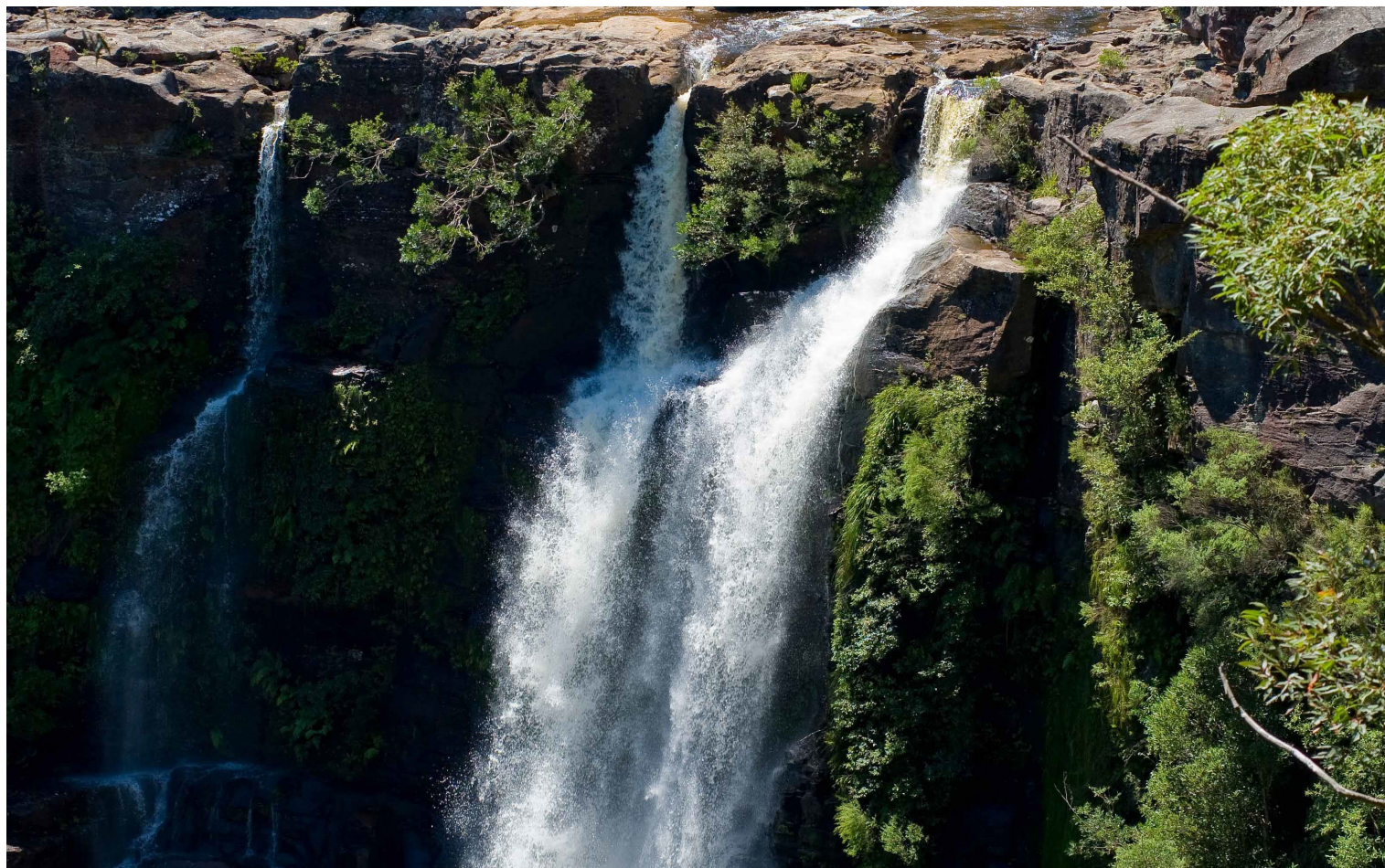




NSW National Parks and Wildlife Service

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area

Draft plan of management



Acknowledgement of Country

The Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live. We pay our respects to Elders past, present and emerging.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area are part of an ancient cultural landscape. The parks and their surrounding lands and watercourses are Gundungurra and Dharawal Country and have traditionally been under the care of the Gundungurra and Wodi Wodi peoples.

'Country' refers to all parts of the natural environment and these parts cannot be separated. This means that the land, sky, water, animals and plants are viewed as one, and they form Aboriginal peoples' cultural and spiritual identity.

Aboriginal people have a deep spiritual and cultural connection to this Country. Their ancestors have lived here for thousands of years and, in doing so, form part of this living landscape.

The rights of the Gundungurra and Wodi Wodi peoples, their enduring connections to Country and their aspirations for their Country are acknowledged and respected.

Contents

Acknowledgement of Country	ii
Have your say	v
Summary	vi
Vision	vii
Development of the draft plan	viii
Plan purpose and role in park management	ix
1. Planning area	1
1.1 Introduction	1
1.2 History of reservation	2
1.3 Purpose and significance of the parks	4
2. Challenges for conservation in the Sydney Basin bioregion	6
3. Management themes	8
3.1 Protecting landscape and catchment values	8
3.2 Conserving nature in a changing climate	10
3.3 Supporting healthy Country	15
3.4 Providing opportunities for sustainable visitor use	16
3.5 Protecting historic heritage	26
3.6 Infrastructure and services	29
4. Park specific management policies	32
Appendices	36
Appendix A: Objects of the <i>National Parks and Wildlife Act 1974</i>	36
Appendix B: Management principles	37
Appendix C: Threatened plants and ecological communities	39
Appendix D: Threatened native animals	40
References	42
More information	42

List of tables

Table 1	History of reservation	2
Table 2	Park specific management policies	32
Table 3	Threatened native plants recorded or observed in the parks	39
Table 4	Threatened ecological communities known or likely to occur in the parks	39
Table 5	Threatened native animals recorded or observed in the parks	40

List of figures

Figure 1	Planning area	3
Figure 2	Sydney Drinking Water Catchment	5
Figure 3	Existing visitor sites and facilities at Minnamurra Rainforest	19
Figure 4	Existing visitor sites and facilities at Carrington Falls	21
Figure 5	Existing visitor sites and facilities at Macquarie Pass	23

Have your say

Submissions must be lodged before 5 pm on 9 February 2026.

Your submission will assist in the preparation of a new plan of management for Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area. Submissions must be in written form and lodged via:



the online submission form at www.environment.nsw.gov.au/get-involved/have-your-say



email to npws.parkplanning@environment.nsw.gov.au



post to Manager, Planning and Assessment, NPWS, Locked Bag 5022, Parramatta NSW 2124.

Your submission may be provided to statutory bodies that have an advisory role under the *National Parks and Wildlife Act 1974* in the preparation of plans of management. These bodies include the Karst Management Advisory Committee, regional advisory committees and the National Parks and Wildlife Advisory Council.

The Department of Climate Change, Energy, the Environment and Water complies with the NSW *Privacy and Personal Information Protection Act 1998*, which regulates the collection, storage, quality, use and disclosure of personal information.

Summary

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area – collectively referred to as the parks – are located on the NSW South Coast, roughly 30 km south-west of Wollongong and 100 km south of Sydney.

The parks lie within Gundungurra and Dharawal Country, the traditional Country of the Gundungurra and Wodi Wodi peoples. They form part of a rich cultural landscape that has been inhabited and cared for by Aboriginal communities for tens of thousands of years.

The parks encompass extensive plateau and escarpment areas, featuring heathland, woodland, tall open forest and significant remnants of cool temperate, warm temperate and subtropical rainforest. These diverse vegetation communities include several threatened ecological communities and provide significant habitat for a range of threatened native plants and animals.

Assets of intergenerational significance have been declared around Carrington Falls to protect 2 highly localised threatened plant species, and across broader sections of Budderoo National Park and Barren Grounds Nature Reserve to safeguard populations of eastern bristlebirds and eastern ground parrots.

The parks are important for water quality management. Robertson Nature Reserve, most of Budderoo National Park, and roughly half of Barren Grounds Nature Reserve lie within the Sydney Drinking Water Catchment, which supplies water to millions of people across Sydney, the Blue Mountains, the Illawarra, Shoalhaven and the Southern Highlands.

The escarpment offers dramatic scenery, including sheer cliffs, waterfalls and panoramic lookouts. These features have made the parks popular visitor destinations for decades. However, visitation has surged in recent years due to the ongoing growth of nearby major centres like Sydney and Wollongong, improved transport routes and reduced travel times. Rapid urban expansion near the parks has further accelerated this trend.

Visitor demographics are also shifting, with a notable rise in younger visitors seeking longer, more challenging day walks to remote and scenic locations beyond the reach of existing visitor infrastructure. Visitor facilities – such as parking areas, day use areas and walking tracks – are struggling to meet the demands of increased and evolving visitor use. This has potential to have adverse impacts on biodiversity and Aboriginal heritage values, and could lead to safety issues, particularly where new and unauthorised walking routes have been created through repeated use.

The draft plan of management aims to protect these values and address the threats by:

- enabling the Aboriginal community with cultural connections to the parks to access Country and maintain, renew or develop cultural connections and practices
- outlining strategies for nature conservation and the protection of the parks' cultural, landscape and catchment values
- outlining strategies to enhance recreational opportunities in the parks while addressing the impacts of growing and changing visitor use.

Vision

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve, and Macquarie Pass State Conservation Area will be protected as interconnected landscapes of exceptional ecological, cultural and scenic value. The parks will protect rare heathlands, diverse rainforests, assets of intergenerational significance, and other habitat for threatened native plants and animals. They will contribute to the health of the Sydney Drinking Water Catchment.

Management of nature conservation will prioritise thriving biodiversity, supporting threatened species, enhancing habitat connectivity and carefully managing impacts of climate change, invasive species and visitor pressure.

The parks will continue to be part of a living cultural landscape and Aboriginal heritage values will continue to be acknowledged, respected and protected. The parks will provide opportunities for Gundungurra and Wodi Wodi peoples enduring connection to Country to be recognised and supported. Historic heritage values will also be protected.

Visitors will be welcomed to experience the parks in ways that are safe, sustainable and enriching. Budderoo and Macquarie Pass national parks will offer high-quality recreational and educational opportunities at key visitor destinations, while the nature reserves will provide low-impact experiences focused on walking and nature appreciation.

Collaboration, including with Aboriginal communities, researchers, volunteers, neighbours and other local stakeholders, will ensure the parks are protected and celebrated for generations to come.

Development of the draft plan

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area are protected in perpetuity through their reservation under the *National Parks and Wildlife Act 1974*. The parks are managed to achieve the objects of this Act, which are centred on conserving the natural and cultural values of the park, as well as fostering public appreciation, understanding and enjoyment of these values (Appendix A).

This draft plan of management has been prepared to provide members of the public with an opportunity to contribute to the preparation of a new plan of management to replace the existing plan which was adopted in 1998.

