy Juluum National Park is limited to the council-administered Billings Road in the south-west of the park, although most vehicles stop at the extent of council maintenance, on the southern bank of the Bielsdown River.

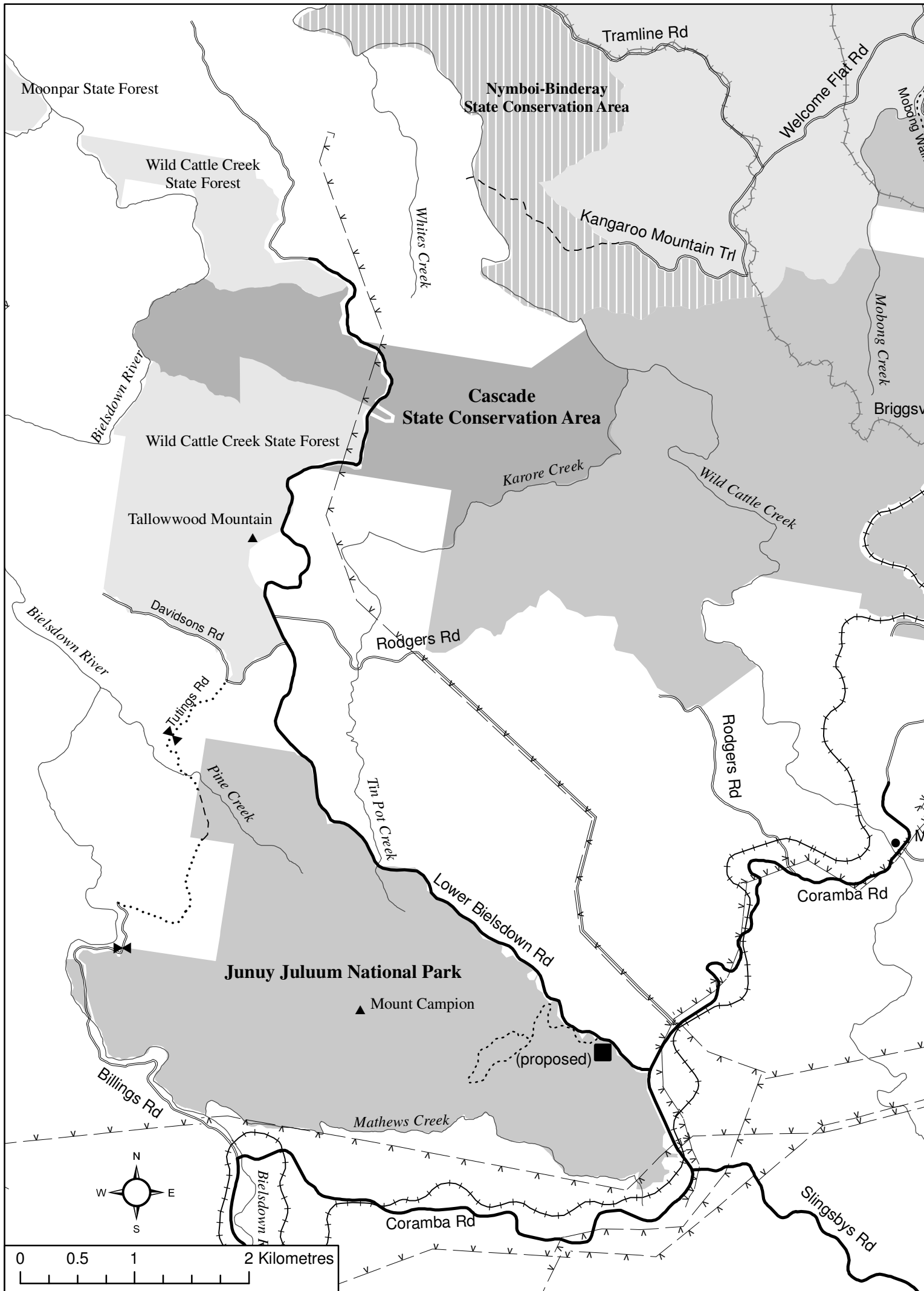
The Dorrigo branch railway line lies adjacent to both parks. The historical value of the line, its bridges and sidings (see Section 3.5) attracts some visitors to Cascade National Park. The Dorrigo Steam Railway and Museum owns the land on which the line is located in the vicinity of the planning area, and has plans to operate a tourist railway on portions of their line at some time in the future.