As required under the National Parks and Wildlife Act, this draft plan of management was prepared following an initial consideration of all the matters listed under section 72AA of the Act, including the management principles for national parks, nature reserves and state conservation areas (Appendix B).

At the completion of the public exhibition period, this draft plan and all submissions received will be considered by the NSW National Parks and Wildlife Service (NPWS) and the relevant statutory advisory bodies whose role it is to provide advice to the Minister for the Environment on plans of management. Once adopted by the Minister, the plan of management will provide strategic direction for management of these parks. All operations undertaken within these parks must then be in accordance with the adopted plan of management.

Plan purpose and role in park management

Parks reserved under the National Parks and Wildlife Act are managed through a statutory management framework comprising the Act, the National Parks and Wildlife Regulation 2019 and plans of management.

The Act provides the legal basis for the establishment and management of parks. The Regulation sets out the rules that apply to all parks, and plans of management set out how each individual park will be managed. Plans of management describe each park's significant values, articulate a vision, and set the long-term objectives, strategies and policies that will be implemented to achieve the objects of the Act (Appendix A) consistent with the management principles relevant to the park category (Appendix B).

Plans of management also provide the basis for management decisions and describe the activities that may and may not be authorised in the future. All activities undertaken in each park must be consistent with the relevant plan of management, including its policies, objectives and strategies.

Plans of management take a strategic view for each park and are expected to remain relevant for at least 10 years. They are not intended to outline all management activities in detail. However, they do provide the context and strategic direction for operational plans and strategies which are prepared by NPWS as necessary. This approach provides the flexibility necessary to respond to future park management challenges and opportunities as they arise.

Operational plans and strategies are prepared for statewide management programs, including the protection of Aboriginal sites, threatened species conservation and recovery, ecological monitoring, fire management, historic heritage conservation, asset maintenance, weed control, feral animal control and visitor facility development. The priorities, targets and performance measures may be set out statewide, regional or park-specific plans or strategies. This enables the periodic evaluation of management effectiveness of management programs at a local, regional and statewide level.

The accuracy of information in plans of management and the relevance of their policies, objectives and strategies will be periodically reviewed. Plans may be amended or replaced, as necessary.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

1. Planning area

1.1 Introduction

The planning area includes Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve, Robertson Nature Reserve and Macquarie Pass State Conservation Area (the parks) (see Figure 1).

This plan also covers areas adjacent to the parks that are unreserved and vested in the Minister under Part 11 of the *National Parks and Wildlife Act 1974*. Part 11 lands are located along the Illawarra Highway adjacent to Macquarie Pass National Park, and also occur over the Yarrowa Track and Keenans Pass management trail on the Yarrowa Plateau adjacent to Budderoo National Park.

The parks are located on the NSW South Coast, roughly 30 km south-west of Wollongong and 100 km south of Sydney. The parks are situated on and adjacent to the Budderoo – Barren Grounds plateau, at the eastern edge of the Southern Highlands, on the Great Escarpment of eastern Australia (see Figure 1).

These parks are nearby each other and share many values. Their incorporation into one plan of management will help to ensure their management is coordinated and compliments strategic goals for conservation across this landscape. The parks also provide interlinked recreational and educational opportunities, except for Macquarie Pass State Conservation Area where there is no public access.

The parks comprise extensive areas of plateau and adjacent escarpment, supporting heathland, woodland, tall open forest and rainforest. The Budderoo – Barren Grounds plateau is one of only a few locations where significant heathlands remain on the NSW South Coast. Many species of native plants and animals found in the parks, including several threatened species, are restricted to heathlands. The parks also protect considerable areas of remnant cool temperate, warm temperate and subtropical rainforest, especially on the more sheltered aspects of the escarpment. Some 75% of the area of the parks lies within the Sydney Drinking Water Catchment, making the parks important for water quality management.

Much of the adjacent highlands and coastal plain are used for cattle raising, dairying and cropping, and extensive urban and small acreage development has occurred along the coast. However, large areas of natural vegetation still exist along the Great Eastern Ranges north and south of the parks. Morton National Park lies to the south, and Upper Nepean State Conservation Area, Nattai and Blue Mountains national parks, and large areas of drinking water catchment managed by WaterNSW are to the north. The parks provide an important vegetated link between these larger areas of natural vegetation, enhancing their viability as conservation areas.

The escarpment has spectacular cliffs, lookouts and waterfalls, which have made the parks and surrounding areas popular visitor destinations for decades. The continuing growth of Sydney, Wollongong, Shellharbour, Calderwood, Tullimbar, West Dapto, Robertson, Moss Vale and Bowral, together with improved transport routes and reduced travel times have led to substantial increases in levels of visitor use.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

1.2 History of reservation

The reservation history of the parks is summarised in Table 1. Their protection stems from the conservation movement after World War II and its early conservation leaders including Myles Dunphy, Paddy Pallin and Allen Strom.

Barren Grounds Nature Reserve, in particular, was established as a result of community advocacy. It was gazetted in 1956, becoming the third faunal reserve established in New South Wales under the former *Fauna Protection Act 1948*.

Additions to Budderoo National Park include the Carrington Falls Trust lands (2001) and land formerly part of Yarrawa State Forest (2018).

Table 1 History of reservation

Park	Area (ha)	Reservation date
Barren Ground Nature Reserve	2,041	Reserved in 1956 from a Crown reserve created in 1949.
Budderoo National Park	7,241	First reserved in 1986, apart from the Minnamurra Falls area which was first reserved in 1904, and other small areas first reserved in the late 1800s for public recreation, timber growth and preservation, or for water supply and access.
Macquarie Pass National Park	1,047	First reserved in 1969 as Macquarie Pass State Park.
Macquarie Pass State Conservation Area	80	2006
Robertson Nature Reserve	5	Reserved in 1979. First reserved in 1884 for public recreation following extensive clearing of Robertson Rainforest (then known as Yarrawa Brush).

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

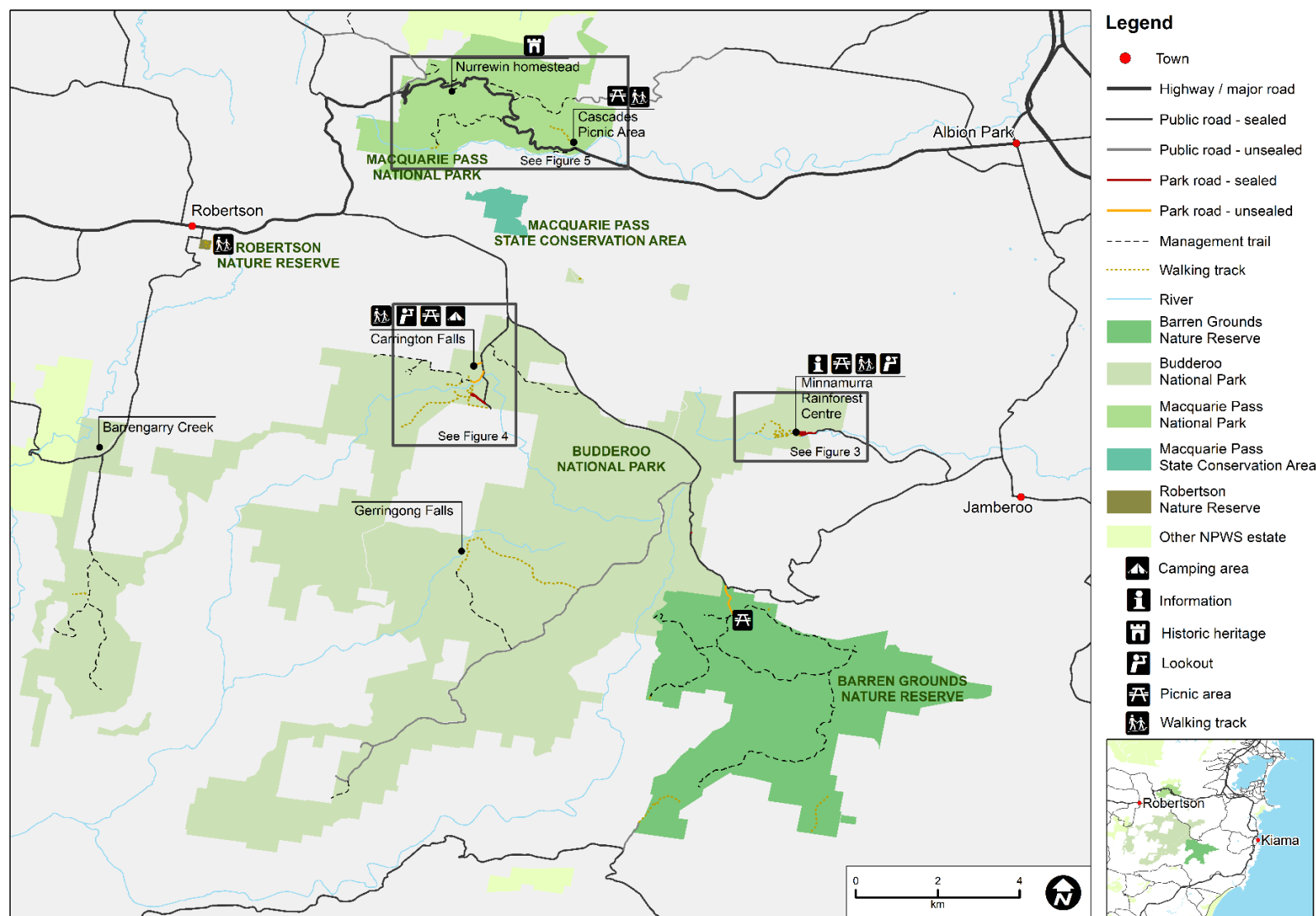


Figure 1 Planning area

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

1.3 Purpose and significance of the parks

Habitat for threatened native plants and animals

The underlying, complex geology combined with the climate of the escarpment and natural processes have resulted in a unique landscape supporting a diverse range of vegetation types, including heathlands, woodlands, tall open forests and rainforest. The parks' protect several threatened plants and ecological communities (see Appendix C). Assets of intergenerational significance have been declared at Budderoo National Park to protect habitat for 2 threatened plants with highly localised distributions centred around Carrington Falls.

The parks provide important habitat for threatened native animals (see Appendix D). Assets of intergenerational significance have been declared at Budderoo National Park and Barren Grounds Nature Reserve to protect eastern bristlebirds and eastern ground parrots. Also, Saving Our Species management sites have been established in the parks for a number of threatened species, including eastern ground parrot, eastern bristlebird, spotted-tailed quoll, long-nosed potoroo and Watson's tree frog.

The connection these parks provide between large naturally vegetated lands to the north and the south is important for the protection and survival of these and many other native plants and animals found in the parks and their supporting ecosystems.

Aboriginal cultural landscape

The parks are part of a broader cultural landscape that has been lived on and cared for by Aboriginal people for tens of thousands of years. Aboriginal people have always had a deep spiritual and cultural connection to this Country and continue to play an active part of this living landscape as custodians and caretakers of their Country.