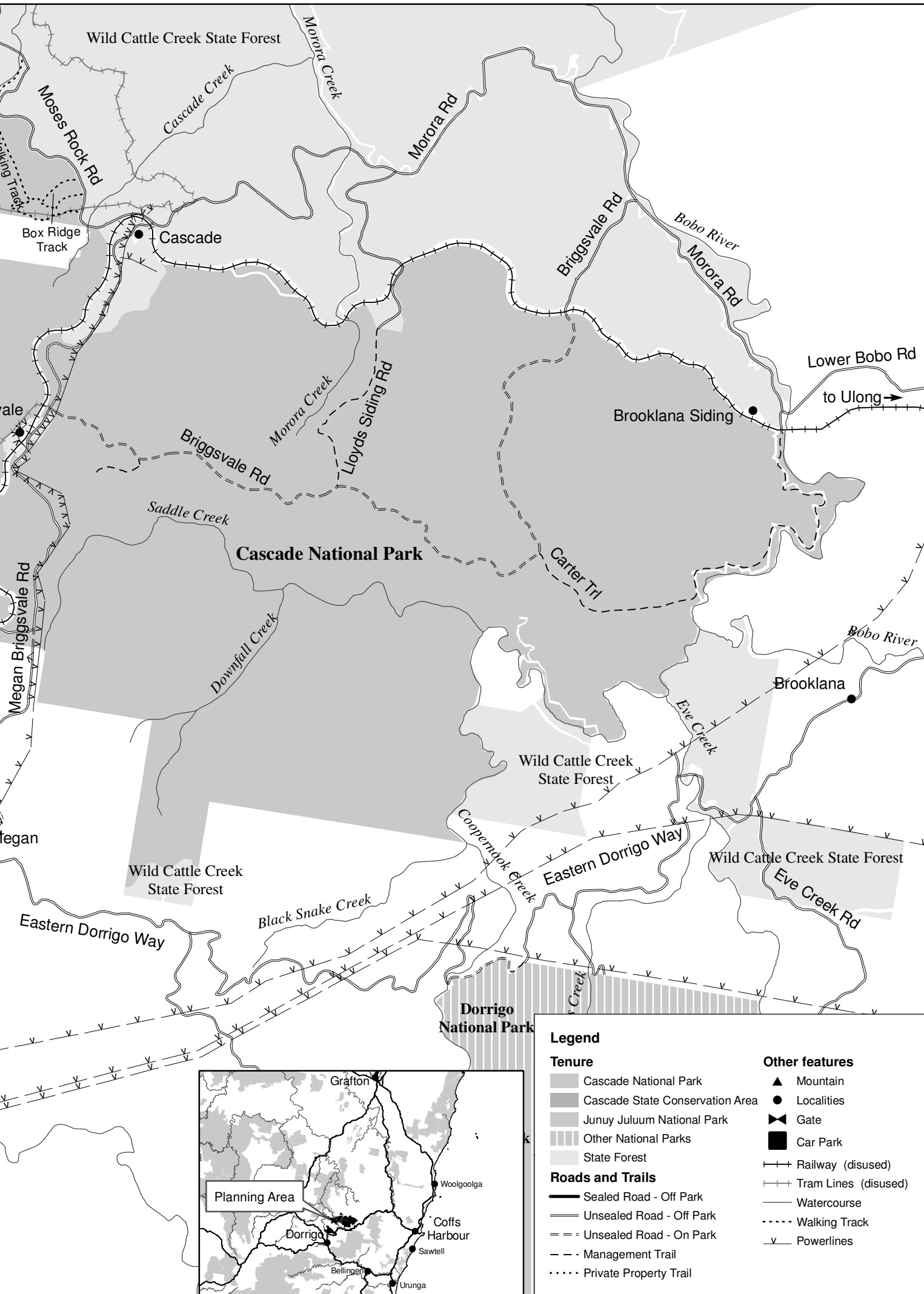
There are currently limited recreation opportunities within the planning area. The only visitor facilities are the Box Ridge and Mobong walking tracks in the north of Cascade National Park. These are natural-surface walking tracks which pass through small areas of regenerating rainforest adjacent to Cascade village (see Map). The Mobong Track features remnants of the Earp, Woodcock, Beveridge & Co Ltd timber tramline, while the Box Ridge Track features an impressively large brush box tree. The southern section of Mobong Track and the Box Ridge Track are signposted and form a short circuit walking track.

It is proposed that a visitor precinct plan be developed for Cascade, including the northern part of Cascade National Park, in conjunction with Forests NSW and Cascade Environmental Education Centre. This plan may include formalisation of a small car-park off Moses Rock Road opposite the southern end of Mobong Track (off park) and a dry composting toilet on park in this vicinity. New interpretive material for these tracks is needed and this should be prepared in conjunction with the Cascade Environmental Education Centre.

It is also proposed to develop a circuit walking track within Junuy Juluum National Park from the Lower Bielsdown Road along a tributary of Mathews Creek and through an old growth Antarctic beech forest. The proposal would involve the development of a small carpark adjacent to the track head.

Minimal horse riding, generally by neighbours, has occurred in the planning area in the past. The slopes and erodible soils of the planning area (refer to Section 3.1) are generally inappropriate for horse riding. Horse riding will however be allowed on the Megan-Briggsvale Road and the Lower Bielsdown Road so that access remains to horse riding opportunities in surrounding state forest.





Wild Cattle Creek State Forest

Cascade Creek

Morora Creek

Moses Rock Rd

Morora Rd

Box Ridge Track

Cascade

Briggsvale Rd

Bobo River

Lower Bobo Rd
to Ulong

Brooklana Siding

Briggsvale Rd

Morora Creek

Lloyds Siding Rd

Cascade National Park

Saddle Creek

Carter Trl

Bobo River

Brooklana

Downfall Creek

Eve Creek

Wild Cattle Creek State Forest

Wild Cattle Creek State Forest

Wild Cattle Creek State Forest

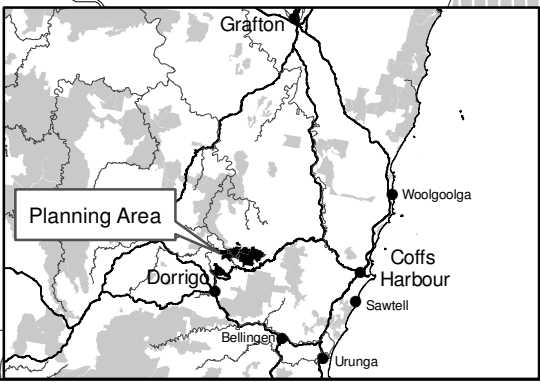
Eve Creek Rd

Eastern Dorrigo Way

Black Snake Creek

Coopermak Creek

Dorrigo National Park



Planning Area

Grafton

Woolgoolga

Coffs Harbour

Sawtell

Bellinger

Urunga

4. THREATS TO THE PLANNING AREA'S VALUES

4.1 Introduced Species

NPWS pest plant and animal control activity within the parks is conducted in accordance with the North Coast Region's Pest Management Strategy (DECC 2008). This strategy has been developed for the region as a whole and identifies pest populations, priorities for control and suggested control methods. A weed survey for the parks was carried out soon after their creation and the results incorporated into a draft pest management plan for the parks (NPWS 2000), which was used in developing the regional strategy.

Weeds within the planning area are concentrated along roadsides and in disturbed areas such as along the old railway line and the Bielsdown River. Noxious weeds present include groundsel bush (*Baccharis halimifolia*), giant Parramatta grass (*Sporobolus fertilis*), lantana (*Lantana camara*), blackberry (*Rubus fruticosus* agg. spp.), small-leaf privet (*Ligustrum sinense*) and camphor laurel (*Cinnamomum camphora*). Japanese honeysuckle (*Lonicera japonica*) is also a weed in Junuy Juluum National Park. Other environmental weeds of concern also include wilding pines that have spread from former neighbouring plantation areas.

The root-rot pathogen, *Phytophthora cinnamomi*, has recently been confirmed as occurring in Junuy Juluum National Park and is suspected to have caused some dieback of coachwood along a former logging track. The pathogen spreads through the movement of spores through water or by machinery or animals, including people, and is known to occur on private property and in other parks within the local region. At present there is no one simple method for controlling phytophthora. Hygiene protocols to reduce the spread of phytophthora are one of the few practical control measures available (DECC 2008b).

A number of feral animals have been recorded within the planning area and on surrounding lands, including wild dogs (*Canis lupus familiaris*), cats (*Felis catus*) and the European red fox (*Vulpes vulpes*). The population of cats within Cascade National Park is considered established and widespread (DECC 2008b). Predation by feral cats and predation by foxes have been listed as Key Threatening Processes under the TSC Act. A threat abatement plan is being implemented for the fox (NPWS 2001) however the planning area does not include any of the priority sites for fox control.

Wild dogs, including dingoes, have been declared as pest animals under the *Rural Lands Protection Act 1998* (RLP Act) throughout NSW. Hence, the NPWS has a statutory obligation to control wild dogs on its estate. Under the RLP Act, however, some public lands (including Cascade and Junuy Juluum national parks) have been identified as potential areas for conserving dingoes (refer to Section 3.3). The RLP Act requires the preparation of a wild dog management plan for these areas listed under Schedule 2 of the Wild Dog Control Order. These plans are to identify methods for the control of wild dogs and the conservation of dingoes, and are to be prepared in consultation with the North Coast Livestock Health and Pest Authority (LHPA)

Poor boundary fencing adjacent to parts of Cascade National Park allows occasional access by straying domestic cattle.

4.2 Inappropriate Fire Regimes

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

The fire history of the planning area is not well known. The substantial areas of fire-sensitive rainforest within the parks suggest that these areas have not been subject to regular or intense fires. However, fire still can pose a threat to the planning area and surrounding assets, particularly from logged wet sclerophyll forest. In 1994, for example, a wildfire in Wild Cattle Creek State Forest threatened the village of Cascade.