Country guides the values, beliefs and behaviours of local Aboriginal people. It shapes their world view and is inseparable from them as individuals and as a community. NPWS recognises local Aboriginal peoples' continuing connection to Country and respects it in the planning for, and management of, these parks.

Historic heritage

Historic heritage in these parks includes tracks, buildings and other structures and sites. These features illustrate the European history from exploration, resource gathering, settlement and agriculture, to the growth of recreational use and the emergence of the conservation movement. Nurrewin homestead, a substantial sandstone residence in Macquarie Pass National Park, is aesthetically and historically significant, demonstrating changing land use on the escarpment through the 19th and 20th centuries.

Recreation and environmental education

Budderoo and Macquarie Pass national parks provide opportunities for recreation and environmental education, including at several high-use locations such as Minnamurra Rainforest, Carrington Falls and Macquarie Pass. Minnamurra Rainforest is one of the key centres for rainforest education in New South Wales. Less substantial visitor facilities are provided at Barren Grounds and Robertson nature reserves. There are no visitor facilities in Macquarie Pass State Conservation Area.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Water quality and catchment values

The Sydney Drinking Water Catchment covers approximately 75% of the planning area (see Figure 2). This drinking water catchment supplies drinking water to millions of people in Sydney, the Blue Mountains, the Illawarra, Shoalhaven and Southern Highlands.

All of Robertson Nature Reserve, most of Budderoo National Park, and around half of Barren Grounds Nature Reserve lie within the Sydney Drinking Water Catchment. Only a very small area (approx. 0.3 ha) in the north of Macquarie Pass National Park and a small area (less than 1.5 ha) in the south-west of Macquarie Pass State Conservation Area are within the Sydney Drinking Water Catchment.

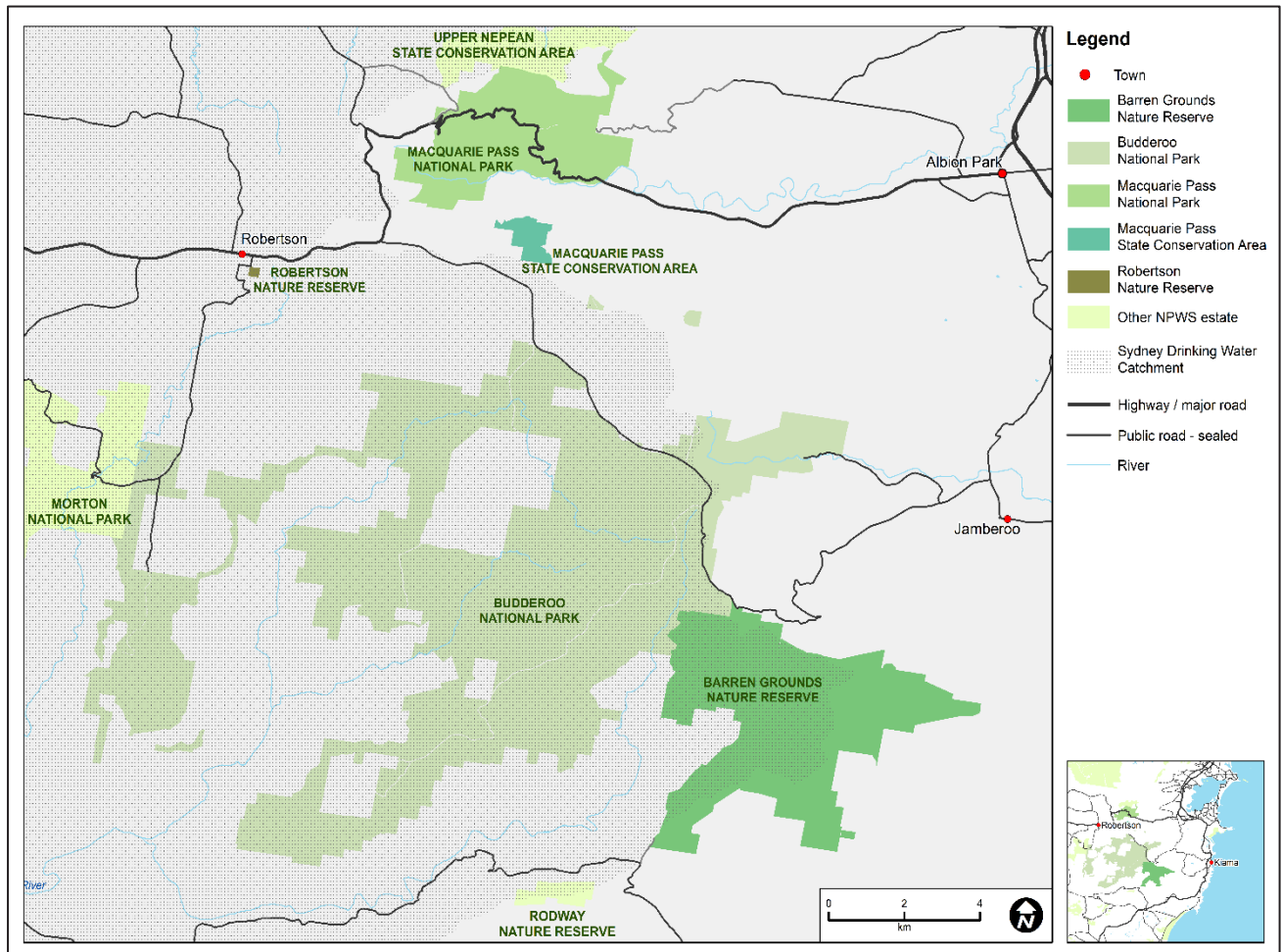


Figure 2 Sydney Drinking Water Catchment

2. Challenges for conservation in the Sydney Basin bioregion

The parks are located within the Sydney Basin bioregion. Bioregions are large, geographically distinct areas of land with common natural characteristics. The national bioregional framework established by the Australian government is endorsed by all levels of government and informs the development of a comprehensive, adequate and representative National Reserve System.

The Sydney Basin bioregion lies on the central coast of New South Wales and covers an area of more than 3.6 million hectares, or just over 4.5% of New South Wales. The bioregion extends from just north of Batemans Bay on the South Coast to Nelson Bay on the Central Coast, and almost as far west as Mudgee. It is one of only 2 bioregions contained wholly within the state.

As well as the major city of Sydney, the Sydney Basin bioregion encompasses the cities and towns of Wollongong, Nowra, Newcastle, Cessnock, Muswellbrook and the Blue Mountains towns of Katoomba and Mount Victoria. It includes a considerable proportion of the catchments of the Hawkesbury, Nepean, Hunter and Shoalhaven river systems; all the smaller catchments of Lake Macquarie, Lake Illawarra, Hacking, Georges and Parramatta rivers; and smaller portions of the headwaters of the Clyde and Macquarie rivers.

Much of the Sydney Basin landscape is elevated sandstone plateau. However, the most prominent feature of the bioregion is the Great Escarpment where streams have eroded deep gorges and cliff faces into the uplifted sandstone. The Great Escarpment is located on the eastern edge of the elevated plateau.

The Sydney Basin bioregion is dominated by a temperate climate characterised by warm summers with no dry season. Rainfall and temperature vary across the bioregion with altitude and with distance from the coast. Typically, it is wetter closer to the coast and in higher altitudes, warmer closer to the coast and cooler in higher altitudes.

The diversity of landforms and rock types, together with the predominant weather and climate systems, have resulted in a diversity of soils and vegetation communities making the Sydney Basin bioregion one of the most species diverse in Australia.

General threats to the terrestrial biodiversity of the bioregion include vegetation clearing, loss of remnants, stock grazing, weeds, feral animals and urbanisation. The Sydney Basin bioregion is densely populated and pressures from recreational activities may also threaten local biodiversity. Further threats include inappropriate fire regimes, sedimentation, salinity, weir construction and mining activities.

In broad terms, the plateau areas of the parks covered by this plan are within the Moss Vale subregion of the Sydney Basin bioregion and the escarpment areas are within the Illawarra subregion of the bioregion.

Despite significant development, particularly for agriculture and urban development, the national parks estate and other conservation-oriented tenure occupy just over 40% of the Sydney Basin bioregion. However, protected areas only account for just over 17% of the Moss Vale subregion and less than 9% of the Illawarra subregion. For details, see *Collaborative Australian Protected Area Database (CAPAD) 2022* webpage (link is provided in the 'More information' section).

The *NSW Biodiversity outlook report 2024* (DCCEEW 2024) assesses indicators of biodiversity for New South Wales bioregions. For the Sydney Basin bioregion, this report

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

found the percentage of original ecosystem diversity that is likely to persist into the future remains high but is declining, and that ecological condition also remains high but is declining. The report notes that bioregions in eastern New South Wales, including the Sydney Basin, are more spatially resilient to climate change, in part because the rate of climate change in these eastern bioregions will be slower, but also because their habitats are more intact and connected than bioregions in the west of the state. The report found that, since 2007, there has been an increase ($\geq 2.5\%$) in the areas permanently managed for conservation in the Sydney Basin bioregion. Improving habitat condition and connectivity across all bioregions may reduce biodiversity loss due to climate change.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

3. Management themes

3.1 Protecting landscape and catchment values

Budderoo National Park, Barren Grounds Nature Reserve, Macquarie Pass National Park, Macquarie Pass State Conservation Area and Robertson Nature Reserve protect areas of highland, plateau and escarpment in the south-eastern corner of the Sydney Basin.

Robertson Nature Reserve is located on a large area of highland basalt on the Robertson Plateau near the town of Robertson. Budderoo National Park sits atop the sandstone Budderoo Plateau, a projection at the eastern end of the highlands, and extends downslope across parts of the adjacent escarpment, including Minnamurra Rainforest. Barren Grounds Nature Reserve comprises an easterly extension of the Budderoo Plateau and, like Budderoo National Park, also includes areas of the escarpment. Most of Macquarie Pass National Park lies on the escarpment at the southern end of the Woronora Plateau. It consists mainly of steep ridges and gullies topped by cliff. Macquarie Rivulet has formed the steepest gully in this park. Much of Macquarie Pass State Conservation Area is on the plateau but it also includes escarpment areas.

Extending across the plateau and down the escarpment gives the parks a significant altitudinal range. The highest point, at Knights Hill in Budderoo National Park, is more than 700 m above sea level (ASL). The lowest points, at approximately 70 m ASL, are on the lower escarpment, at the edge of the coastal plain at Minnamurra Rainforest in Budderoo National Park and at Macquarie Pass National Park.

The parks also encompass sheer cliffs around the plateaus, forming the Illawarra Escarpment and the north-eastern boundary of Kangaroo Valley. In places, these cliff lines are deeply dissected by streams. In other places, streams cross the sheer cliffs forming impressive waterfalls. The highest waterfalls in the parks are Carrington Falls and Gerringong Falls in Budderoo National Park, and Macquarie Falls in Macquarie Pass National Park.

Poorly designed or poorly sited infrastructure could have adverse visual impacts on the open nature of the plateau country and the strong visual presence of the escarpments. Any new infrastructure, including for park management, visitor or third-party non-park infrastructure, will be carefully designed to limit visual impacts on the open landscape character of the plateau and on other significant landscape features such as the escarpment and waterfalls.

On the escarpment, high-intensity rainfall events can result in landslides, rock falls or flash floods. Although naturally occurring, these events may negatively impact ecological values, for example, they may remove vegetation, deposit extensive amounts of silt and debris, open the canopy to pioneer species including weeds, and provide movement corridors for feral animals. Landslides and rock falls may also impact on the aesthetic qualities of the landscape. Those sections of the parks located on the escarpment, and visitors and infrastructure in these areas, are potentially at risk. Climate change may exacerbate this issue and these risks. NPWS will continue to undertake assessments of its lookouts and other geologically oriented visitor facilities, such as walking tracks above and below cliffs, as required.

Several major streams and tributaries arise within or immediately adjacent to the parks. Protection of water quality in all streams is important for the maintenance of biodiversity within the parks and for all downstream users.

Gerringong Creek and Brogers Creek flow into the Kangaroo River. The headwaters of these 3 waterways are located in Budderoo National Park and Barren Grounds Nature Reserve.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

The Kangaroo River flows into WaterNSW Shoalhaven Special Area at Tallowa Dam which provides water directly to the Shoalhaven and Southern Highlands regions and acts as a back-up to the Sydney and Illawarra water supplies. The Kangaroo River catchment is part of the Sydney Drinking Water Catchment, a 'regulated catchment' under the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*.

NPWS, as a public authority, has responsibilities to maintain catchment values and water quality within the Sydney Drinking Water Catchment. To protect water quality, a key consideration for any proposed activity within the catchment is whether it would have a neutral or beneficial effect on water quality consistent with the guideline (WaterNSW 2022). These planning provisions help ensure water quality, ecological and catchment values are considered and protected in management and approval decisions for new infrastructure works in the catchment.

Exploration for minerals and petroleum (including gas), as well as mining and petroleum production, are permissible uses within state conservation areas. Macquarie Pass State Conservation Area is partly covered by Illawarra Coal Measures, a group of sedimentary rocks known to contain coal deposits. There are currently no exploration or mining titles covering Macquarie Pass State Conservation Area. However, exploration titles have applied to this park previously and applications for exploration and mining could be considered in the future.

Management objective

- Protect the catchment, water quality, landscape and scenic values of the parks.

Strategies

- Consider the scenic amenity of the landscape of the parks before designing and undertaking works, and ensure any new infrastructure is not visually intrusive.
- Protect the quality of water outflows from the parks, consistent with legislative and government policy requirements.
- Where appropriate, undertake works to improve riparian protection or repair damage to riparian zones to provide benefits for water quality and biodiversity.
- Undertake assessments of lookouts and other visitor facilities in geologically unstable areas consistent with industry standards and guidelines.

3.2 Conserving nature in a changing climate

Protecting biodiversity

The parks protect a diversity of vegetation communities, some of which are threatened. This diversity is a result of the parks' broad range of landforms and complex underlying geology. Vegetation communities in the parks range from warm temperate and cool temperate rainforest on the high basalt peaks, through open forest, woodland and heath on the broader sandstone plateau, to warm temperate and subtropical rainforest and tall moist eucalypt forest on the escarpment below the sandstone plateau.

The vegetation communities now protected in the parks were once widespread across the broader landscape. Clearing for agriculture and urban development has impacted their distribution. For example, the extensive heathlands of Barren Grounds Nature Reserve and Budderoo National Park are one of only 4 large areas of heath remaining on the NSW South Coast. Many species of native plants and animals found in the parks, including several threatened species, are restricted to heath.

Similarly, threatened ecological communities protected in the parks (see Appendix C) have been extensively cleared across the wider landscape. Today, only relatively small and isolated pockets of these communities remain, which make the remnants protected in these parks increasingly important.

The parks are also critical for the conservation of several threatened native plants (see Appendix C). Concentrations of threatened native plants occur at the following locations:

- Carrington Falls in Budderoo National Park – the critically endangered Carrington Falls grevillea and Carrington Falls pomaderris are highly localised species with distributions restricted to Carrington Falls and the adjacent upper Kangaroo River catchment. Two sites at Carrington Falls have been identified as having exceptional value for the protection of these plant species and each has been declared an asset of intergenerational significance. The vulnerable Deane's boronia also occurs near Carrington Falls.
- Minnamurra Rainforest in Budderoo National Park – the complex of temperate and subtropical rainforest in the Minnamurra Rainforest protects a range of threatened plants, including the critically endangered scrub turpentine, the endangered Illawarra Irene, Illawarra socketwood, Illawarra zieria, white-flowered wax plant, *Solanum celatum* and the vulnerable waterfall greenhood orchid.
- the escarpment in Macquarie Pass National Park – threatened plants here include the critically endangered scrub turpentine, the endangered Illawarra Irene and *Solanum celatum*.

The varied habitats in these parks support many species of native animals, including rare species and 35 threatened species (see Appendix D). The declaration of assets of intergenerational significance to protect eastern bristlebirds and eastern ground parrots in Budderoo National Park and Barren Grounds Nature Reserve, and the presence of Saving our Species management sites (for eastern ground parrots, eastern bristlebird, spotted-tailed quoll, long-nosed potoroo and Watson's tree frog) recognise the importance of the parks for the ongoing conservation of those species.

The National Parks and Wildlife Act requires that assets of intergenerational significance have a conservation action plan that outlines the conservation activities required to control, abate or mitigate the key risks to those assets and to maintain, restore and remediate the environmental values of the land. Conservation action plans have been prepared for the assets of intergenerational significance declared in the parks.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

The NPWS *Zero extinctions threatened species framework* is the primary framework for threatened species conservation on the national parks estate. The framework outlines a series of initiatives to secure and restore the threatened species populations that are most at risk of being lost from the reserve network. These initiatives include:

- declaration of important habitat as assets of intergenerational significance, attracting special legislative protection
- reintroduction of locally extinct species into a network of feral predator-free areas
- implementation of the Saving our Species program, which is the statutory biodiversity conservation program under the *Biodiversity Conservation Act 2016*
- strengthening the integration of threatened species objectives in NPWS landscape-scale programs such as feral animal control and fire management
- delivery of an ecological health monitoring framework
- effective collaboration and integration with off-park threatened species conservation measures.

Fitzroy Falls spiny crayfish

The Fitzroy Falls spiny crayfish (*Euastacus dharawalus*) is a naturally rare species of freshwater spiny crayfish. It has a very limited distribution, found only within a 12 km stretch of creeks on the NSW Southern Highlands. It is listed as critically endangered under the *Fisheries Management Act 1994*. It is expected to occur in 2 creeks within Budderoo National Park where it creates burrows in the soft stream bed below the waterline.

Threats to the Fitzroy Falls Spiny Crayfish include:

- habitat degradation from clearing, alteration of flows and degradation of riparian vegetation
- predation from, and competition with, the common yabby (*Cherax destructor*)
- potential illegal harvest or misidentification with the common yabby
- predation by exotic species, including foxes, feral cats and introduced salmonids
- trampling of burrows by livestock.



Photos Fitzroy Falls spiny crayfish (left) and its habitat (right). Photos: Justin Stanger/Department of Primary Industries (Source DPI 2012).

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Managing threats

Key threats to the parks' biodiversity include climate change, feral animals, weeds and inappropriate fire regimes. These threats are managed to ensure the biodiversity values of the parks can be maintained or improved.

Climate change is recognised as a key threatening process in New South Wales. For the parks and their surrounding area, climate change is projected to lead to increases in temperature and the number of hot days (that is, days $\geq 35^{\circ}\text{C}$) and reductions in rainfall and the number of cold nights ($< 2^{\circ}\text{C}$). Severe fire danger days, which create the underlying conditions for large-scale bushfires, are expected to become more common in the future.

More intense rainfall events may accelerate soil erosion and increase runoff, increasing the potential for flash flooding and landslides. This could pose a significant threat to park values and assets on the escarpment and to neighbouring properties on and below the escarpment. Temporary, seasonal or more prolonged park or site closures may be required to manage risks to park visitors.

Climate change may significantly affect biodiversity by changing the size of populations and the distribution of species and by altering the geographical extent and species composition of habitats and ecosystems. Species most at risk are those unable to migrate or adapt, particularly those with small population sizes or with slow growth rates. For example, while Illawarra subtropical rainforest on the lower slopes of the escarpment may be able to adapt by extending upslope as the temperature increases, isolated remnants of cool temperate Robertson rainforest on the plateau cannot extend upslope and may be more directly impacted by climate change.

Detailed impacts of climate change on the parks are difficult to assess since they will be influenced by the compounding effects of other pressures, particularly barriers to migration and pressure from introduced animals. However, highly cleared and fragmented ecosystems are likely to be at greater risk than more intact ecosystems.

European red foxes and feral cats are a threat to native animals in the parks. Threatened ground-dwelling mammals known from the parks, such as long-nosed potoroo, southern brown bandicoot, eastern pygmy possum and threatened birds such as eastern bristlebirds and eastern ground parrots, are all vulnerable to predation by foxes and feral cats. Fox control is undertaken in the parks. This work is guided by the eastern bristlebird and eastern ground parrot conservation action plans and the NSW fox threat abatement plan (OEH 2010).

Feral goats and deer are also of significant concern. Their potential to cause considerable damage to native vegetation has led them to being recognised as key threatening processes in New South Wales. Wild deer also pose a public safety risk, having been the cause of motor vehicle accidents, especially around the Illawarra.

Weeds such as blackberry, English ivy and Japanese honeysuckle can be a significant threat in disturbed fertile areas on the plateau. Weeds also occur in disturbed areas on the escarpment. The main weeds known to occur on the escarpment are lantana, mist flower and crofton weed. Other weeds present include cape ivy, trad, coral trees and wild tobacco bush. Weed invasion is recognised as a major threat to several vegetation communities and threatened plant species present in the parks.

The management of feral animals and weeds in New South Wales is directed and guided by legislation, policies and plans, including the *Biosecurity Act 2015* and its regulations, the *NSW invasive species plan 2023–2028* (DPI 2023) and regional strategic weed and feral animal management plans. Within parks, feral animal and weed management planning is generally undertaken at a regional scale and supplemented by park-specific programs. This approach ensures that regional and statewide priorities are observed, but also that

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

management programs can be responsive to changing circumstances, such as the discovery of new feral animals and weeds.

Volunteer groups, including Friends of Minnamurra Rainforest and Friends of Robertson Nature Reserve, make significant contributions to protecting park values through a range of programs and activities, including bush regeneration and weed management. There is potential for existing volunteer programs to expand through enhanced volunteer recruitment and training.