The primary fire management objectives of the NPWS are to protect life, property and community assets from the adverse impacts of fire, whilst managing fire regimes to maintain and protect biodiversity and cultural heritage (NPWS 2007).

The NPWS approach to fire management planning is based on the level of complexity and risk. Due to the complexity of fire management in the planning area, a separate Fire Management Strategy has been prepared. This provides for a low frequency strategic pattern of burning in non-rainforest vegetation, incorporating ecological burning principles. Management will also aim to maintain biodiversity by restricting fires to only part of the distribution of a vegetation community at any one time, by ensuring that fire thresholds are not exceeded, and by excluding fire from some communities such as rainforest. Strategic control zones have been identified to protect property and assets. A number of trails within and surrounding the reserves provide access for fire suppression activities and strategic fire advantages (refer to Section 5.1). Annual hazard reduction programs, which may include mechanical fuel reduction techniques, prescribed burning and fire trail works, are submitted to the Mid North Coast Bush Fire Management Committee (BFMC).

NPWS maintains cooperative arrangements with surrounding landholders and the Rural Fire Service (RFS) brigades and is actively involved with the Mid North Coast BFMC. Cooperative arrangements include fire planning, fuel management and information sharing.

4.3 Climate Change

Anthropogenic climate change has been listed as a key threatening process under the TSC Act. Projections of future changes in climate for NSW include more intense but possibly reduced annual average rainfall, increased temperature extremes and higher evaporation. These changes are likely to lead to greater intensity, duration and frequency of fires, more severe droughts and increased regional flooding.

Climate change is likely to significantly affect biodiversity by changing population size and distribution of species, modifying species composition, and altering the geographical extent of habitats and ecosystems. Species most at risk are those unable to migrate or adapt, particularly those with small population sizes or with slow growth rates. The specific impacts of climate change on the planning area are difficult to assess since they will depend on the compounding effects of other pressures, particularly barriers to migration and pressure from weeds and feral animals.

Programs to reduce pressures arising from such threats will help reduce the severity of the effects of climate change.

A particular concern for the planning area is the likely increase in heavy rain events and cyclonic winds associated with East Coast Lows, and the resulting negative impacts upon water quality in the creeks and streams in the planning area. Programs to reduce erosion will reduce these impacts.

5. MANAGEMENT OPERATIONS AND OTHER USES

5.1 Access

In addition to the public access park roads (described in Section 3.6), the planning area contains three management trails: Carter Trail and Lloyds Siding Road in Cascade National Park; and a short unnamed trail in the north-western corner of Junuy Juluum National Park which is accessed across private property (see Map). These, together with surrounding public roads and forestry trails, provide access for park management operations such as fire and pest control. Lloyds Siding Road may also provide access for forestry operations (refer Section 1). There are no management trails in Cascade State Conservation Area.

The Megan-Briggsvale Road bisects Cascade National Park. It lies on Crown land most of which is vested in the Crown Lands Division of the Department of Primary Industries (DPI Crown Lands), apart from a short section of less than 200 metres which is vested in the Minister administering the NPW Act. A memorandum of understanding between NPWS and Forests NSW governs the current arrangements for shared maintenance of this road. The short section of the Lower Bielsdown Road through Cascade State Conservation Area, where it deviates from the road reserve, has been retained as Crown land which is currently vested in the Minister administering the NPW Act. This section of road is maintained by Bellingen Shire Council.

Most of the former forestry trails within the park will be closed. Many terminated at former logging dumps and it has been determined that they serve no management purpose. Unrestricted access along many of these trails has previously resulted in activities such as rubbish dumping and illegal firewood collection. Linear clearings such as these trails also are noted as potential impacts on some threatened species.

5.2 Trigonometrical Station

Mount Champion Trigonometrical Station is located within the central area of Junuy Juluum National Park (see Map). An agreement between NPWS and the former Central Mapping Authority (now part of the Department of Finance and Services) provides continued right of access to the station for survey purposes, subject to environmental impact assessment. The old track from Lower Bielsdown Road to the trigonometrical station, that originally provided access for its maintenance, has not been used for 20-30 years and is largely overgrown.

5.3 Powerlines

Three powerlines traverse parts of the planning area (see Map). Power suppliers periodically maintain the lines and also use herbicides and mechanical pruning or slashing to reduce the amount of vegetative cover underneath the powerlines.

The line through Junuy Juluum National Park is maintained by TransGrid and occurs within the corridor of a formal easement. The procedure for access to, and maintenance of, this powerline is detailed within an agreement between the NPWS and TransGrid (2002).

Essential Energy maintains the powerlines through Cascade National Park and the State Conservation Area. No easement or licence is in place for these lines and there is no formal agreement in place with Essential Energy covering the maintenance of the lines and their clearings. The powerlines could be regularised by way of an easement granted under section 153(1) of the NPW Act. Essential Energy however has the right to maintain its powerline clearing and carry out other maintenance works under the terms of the *Electricity Supply Act 1995*, subject to compliance with the NPW Act and Regulations.