Various pathogens and diseases threaten biodiversity. Infection of plants by *Phytophthora cinnamomi* (a soil-borne pathogen) and myrtle rust (a plant disease caused by the exotic fungus *Austropuccinia psidii*) are key threatening processes in New South Wales that have the potential to impact native vegetation and habitats within the parks. *Phytophthora* has not been recorded in the parks. Myrtle rust has been observed on the threatened scrub turpentine at Minnamurra Rainforest in Budderoo National Park and at Macquarie Pass National Park. Infection of frogs by amphibian chytrid, causing the disease chytridiomycosis, also a key threatening process in New South Wales, is a threat to frog populations in the parks.

The primary objectives of fire management in parks are to protect life, property, community assets and cultural heritage from adverse impacts of fire, while also managing fire regimes to maintain and enhance biodiversity.

Inappropriate fire regimes, particularly too-frequent fire, can have a significant negative impact on vegetation communities and the native animals that live within them. For example, in the heaths and woodlands of the plateau, eastern ground parrots and eastern bristlebirds are especially sensitive to fire regimes, in particular the time since fire. In response, some areas of eastern ground parrot and eastern bristlebird habitat may be managed to exclude fire and ensure they remain unburnt for long periods. In other areas, fire management will aim to develop a mosaic of fire histories to increase the complexity of ecosystems as well as minimise the likelihood of an unplanned broadscale fire, which might simplify the parks' habitats.

Threatened species management is a critical consideration for fire management, particularly in Budderoo National Park and Barren Grounds Nature Reserve, where several threatened species have complex and at times competing fire requirements. The conservation action plans for eastern bristlebird, eastern ground parrot, Carrington Falls grevillea and Carrington Falls pomaderris all recognise the important role that fire management plays in the conservation of these species. Each plan requires NPWS to develop guidance on the appropriate fire management for the species' habitat and to implement fire management consistent with that guidance.

The complex boundaries of these parks and their intersection with a multitude of neighbours makes fire management challenging. NPWS maintains cooperative arrangements with surrounding landowners and the Rural Fire Service, and is actively involved with the Illawarra, Shoalhaven and Wingecarribee bush fire management committees. Cooperative arrangements include fire planning, fuel management and information sharing.

Many threats to biodiversity – including feral animals, weeds, climate change induced flash flooding and erosion, and high-intensity wildfire – are also threats to Sydney Drinking Water Catchment water quality. When managing threats to biodiversity, NPWS will consider that some control measures, such as the application of pesticides and herbicides, may also carry risks to water quality.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Enhancing connectivity

Given the parks are located in a fragmented landscape, it is important for conservation that existing habitat connectivity is maintained and, where practicable, improved. This may be by land acquisition and voluntary conservation agreements, or through other means to maintain or develop connections between reserved lands or between parks and other naturally vegetated lands nearby.

Several threatened native mammals, including the spotted-tailed quoll, have been recorded in Macquarie Pass National Park and in either Budderoo National Park or Barren Grounds Nature Reserve. Securing a corridor connecting these reserves may assist the viability of these populations.

Two parcels of land owned by Illawarra Local Aboriginal Land Council and a block of Crown land follow the cliff line, connecting Budderoo National Park, Macquarie Pass State Conservation Area and Macquarie Pass National Park. There is potential for NPWS to work with NSW Crown Lands and the Illawarra Local Aboriginal Land Council to enhance connectivity between these parks.

Research and monitoring

A wide range of research and monitoring has been undertaken in the parks, much of it focussed on biodiversity values in Barren Grounds Nature Reserve. The parks provide great opportunities for research and monitoring given they support significant biodiversity and are located close to education and research hubs in Sydney and Wollongong. They continue to be popular sites for research and monitoring.

NPWS supports scientific and other research and monitoring in these parks to improve knowledge of their native plants and animals, especially of threatened and rare plants and animals. This can enhance the ability of park management to reduce threats and maintain and improve the biodiversity values of the parks.

Management objectives

- Maintain or improve the extent, diversity and condition of priority habitats, communities and plant and animal species.
- Minimise the risks to biodiversity associated with threats including climate change, feral animals and weeds.
- Ensure that fire management activities and fire planning protects life, property and park infrastructure, and conserves and benefits park values.
- Expand knowledge and understanding of the biodiversity of the parks and the efficacy of management programs for their protection through research, analysis and evaluation.

Strategies

- Undertake or support actions to promote the conservation and recovery of threatened species, populations and ecological communities and assets of intergenerational significance.
- Undertake programs, as guided by relevant strategies and plans, to minimise the impacts of feral animals, weeds, pathogens and disease on park values.
- Consider the potential impacts of climate change on park values and incorporate actions that build resilience into management programs.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

- Implement fire management strategies and bushfire risk management plan treatments consistent with strategic fire management planning and relevant legislation.
- Participate in strategic fire planning through the relevant bush fire management committees and emergency management committees; and maintain cooperative arrangements with local Rural Fire Service brigades, other fire authorities and surrounding landowners.
- Work cooperatively with owners of high conservation value lands adjacent to the parks to improve habitat connectivity.
- Encourage, support and where possible undertake research and monitoring to develop a greater understanding of the natural values and ecological functions of the parks.
- Support volunteer programs that protect and restore park values in priority locations.

3.3 Supporting healthy Country

The parks and the surrounding lands are within Gundungurra and Dharawal Country, the traditional Country of the Gundungurra and Wodi Wodi peoples. The parks' lands, waters, animals, plants and landscapes have traditional and contemporary significance for local Aboriginal communities. NPWS acknowledges these parks as a cultural landscape and works to protect their natural and cultural values, strengthen partnerships with Aboriginal people, recognise and support connection to Country, and support a cultural visitor experience.

Aboriginal cultural heritage values are managed consistent with the National Parks and Wildlife Act, other heritage legislation and, where practicable, in partnership with Gundungurra and Wodi Wodi people to ensure these values are managed in a culturally appropriate way.

The active involvement of Gundungurra and Wodi Wodi people in the caring for Country will help to maintain their strong connection to Country. The perspectives of Gundungurra and Wodi Wodi people will continue to be reflected in management through their participation in planning and management operations for these parks. Cultural tourism ventures led by Gundungurra and Wodi Wodi people could help enhance the experience of visitors and contribute to their understanding of these parks as a cultural landscape.

Management objectives

- Provide opportunities for Gundungurra and Wodi Wodi people to build connection to, and care for Country.
- Acknowledge, respect and protect Aboriginal cultural heritage values in the parks.
- Work towards a cooperative approach to park management with Gundungurra and Wodi Wodi people.

Strategies

- Continue to work with Gundungurra and Wodi Wodi people to support sharing of culture, where appropriate. Where possible this may include incorporating Aboriginal language, art and perspectives in interpretation, signage and naming of places.
- Enable the Aboriginal community with cultural connections to the parks to access Country to maintain, renew or develop cultural connections and practices, including cultural fire management activities and management of Aboriginal cultural heritage values and sites.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

- Work with the Aboriginal community with cultural connections to the parks to develop and implement opportunities for Aboriginal involvement in management of the park, including participation in conservation programs and park management operations.
- Work with the Aboriginal community with cultural connections to the parks to assess impacts on cultural values and sites and implement strategies to protect them.
- As opportunities arise, undertake proactive Aboriginal site appraisals and surveys to build knowledge of cultural heritage sites within the parks. Whenever possible, conduct these with Gundungurra and Wodi Wodi people and in consultation with specialists. Target sites at risk, sites where information is lacking, or sites otherwise identified by the community, and implement actions.
- Enable the Aboriginal community with cultural connections to the parks to share their knowledge and culture. This could be achieved through engagement on or involvement in park management, employment, or by providing cultural and other tours.

3.4 Providing opportunities for sustainable visitor use

The parks have a long history of recreational use dating back to the 1870s. Visitors are attracted to the parks by the spectacular scenery, particularly the dramatic cliffs and escarpments which feature well-known lookouts and waterfalls.

Budderoo National Park is one of the busiest parks on the NSW South Coast, with visitors coming to picnic, bushwalk, cycle, camp, swim and view the spectacular scenery. Macquarie Pass National Park also attracts large numbers of visitors coming to bushwalk, swim and picnic, with some visiting to abseil and canyon in Macquarie Rivulet. Visitors to Barren Grounds Nature Reserve are mostly seeking more remote bushwalking and picnicking opportunities. Most visitors to Robertson Nature Reserve enjoy a short walk in the rainforest. There are no visitor facilities in Macquarie Pass State Conservation Area.

Consistent with the management principles for national parks and nature reserves (see Appendix B), the provision of opportunities for visitors will be focused on Budderoo and Macquarie Pass national parks, rather than on Barren Grounds and Robertson nature reserves. Table 2 (in Section 4) outlines the activities allowed in the parks, including recreational activities, and any conditions on those activities.

Managing impacts

There has been a significant increase in visitors seeking out longer and more difficult day walks to more remote, picturesque sites beyond the reach of existing visitor infrastructure. The increasing number of visitors, and the changing pattern of visitor use are placing increasing pressure on park infrastructure, such as parking areas, day use areas and walking tracks.

Many existing facilities are not coping with increased pressures and are no longer meeting visitor demands. For example, parking areas at most day use areas were installed many years ago and are no longer fit for purpose. Similarly, short walking tracks to nearby sites of interest and viewing points were planned and constructed decades ago and no longer meet the demands of visitors who are creating, or 'walking in', their own informal or unplanned and unauthorised routes as they seek out more remote and picturesque sites. These unplanned and unauthorised routes have been promoted on social media and in the print and online media by third parties.

These changes are adversely impacting park values. For example, unplanned and unauthorised walking routes are damaging threatened species habitat and risk impacting Aboriginal heritage values. There are also risks associated with the use of unplanned and

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

unauthorised routes, especially those near cliff tops and waterfalls. Serious injury and deaths have occurred, and occurrences of search and rescue have increased as visitors embark on more difficult unplanned and unauthorised routes, often poorly prepared and at the wrong time of day.

The nature and severity of potential visitor impacts depend on the type, frequency and interaction of activities, visitor numbers and behaviour, the site's capacity and durability, and the sensitivity of the site's natural and cultural values. If left unmanaged, visitor use on the fragile Budderoo and Barren Grounds plateaus or on the steep moist forest areas of the escarpment has potential to disturb threatened and rare species or lead to erosion, vegetation damage and weed invasion.

Visitor access requires long-term planning and careful management to address negative impacts. Site hardening and appropriate visitor facility improvements are required in some locations to manage impacts, improve visitor safety, enhance the visitor experience, and increase the resilience, longevity and effectiveness of facilities.

Key visitor experiences

While there are many popular visitor destinations in the parks, the 3 key visitor destinations are Minnamurra Rainforest (Figure 3) and Carrington Falls (Figure 4) in Budderoo National Park; and Macquarie Pass (including Cascades and Clover Hill) (Figure 5) in Macquarie Pass National Park.

New or upgraded visitor infrastructure may be required in Budderoo and Macquarie Pass national parks in response to increasing demand. Any new infrastructure or upgrades will be of a scale and design sympathetic to the setting and be subject to detailed planning and environmental and cultural heritage impact assessment.

Details on the proposed visitor facility improvements at Minnamurra Rainforest, Carrington Falls and Macquarie Pass will be included in precinct plans, and the draft plans will be made available for community comment. Once finalised, the precinct plans will be implemented, subject to environmental and cultural heritage impact assessment and approval. If in the future significant changes to facilities are required at these locations, NPWS would update the precinct plans and consult further with the community.

A wide variety of bushwalking options are also available in the parks, including many at Minnamurra Rainforest, Carrington Falls and Macquarie Pass. There are also popular walking routes elsewhere in the parks, including the Budderoo Track in Budderoo National Park; Cooks Nose, Griffiths, Drawing Room Rocks walking tracks and Hoddles Track in Barren Grounds Nature Reserve; and the Rainforest walking track at Robertson Nature Reserve.

Minnamurra Rainforest (Budderoo National Park)

The Minnamurra Rainforest area has been a very popular tourist destination for many years. The visitor destination encompasses the busy Minnamurra Rainforest Centre, picnic area, elevated walking tracks meandering through the rainforest, and lookouts providing spectacular views of Minnamurra Falls (see Figure 3).

Minnamurra Rainforest is the most popular visitor destination in Budderoo National Park and one of 3 rainforest education centres in New South Wales. NPWS staff at Minnamurra Rainforest provide educational talks and guided walks to visitors, including large numbers of school children and bus groups.

The establishment of a kiosk, cafe or restaurant at the rainforest centre has potential to enhance the experience of visitors. The use of the centre for day-time and evening functions

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

may also be considered, subject to further consideration of traffic management issues and potential impacts on wildlife and neighbours.

NPWS will investigate the potential for an external partner or partners to provide services at the centre. If suitable, a lease or licence may be granted under the National Parks and Wildlife Act for an operator to provide a kiosk, cafe and/or restaurant within the rainforest centre.

Existing walking tracks at Minnamurra Rainforest include:

- Lyrebird loop walk – a 1.6 km loop track that starts and finishes at the rainforest centre
- Minnamurra Falls walk – a 2.6 km return walk to the Minnamurra Falls from the Lyrebird loop walk.

The elevated and hardened surfaces of these walks provide for a large number of visitors without adversely impacting the rainforest. Additional walks may be provided at Minnamurra Rainforest to supplement these existing walks, better disperse visitors and provide additional or different recreational opportunities. Additional walking tracks would provide new or different visitor experiences and cater for a more diverse array of users.

The steep terrain and small area of existing disturbance limits the amount of parking available at this site. Minnamurra Rainforest can be extremely busy on weekends and during school holidays, and the capacity of the car park is exceeded at times. Parking overflows increase congestion, cause environmental and social impacts, and can have visitor safety implications. Better access for coaches is also required. At Minnamurra Rainforest the terrain and threatened ecological communities mean there are limited opportunities to further expand parking.

Small-scale short-stay visitor accommodation, such as cabins or onsite tents, may be considered for establishment at Minnamurra Rainforest on a cleared site known as the former 'Sport and Rec site' located north of Minnamurra Falls Road near the eastern boundary of the park (see Figure 3). The site is currently used by NPWS for storage and as a helipad. It is out of the way of day visitors, is vehicle accessible, and offers remarkable views to the escarpment. Providing short-stay accommodation here would expand the range of people who come to these parks and allow guests to have a more in-depth experience, see and experience the rainforest after hours, and better appreciate and understand the park's values.

The historic Kelly's Cottage, downstream from the Minnamurra Rainforest Centre may be modified for adaptive reuse. Suitable uses include environmental education and cultural heritage interpretation. It may also be used as a base for NPWS volunteers, as an administration centre and/or as accommodation for site managers (if short-stay accommodation is established at the former Sport and Rec site). Adaptive reuse of Kelly's Cottage would require assessment of its heritage values as part of an environmental and cultural heritage approval process.

NPWS will investigate options for the establishment and management of short-stay accommodation. If accommodation is established it will be owned by NPWS but may be operated by a commercial operator under a lease or licence. If accommodation is provided at the former Sport and Rec site, a new walking track may be constructed to link it with the rainforest centre and other walks. If the Kelly's Cottage is adaptively reused, a walking track between it and the former Sport and Rec site may also be necessary.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve
and Macquarie Pass State Conservation Area draft plan of management**

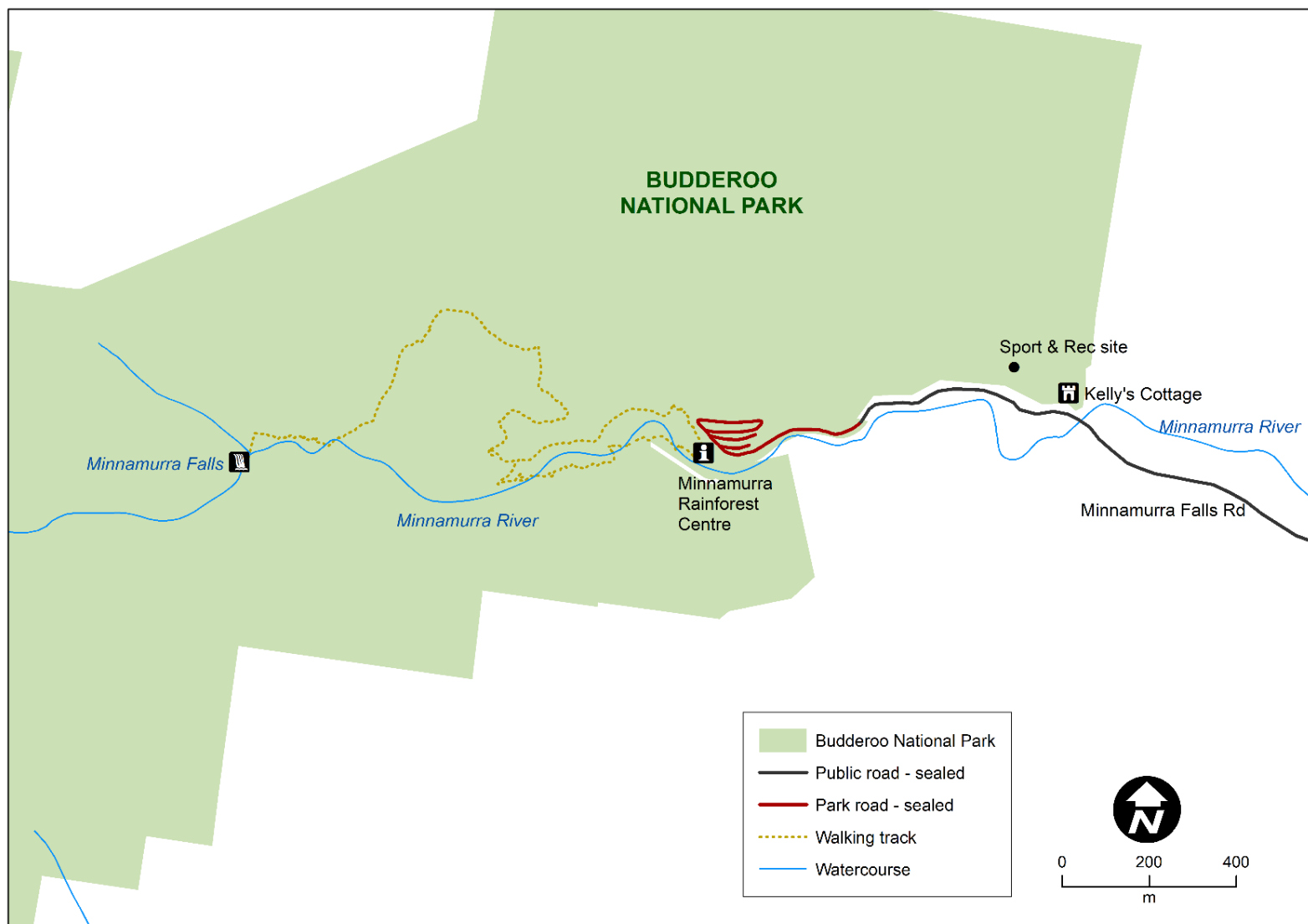


Figure 3 Existing visitor sites and facilities at Minnamurra Rainforest

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Carrington Falls (Budderoo National Park)

Some regard Carrington Falls, where the Kangaroo River plunges 90 m to the valley floor below, as the most beautiful falls on the South Coast. With its cascades, waterholes and rockpools, this the second busiest visitor site in Budderoo National Park.

The Carrington Falls visitor destination covers 3 main attractions – Blue Pool, Nellies Glen and Carrington Falls (see Figure 4). Most visitors view Carrington Falls from the visitor site known as Thomas Place. Carrington Falls offers a variety of visitor activities including scenic viewing, picnics, camping, swimming and a range of walking opportunities.

The area around Carrington Falls is particularly sensitive to disturbance. Several threatened native plants occur in this area and 2 areas at Carrington Falls have been declared as assets of intergenerational significance to protect the critically endangered Carrington Falls grevillea and the Carrington Falls pomaderris. Significant Aboriginal cultural heritage values also occur in the area. As a result of increased levels of visitor use at this site, the capacity of visitor facilities to minimise impacts on these sensitive areas is regularly exceeded.

The visitor destination of Carrington Falls is dissected by the Kangaroo River and Missingham Creek. Consequently, there are 3 separate parking areas for each of the main visitor attractions, but no primary entry point (see Figure 4). Car parks are often full, especially at Nellies Glenn where parking overflows onto the narrow approach road. This is damaging roadside vegetation and has potential to compromise visitor safety.

There are established walking tracks around Carrington Falls that provide access to suitable scenic lookouts. However, a number of additional, unplanned and unsuitable walking routes have now been established through their repeated use by visitors. These routes have been promoted through social media and third-party publications. Many users are underprepared for the significant challenges of using these routes. This is resulting in increased incidences of lost and injured visitors. Excluding visitors from unsuitable areas and providing a select number of alternate, properly planned and designed walking tracks is necessary.

Walking access between the attractions can be significantly improved, particularly between Blue Pool and Nellies Glen. Connection to Thomas Place is complicated by the need to cross the Kangaroo River above Carrington Falls. Improving walking access between the key sites will also help limit vehicle movements and allow some rationalisation of car parking areas.

A small vehicle-based camping area (Carrington Falls campground) is currently available at Blue Pool. The basic facilities provided include camp sites, picnic tables and a long drop toilet. These facilities are not meeting the demands of users. The campground is located within a riparian zone and some of its sites are periodically flooded. There is currently limited separation between campers and day users visiting Blue Pool, so the amenity of campers can be impacted. Day users drive close to the camping area to reach their parking area, which regularly overflows back into the campground. Day users also share the single long drop toilet with campers.