5.4 Mineral Exploration and Quarries

As discussed in Section 2.2, the tenure of state conservation area allows for certain activities permitted under Section 47J of the NPW Act such as mining and mineral exploration. There is currently one mineral exploration licence which includes the state conservation area. Exploration licences and assessment leases may continue to be granted within state conservation areas without the concurrence of the Minister administering the NPW Act. However, the Minister's approval must be obtained before any rights under that lease or licence can be exercised. Likewise, the concurrence of the Minister must be obtained before any mining lease is issued. In the case of exploration licences and other prospecting titles, an access agreement under the *Mining Act 1992* will also be required between the titleholder and the NPWS in order for the titleholder to conduct prospecting operations within a state conservation area.

The Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS Minerals) is the lead authority for mining, mineral exploration and mine site rehabilitation. DTIRIS Minerals is required under the EPA Act to undertake environmental assessments for mining and exploration activities in all state conservation areas. The existing Memorandum of Understanding (MOU) between NPWS and DTIRIS Minerals describes the management and consultative arrangements associated with exploration and mining in state conservation areas.

A quarry, unused for many years, is located off the western side of the Megan-Briggsvale Road at the southern end of Cascade National Park. It does not pose a risk to either the environment or the community and is not required for management purposes. There are also two former quarries outside the southern boundary of Junuy Juluum National Park.

6. MANAGEMENT ISSUES AND STRATEGIES

Issue	Desired Outcomes	Strategies	Priority
<p>6.1 Soils, Landforms and Hydrology</p> <p>Although there are currently minimal soil erosion or water quality issues, moderate to very steep slopes and highly erodible soils occur throughout most of the planning area. The planning area experiences high rainfall and frequent highly erosive rainfall events.</p> <p>Potential erosion hazards include sheet, gully, water and stream bank erosion as well as mass movement.</p> <p>A disused quarry is located on the southern boundary of Cascade National Park. It is not required for management purposes.</p>	<ul style="list-style-type: none"> There is no evidence of accelerated soil erosion as a result of park management activities, vehicle access and visitor use. There is no reduction in the quality of water and health of watercourses in the planning area. The disused quarry is revegetated to minimise soil disturbance and land degradation. 	<p>6.1.1 Undertake all works, such as trail maintenance and hazard reduction, in manner that minimises soil erosion and water pollution.</p> <p>6.1.2 Upgrade and maintain trails required for management and visitor access to provide appropriate safe and environmentally sustainable access (refer to sections 6.4 and 6.6).</p> <p>6.1.3 Monitor the natural revegetation of the quarry. If required, undertake active works to encourage regeneration processes.</p>	<p>Ongoing</p> <p>High</p> <p>Medium</p>
<p>6.2 Native Plant and Animal Conservation</p> <p>A large number of threatened fauna species is known to occur within the planning area. Only one threatened plant species is recorded, although a number of other regionally significant plant species do occur. Recovery actions contained within the Priorities Action Statement of most relevance to the planning area are targeted surveys for threatened species.</p> <p>Old growth forests and rainforests in the planning area have high conservation</p>	<ul style="list-style-type: none"> There is no loss of native plant and animal species found in the planning area, particularly significant species, or reduction in habitat diversity. There is an increased understanding and knowledge of the ecological needs and 	<p>6.2.1 Undertake or encourage research within the planning area that increases knowledge of native flora and fauna distribution and conservation needs, in particular targeted surveys for threatened species.</p> <p>6.2.2 Implement other relevant recovery actions listed in the Priorities Action Statement and recovery plans.</p> <p>6.2.3 Continue to monitor the regeneration of former pasture areas within the planning area and, if necessary, carry out additional supplementary plantings.</p>	<p>Medium</p> <p>Medium</p> <p>Ongoing</p>