A precinct plan will be prepared to improve the sense of arrival, improve the walking track network, upgrade toilets, improve parking, and ensure the safe and efficient movement of people and vehicles within the precinct. The precinct plan may also guide changes to camping, day use and interpretation areas.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

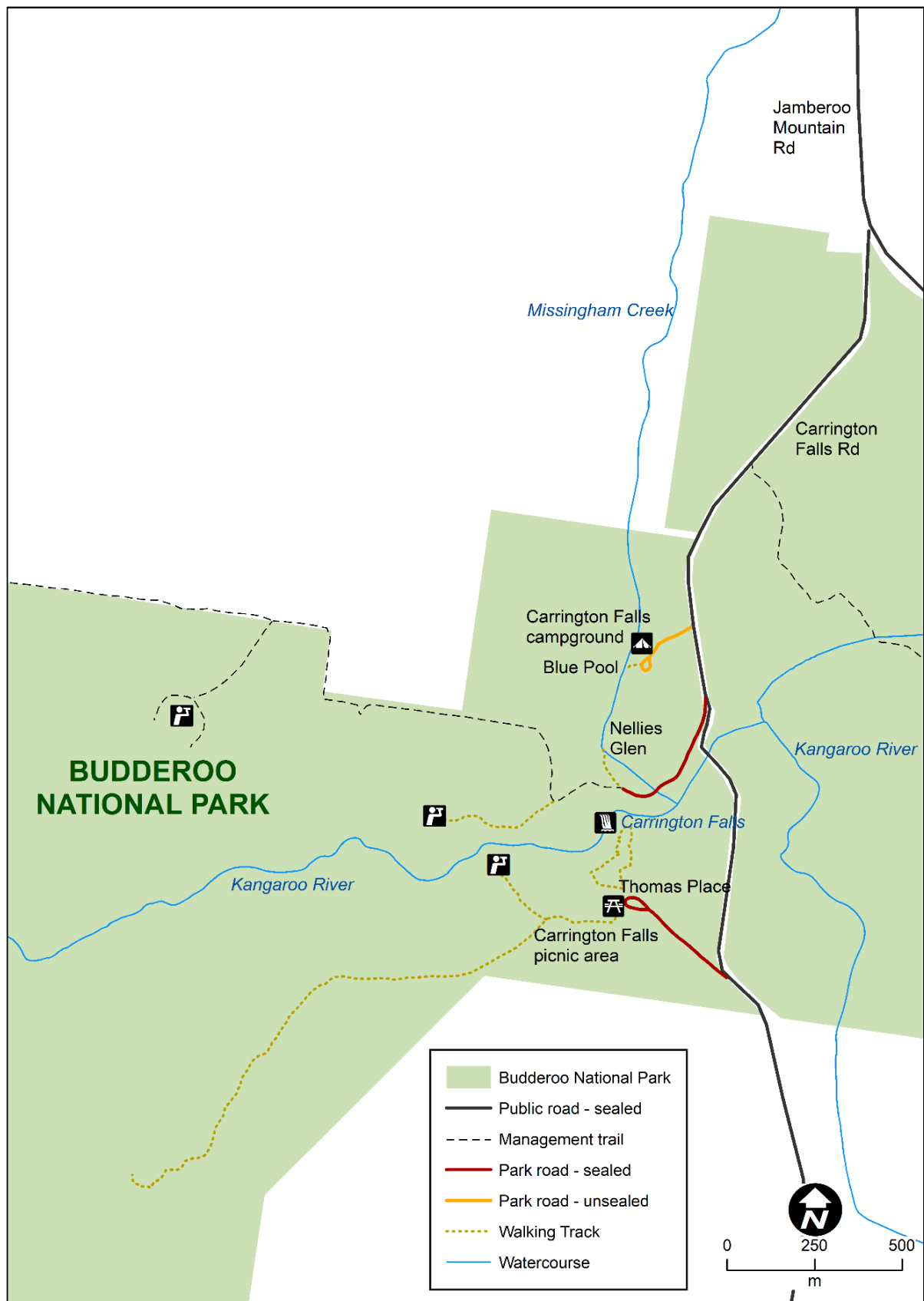


Figure 4 Existing visitor sites and facilities at Carrington Falls

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Macquarie Pass (Macquarie Pass National Park)

Macquarie Pass is the key visitor destination in Macquarie Pass National Park and includes Cascades and Clover Hill. Visitors also seek out sites on Macquarie Rivulet.

Cascades is north of the Illawarra Highway at the base of Macquarie Pass Cascades. This site consists of an open grassy picnic area and some roadside parking (Figure 6). The Cascades walk is a short, easy 2 km return walk from the picnic area through rainforest and tall eucalypt forest to the beautiful Cascade Falls.

Clover Hill is a former farm site that remains partially cleared and offers spectacular views to the surrounding escarpment. Clover Hill is accessed from the Illawarra Highway via a 3 km walk along a management trail through dense forest (Figure 6). From there, some visitors walk on to Macquarie Rivulet.

Recent years have seen significant increases in visitor numbers and changes in the types of visitor activities at Cascades and Clover Hill. The small car parks that service Cascades and Clover Hill are both located on the busy Illawarra Highway and are not coping with demand. Overflow parking spills out onto the highway verge.

Existing walking tracks are also not meeting visitor demand. Large numbers of visitors are accessing more remote sites beyond the reach of existing walking tracks and visitor facilities, especially sites such as waterfalls and swimming holes beyond Cascades Falls on Cascades walk and beyond Rainbow Falls at Clover Hill.

Visitors get to these other sites along rough, unmarked routes that have been established through repeated use by visitors, often with steep slopes and/or unstable creek banks. The rugged terrain and wet and slippery ground creates hazardous conditions. Uncontrolled access to these areas is also increasing the risk of impacts on threatened plants, such as Illawarra Irene, as well as increasing the risk of exposing and impacting Aboriginal sites.

It is proposed to establish some of these walking routes as properly planned and designed walking tracks. At Cascades, a loop track may be created using, in part, a disused logging trail to return to the car park. These developments will promote safer and more sustainable visitor use and satisfy some of the demand for longer walks to alternative destinations.

The Cascades picnic area is a large open grassy area located immediately behind the Cascades parking area. This site has some tables and functions as a day use area. Despite the Cascades walk being popular, the picnic area is underutilised. This is thought to be because it is poorly laid out and is not adequately separated from the car park, the highway or passing walkers. It is proposed to improve the amenity and functionality of this site.

Day use facilities may be provided in a cleared area at the former Clover Hill farm site. This would provide exceptional views of the surrounding escarpment and the Tasman Sea.

Visitors access the Macquarie Rivulet and creeks at Cascades. However, water depth, flow rates and temperature can vary quickly, and submerged objects and sometimes low water quality may at times make swimming in these areas hazardous. Visitors have also accessed a site outside the park on a Crown waterway known as Jump Rock via unplanned and unsuitable walking routes that have been established through repeated use by visitors. Use of this route will not be permitted due to the hazardous conditions and risk of environmental impacts to the park. The establishment of access to this area outside the park may be considered subject to resolution of risks and other site management issues.

Better walk-in access, safety and day use features may also be necessary at Rainbow Falls, on the upper reaches of Macquarie Rivulet.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

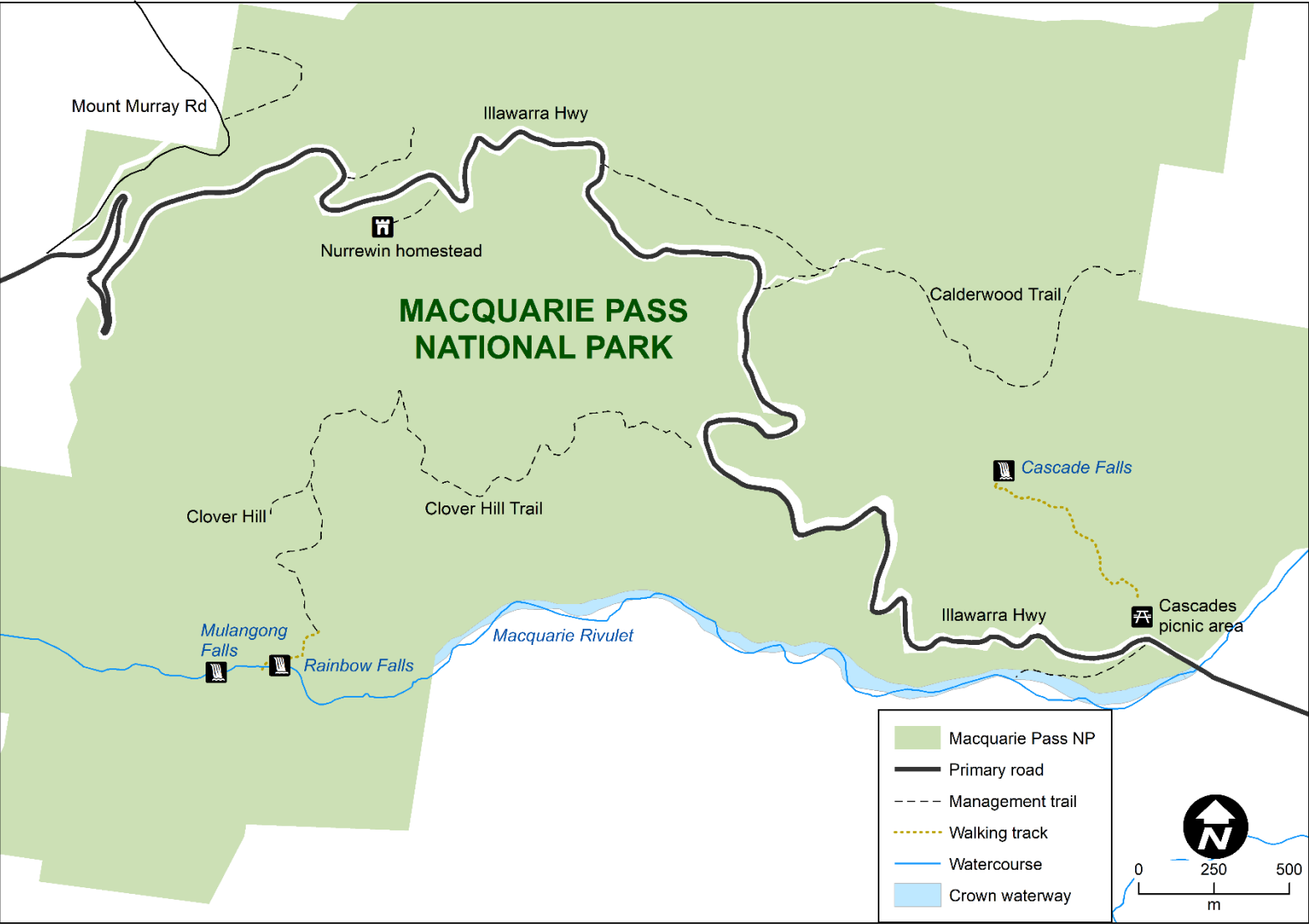


Figure 5 Existing visitor sites and facilities at Macquarie Pass

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Adventure activities including base jumping, bungee jumping, hang-gliding, parachuting, paragliding, parasailing, rock climbing, slack-lining and highlining, via ferrata and zip lining are not allowed in the parks. However, abseiling and canyoning may be permitted at Macquarie Rivulet under a consent.