Issue	Desired Outcomes	Strategies	Priority
<p>value and are sensitive to fire (refer to section 6.6). Former hardwood plantations within Cascade National Park do not require any active intervention to return them to a natural condition.</p> <p>Vegetated areas on public and private land surrounding the planning area are important in providing connectivity between vegetation communities and habitats. An area of former pasture in Junuy Juluum National Park, next to the Bielsdown River, is being revegetated.</p>	<p>characteristics of flora and fauna in the planning area.</p> <ul style="list-style-type: none"> • Areas of previous disturbance are returned to a natural condition. • Sympathetic management of adjacent land enhances conservation values of the planning area. 	<p>6.2.4 Work with relevant agencies, neighbours, Landcare groups and others in the local community to create an awareness of significant plant and animal species. Support the protection of high conservation value vegetation adjacent to the park through Voluntary Conservation Agreements (VCAs) or other appropriate strategies.</p>	<p>Ongoing</p>
<p>6.3 Cultural Heritage</p> <p>Heritage sites known to occur in the parks include villages, mills and sidings along the Dorrigo branch railway and a network of timber tramlines radiating from the Cascade and Briggsdale mills.</p> <p>Heritage assessments and mapping of the tramways in Cascade National Park have been undertaken. The tramways are of local significance and are part of a group of timber tramways on the Dorrigo Plateau considered to be of state heritage significance (OHM Consultants 2006). The heritage assessments recommended that the timber tramways within the park are managed as a ruin. It is recognised however that little can be done to preserve the physical remains of the sections of the tramways in the park, and that better opportunities for their interpretation occur in Nymboi-Binderay</p>	<ul style="list-style-type: none"> • Cultural heritage features and values are identified, conserved and managed in accordance with their significance. • Aboriginal heritage values are protected in partnership with the local Aboriginal community. 	<p>6.3.1 Work with appropriate members of the local Aboriginal community and the Dorrigo Plateau and Coffs Harbour local Aboriginal land councils to survey the planning area, and to manage Aboriginal sites, objects, places and values.</p> <p>6.3.2 Precede all new ground disturbance work by a survey for cultural features. Maintenance of existing works is exempted to the extent of land previously disturbed.</p> <p>6.3.3 Undertake or encourage further appropriate research into the planning area's cultural heritage values and implement appropriate strategies for site protection where required.</p> <p>6.3.4 Monitor the timber tramways and manage them as a ruin in accordance with the recommendations of the heritage assessments.</p>	<p>High</p> <p>Medium</p> <p>Low</p> <p>Medium</p>

Issue	Desired Outcomes	Strategies	Priority
<p>National Park.</p> <p>No formal surveys have been undertaken within the planning area for sites of Indigenous cultural significance.</p>			
<p>6.4 Visitor Use</p> <p>Visitor access to the planning area is via a mixture of public roads and Ministerial roads, the latter being on Crown land vested in the Minister administering the NPW Act. Briggsvale Road is the only road on gazetted park within the planning area that is open to the public.</p> <p>Horse riding in the planning area, apart from along the Megan-Briggsvale Road and Lower Bielsdown Road, has the potential to impact upon the natural and cultural values of the planning area and conflict with other users.</p> <p>Box Ridge and Mobong walking tracks are currently the only visitor facilities in the planning area (refer to Section 3.6). These are primarily used for educational purposes. There are no facilities for other park visitors using these tracks. A new circuit walking track is proposed in Junuy Juluum National Park.</p> <p>School groups also use Cascade National Park for educational purposes. The existing interpretive material (which was developed when the area was state forest) needs updating. Some signage is also needed for the benefit of the general</p>	<ul style="list-style-type: none"> • Visitor use is ecologically sustainable and consistent with management principles. • The local community is aware of the significance of the parks and supports management programs. 	<p>6.4.1 Maintain Briggsvale Road for public access. This road may be closed during periods of wet weather to prevent damage to the road's surface.</p> <p>6.4.2 Horse riding within the planning area is only permitted on the Lower Bielsdown Road and the Megan-Briggsvale Road.</p> <p>6.4.3 Cycling is permitted on management trails in the planning area as well as the public access roads.</p> <p>6.4.4 Bush walking is permitted throughout the planning area except in any quarantine zones designated to prevent the spread of phytophthora (see strategy 6.5.2). Bush camping can occur in Cascade National Park in areas that are more than 500 metres from any road designated for public vehicular use. Camping is not permitted in other parts of the planning area.</p> <p>6.4.5 The use of wood fires is prohibited in the planning area. Gas stoves are permitted.</p> <p>6.4.6 Maintain Box Ridge and Mobong walking tracks as natural-surface walking tracks to provide a visitor experience consistent with the setting.</p> <p>6.4.7 Develop interpretive material for the Box Ridge and Mobong loop walking track in conjunction with the Cascade Environmental Education Centre.</p>	<p>Medium</p> <p>Ongoing</p> <p>Ongoing</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p>

Issue	Desired Outcomes	Strategies	Priority
<p>public.</p> <p>Broader community understanding and appreciation of the values of the planning area is also important to minimise damaging activities.</p> <p>Commercially operated tours may be appropriate to increase the recreational opportunities within the planning area. There are currently two operators licensed to use Cascade National Park.</p> <p>The Dorrigo Steam Railway and Museum may at some point in the future run heritage train rides on their railway line adjacent to and through the planning area.</p>		<p>6.4.8 Participate in a visitor precinct planning exercise for Cascade (including the northern section of Cascade National Park) with Forests NSW and Cascade Environmental Education Centre. If included in the precinct plan, install a dry composting toilet on the park in this vicinity.</p> <p>6.4.9 Construct a natural surface walking track circuit and a small car park adjacent to the Lower Bielsdown Road as shown on the map.</p> <p>6.4.10 Develop interpretation material on the planning area's natural and cultural values and recreational opportunities.</p> <p>6.4.11 Continue to monitor levels and impacts of visitor use and undertake measures to reduce impacts if they are found to be unacceptable.</p> <p>6.4.12 Encourage commercial activities promoting the appreciation of natural and cultural heritage features of the planning area, subject to their licensing and compliance with this plan of management.</p> <p>6.4.13 Encourage the Dorrigo Steam Railway and Museum to appropriately interpret the planning area's values on heritage train rides run in the planning area's vicinity.</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Ongoing</p> <p>Medium</p> <p>Medium</p>

Issue	Desired Outcomes	Strategies	Priority
<p>6.5 Introduced Species</p> <p>Pest management in the planning area is carried out in accordance with the Regional Pest Management Strategy (DECC 2008b). This identifies pest species of concern within the planning area, and outlines control strategies and priorities.</p> <p>A number of weeds, including groundsel bush, giant Parramatta grass, camphor laurel, blackberry lantana and privet, are concentrated along roadsides, in disturbed areas, and in riparian zones within the planning area. Pine saplings also occur in Cascade National Park in areas adjacent to former plantations.</p> <p>The root rot pathogen <i>Phytophthora cinnamomi</i> has been detected in Junuy Juluum National Park.</p> <p>Wild dogs, cats and foxes have been reported within the planning area, with cats established and widespread in Cascade National Park. While the RLP Act requires the control of wild dogs, the parks may also be managed to conserve dingoes. However, dingoes roaming across the landscape pose a problem for neighbours.</p> <p>Poor boundary fencing adjacent to a section of Cascade National Park allows occasional straying of domestic cattle into the park.</p>	<ul style="list-style-type: none"> • Pest species are controlled, and where possible eradicated in the planning area. • The impacts of introduced species on native species and adjacent lands are reduced. • Areas of weed species do not expand beyond their current extent. • Methods used to control introduced species have minimal impact on native species. • Domestic stock are excluded from the planning area. 	<p>6.5.1 Monitor, control and, where possible, eradicate introduced species in accordance with the priorities of the Regional Pest Management Strategy and in cooperation with neighbours, the North Coast LHPA, Bellingen Shire Council, Forests NSW and other stakeholders</p> <p>6.5.2 Carry out further sampling to confirm the extent of phytophthora in Junuy Juluum National Park. Introduce quarantine zones or hygiene protocols (e.g. boot wash-down stations) to limit the spread of the pathogen.</p> <p>6.5.3 Undertake or encourage research regarding the impacts of introduced species on the conservation values of the planning area and appropriate control methods.</p> <p>6.5.4 If required, undertake works to encourage native revegetation following weed control.</p> <p>6.5.5 Assist in the preparation and implementation of a local wild dog management plan in accordance with the RLP Act. In the meantime, continue to carry out ground-baiting along park boundaries as required in conjunction with the LHPA and the local wild dog committee.</p> <p>6.5.6 In accordance with NPWS policy, provide assistance to neighbours to establish effective boundary fencing that prevents domestic stock entering the planning area.</p>	<p>High</p> <p>Medium</p> <p>Low</p> <p>Low</p> <p>Medium</p> <p>Medium</p>

Issue	Desired Outcomes	Strategies	Priority
<p>6.6 Fire Management</p> <p>The vegetation in the planning area is largely considered to be of low fire risk. Rainforest communities and developing rainforest are considered sensitive to fire, and fire could also damage the remains of the timber tramways and fences, and threaten other assets on neighbouring land.</p> <p>A separate fire management strategy has been prepared for the planning area.</p>	<ul style="list-style-type: none"> Life, property, and the natural and cultural values are protected from fire, both in and adjacent to the planning area. The potential for spread of wildfire on, from, or into the planning area is restricted. Fire regimes are appropriate for the conservation of native flora and fauna communities, including threatened species. 	<p>6.6.1 Implement the fire management strategy for the planning area and update as necessary.</p> <p>6.6.2 Exclude fire from rainforest, and other fire sensitive communities and areas.</p> <p>6.6.3 Monitor the impacts of fire on ecosystems in the planning area.</p> <p>6.6.4 Encourage further appropriate research into fire ecology of vegetation communities and significant plants within the planning area.</p> <p>6.6.5 Continue to participate in the Bellingen BFMC. Maintain coordinated and cooperative arrangements with local Rural Fire Service Brigades, Forests NSW and neighbours with regard to fuel management and fire suppression.</p>	<p>High</p> <p>High</p> <p>Medium</p> <p>Low</p> <p>High</p>
<p>6.7 Management Operations</p> <p>NPWS and Forests NSW share the maintenance of Megan-Briggsvale Road, only a small part of which is a Ministerial road. In addition, Forests NSW requires the use of Lloyds Siding Road and part of Briggsvale Road for access to part of Wild Cattle Creek State Forest. Part of the council-maintained Lower Bielsdown Road through Cascade State Conservation Area deviates from its road reserve and is another Ministerial road in the planning area.</p> <p>A network of management trails shown on</p>	<ul style="list-style-type: none"> The Megan-Briggsvale Road continues to be jointly maintained by NPWS and Forests NSW for public use. Management facilities are kept to a minimum, have minimal impact on the natural and cultural values of the planning area while still adequately meeting 	<p>6.7.1 Continue to maintain Megan-Briggsvale Road in association with other authorities to a two-wheel drive, all weather standard.</p> <p>6.7.2 Seek to have the Ministerial road section of the Lower Bielsdown Road proclaimed a public road and vested in Bellingen Shire.</p> <p>6.7.3 Maintain management trails shown on the map, except for Lloyds Siding Road, to dry weather 4WD standard. Maintenance of Lloyds Siding Road may be undertaken as required by Forests NSW for access to Wild Cattle Creek State Forest.</p>	<p>Medium/ Ongoing</p> <p>Medium</p> <p>Medium/ Ongoing</p>

Issue	Desired Outcomes	Strategies	Priority
<p>the map provides the necessary management access (primarily for fire and weed control) within Cascade and Junuy Juluum national parks. No management trails exist in Cascade State Conservation Area. NPWS accesses the western part of Junuy Juluum National Park through private property.</p> <p>Unconstructed road reserves within Cascade National Park and Cascade State Conservation Area are unlikely to be required in the future (refer to Section 1).</p>	<p>management needs.</p> <ul style="list-style-type: none"> Unconstructed road reserves are incorporated into the planning area. 	<p>6.7.4 Gate or signpost management trails to exclude unauthorised access.</p> <p>6.7.5 Close all old logging snig tracks and any trails not shown on the map as they are not required for public or management access. Allow these trails to regenerate naturally or, if required, assist in revegetation.</p> <p>6.7.6 Continue to liaise with neighbours regarding the use and maintenance of trails on their properties required for access and fire management purposes within the planning area. Undertake maintenance works as required on Tutings Road and other private trails to ensure ongoing access to the western part of Junuy Juluum National Park for fire control and other management purposes, in return for a formal agreement with the neighbours for continued NPWS right of access.</p> <p>6.7.7 In consultation with the DPI Crown Lands, seek the addition of the unconstructed road reserves to Cascade National Park and Cascade State Conservation Area.</p>	<p>High</p> <p>Medium/ Ongoing</p> <p>Medium/ Ongoing</p> <p>Low</p>
<p>6.8 Non-NPWS Uses</p> <p>Non-NPWS occupancies within the planning area include the Mount Campion trigonometrical station within Junuy Juluum National Park and three powerlines. The trig station is managed in accordance with an existing agreement with Land and Property Information (LPI). The powerline in Junuy Juluum National Park is within a formal easement. Its maintenance is subject to a state-wide</p>	<ul style="list-style-type: none"> Non-NPWS uses and their associated infrastructure are subject to formal agreements and do not adversely impact on the values of the planning area. 	<p>6.8.1 Ensure all non-NPWS uses are licensed or easements granted as appropriate under the NPW Act, and proper commercial returns are obtained where possible.</p> <p>6.8.2 In accordance with the agreement between NPWS and LPI, authorise use and maintenance of the trig station at Mount Campion.</p> <p>6.8.3 Continue to permit vegetation management under</p>	<p>Medium/ Ongoing</p> <p>Medium/ Ongoing</p> <p>Medium/ Ongoing</p>

Issue	Desired Outcomes	Strategies	Priority
<p>agreement between TransGrid and NPWS. No easement is in place for either powerline in Cascade National Park or Cascade State Conservation Area. A licence for these lines is yet to be negotiated with CountryEnergy.</p> <p>Megan-Briggsvale Road is part of a route linking Dorrigo to Coramba that is used by heavy vehicles (including livestock trucks) when the Dorrigo Mountain Road is closed. It is also the only access to the village of Briggsvale, and is also used as the primary access to the village of Cascade and large areas of state forest to the north of the planning area. Likewise, the Lower Bielsdown Road and Billings Road provide the only access to some private properties.</p> <p>The tenure of state conservation area allows for mining activity. A mineral exploration licence is currently active in the area.</p>		<p>powerlines with conditions to limit impacts on park values.</p> <p>6.8.4 Allow animals to be transported within vehicles on the Megan-Briggsvale Road, Lower Bielsdown Road and Billings Road, in accordance with the NPW Regulation and NPWS Pets Policy.</p> <p>6.8.5 Applications for works or access associated with mineral exploration in the state conservation area will be managed in accordance with the Memorandum of Understanding between NPWS and DTIRIS Minerals.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>High</p>

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

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

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

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