Drawing Room Rocks and Hoddles Track (Barren Grounds Nature Reserve)

Drawing Room Rocks and Hoddles Track walking tracks have become increasingly popular in recent years, despite not being promoted or publicised by NPWS. Neither of these tracks adequately caters for large numbers of visitors.

Hoddles Track is an historic track from the escarpment to Kiama on the coast (see Section 3.5). The track enters the park at Saddleback Mountain from public lands managed by Kiama Municipal Council. It follows the contour beneath a cliff line then climbs the escarpment and ends at the top of the escarpment.

An extension of Hoddles Track has been proposed by walkers. However, to avoid habitat fragmentation and protect the sensitive biodiversity values of the north-eastern area of the nature reserve, this track will not be extended. NPWS will work with Kiama Municipal Council to develop appropriate signage at or near the start of the track on Saddleback Mountain.

The Drawing Room Rocks walking track provides visitors access to unusual geological features and spectacular views. There are land tenure issues complicating concerns around access and parking at the track head to Drawing Room Rocks. Incorporation of the adjoining Crown road reserve into the park may assist in the management of this site.

There are risks to walkers on Hoddles Track and Drawing Room Rocks associated with steep slopes and cliff edges. At Hoddles Track there are also risks associated with falling objects where the track follows underneath the cliff line. NPWS will continue to maintain the tracks, and observe visitor numbers, monitor environmental impacts, and assess risks at both Hoddles and Drawing Room Rocks tracks. If numbers, impacts or risks become too great, NPWS may install or upgrade infrastructure to reduce impacts and manage risks. Limitations to visitor use may also be considered through a permit system, temporary closure or permanent closure.

Waterfalls

Several unsuitable walking routes to and around waterfalls have established incrementally through their repeated use by visitors. These routes traverse hazardous terrain and are beyond the ability of many people to use them safely. NPWS may close and rehabilitate these routes.

The area around Gerringong Falls has become a popular visitor destination accessible via Budderoo Track and Hersey Fire Trail. It is approximately 9 km to the area above the falls and many people ride bicycles to this location. No facilities are currently provided at or near Gerringong Falls and visitor impacts on creek-side and cliff line vegetation are evident. Access to the base of Gerringong Falls is closed due to public risk. However, some visitors are still seeking to descend the steep slopes and access the base of the falls, which has led to multiple rescues and one serious injury. NPWS will continue to provide warning signs and restrict access to the base of the falls. NPWS may establish alternate access and viewing areas in this area.

NPWS may construct a new track or trail that provides more direct access to Gerringong Falls or construct a multi-use track for walking and cycling between the car park at the locked gate on Budderoo Track near Jamberoo Mountain Road and Hersey Fire Trail.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Pressure from increasing visitor use and changing visitor use patterns is also occurring at Belmore Falls in adjacent Morton National Park. Access to the base of Belmore Falls is closed because, as with Gerringong Falls, geotechnical reports have indicated the risk to the public is unacceptable. Tragically, 4 deaths have occurred at Belmore Falls since 2021 and NPWS is working to discourage and prevent unsafe behaviour. NPWS will continue to provide warning signs and restrict access to the top and base of Belmore Falls. NPWS may also provide alternative visitor opportunities at nearby Barrengarry Creek in Budderoo National Park to reduce pressure on overcrowded facilities and destinations at Belmore Falls. As with any new tracks and facilities in the parks, the location, design and construction of any new tracks and facilities will protect creek-side vegetation and the riparian buffer zone and minimise impacts on water quality.

Lookouts

The sheer cliffs, lookouts and waterfalls of these parks have made them popular destinations for scenic viewing for well over a century. Opportunities for scenic viewing are provided at lookouts throughout the parks. NPWS may improve these lookouts while maintaining the character of those locations. NPWS may also establish a new lookout above Macquarie Pass, accessed from Mount Murray Road. This location is easily accessible from the Illawarra Highway, would require only a short walk, could provide access for people with limited mobility, and would offer magnificent views across the escarpment and to the coast.

Long-distance walking

Advocates within the community have proposed the establishment of a long-distance walking track along the length of the Illawarra Escarpment. An alignment that traverses Budderoo and Macquarie Pass national parks and/or Macquarie Pass State Conservation Area could be contemplated subject to funding, community support and further detailed planning, including an assessment of environmental and cultural heritage impacts. An alignment that passes through Barren Grounds Nature Reserve has been proposed but is not considered to be appropriate due to risks to the significant values of this reserve.

Management objectives

- Provide a range of high-quality and appropriate visitor opportunities and experiences in the parks that are safe, sustainable and meaningful.
- Assist the community to better understand and appreciate the natural and cultural values of the parks, and the risks associated with various activities.

Strategies

- Continue to provide a range of visitor opportunities in the parks consistent with Table 2 (see Section 4).
- Prepare and implement precinct plans to guide visitor management and the provision of visitor facilities at Minnamurra Rainforest, Carrington Falls and Macquarie Pass. Seek community input on those plans before detailed design and implementation.
- Consider, and if appropriate, provide new facilities as follows:
 - new visitor facilities at or near the top of Gerringong Falls to establish a destination point
 - a new track for walking, cycling or both (multi-use track) that improves visitor access to the top of Gerringong Falls

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

- a new scenic viewing point off Mount Murray Road overlooking Macquarie Pass which could be accessible to people with a disability
- a new walking track on the former Yarrawa State Forest lands at Barrengarry Creek to link with facilities in Morton National Park.
- Identify, assess and endeavour to manage risks to visitor safety, including undertaking assessments of high-risk areas. Management responses may include closure of areas, realignment of tracks and trails, and installation of infrastructure such as safety barriers.
- Develop, install and publish a range of interpretation materials to provide park visitors and the broader community with an understanding and appreciation of the values of the parks and the potential risks associated with inappropriate use.

3.5 Protecting historic heritage

The earliest Europeans to visit the area are thought to be cedar-getters who were in the area from as early as 1805. Development of the nearby coast followed in the 1820s. Red cedars nearest the coast were harvested first, before the more remote areas of the foothills and ranges. Clashes between cedar-getters and the local Aboriginal people are recorded to have occurred.

By the mid-1840s most cedar had been removed, and many property owners then cleared the rest of their lands for grazing and cultivation. By the 1870s practically all the cedar had been cut out from the Illawarra and Shoalhaven.

The original large coastal land holdings and beyond began being subdivided in the 1880s and subdivision continues today. At Minnamurra and Macquarie Pass, numerous piles of stone remain from past track formation and paddock clearing. The remains of cobblestone roads occur near Minnamurra Falls and a stone wall in the area marks the site of an unnamed cottage occupied in the 1880s.

Kelly's Cottage

Downstream from the Minnamurra Rainforest Centre is a historic hut known as Kelly's Cottage, built by Michael Kelly Snr who was born in Ireland in 1806 and transported to Australia in 1831. He served time at Camden and Peterborough (now Shellharbour) before being released in 1836. He became a sawyer who traded in red cedar. In 1853, Mr Kelly purchased 100 acres of surveyed land adjacent to the Minnamurra River. The block was said to contain red cedar, white cedar, sassafras, gum, hickory, mountain ash, stringy bark and white wood. The Kelly's Cottage site includes 2 circa 1854 timber slab buildings – one which housed the main living rooms and the other a kitchen, later converted to a parlour. The site also includes a timber weatherboard dairy building, a very large Camelia bush, reportedly planted by Kelly, and a former orchard.

The timber slab buildings were built with local materials, mostly turpentine obtained from the property, but also river oak for verandah beams and white box for floorboards. Locally cut sandstone was also used in construction. Historically, there were many similar slab dwellings like this in the region. Kelly's Cottage is thought to be the only preserved example.

Before the road extended beyond Kelly's Cottage towards Minnamurra Falls, early tourists left their horses in the paddock at the cottage and walked upstream to view the falls.

The Kelly property was held in private ownership until 1976 when, along with neighbouring properties, it was resumed by the NSW Government as a NSW National Fitness Camp before NPWS purchased the property in 1998. The last private owner was Howard Judd, a botanist and ranger at Minnamurra Falls for nearly 30 years.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Kelly's Cottage is located on the eastern edge of Budderoo National Park, in a clearing beyond the natural rainforest vegetation. It is close to the road and has previously been subject to vandalism and removal of historic fabric. A conservation management plan was prepared for Kelly's Cottage in 2004 (Freeman et. al 2004). Kelly's Cottage is managed consistent with this conservation management plan. The conservation management plan may be reviewed and updated over the life of this plan of management.

Provided it is consistent with the conservation management plan, NPWS may adaptively reuse Kelly's Cottage, including for conservation or cultural purposes or for the provision of education, accommodation or other visitor services. Appropriate uses may include supporting education opportunities in the park, cultural heritage interpretation, as a base of NPWS volunteers or as an office and/or accommodation for managers if short-stay accommodation is established at the former Sport and Rec site.

Escarpment passes

A number of historical passes over the escarpment are known from around Budderoo, Barren Grounds and Macquarie Pass. These follow ancient tracks of Aboriginal people, who would have used them to move between the high country and the coast. Charles Throsby, an English surgeon, explorer and pioneer, began searching for a route from the highlands to the coast in 1818. However, it was not until 1830 that Europeans first ventured into the Yarrowa Brush – the dense rainforest that covered the country around what is now Robertson.

Surveyor Robert Hoddle cut a track (Hoddles Track) through the brush along the present route of the Robertson to Jamberoo Road, through Barren Grounds and down the escarpment to Saddleback Mountain above Kiama. This track was used to transport produce to Kiama for shipping. However, a better route up Jamberoo Mountain was found and much of Hoddles Track became disused. Only a small portion of Hoddles Track below the escarpment remains.

The Yarrowa Brush remained largely intact until the so-called Robertson Land Acts of 1861 allowed 'selectors' to take up Crown land. Selectors rapidly cleared the rainforest for growing vegetables, dairying and cattle raising. Most of the Yarrowa Brush had been removed by 1900. The rapid and extensive clearing may have prompted the 1884 reservation of what is now Robertson Nature Reserve for public recreation.

Nurrewin and Clover Hill

The Nurrewin property, high on the escarpment slopes at Macquarie Pass, was originally purchased in 1865 by William Roach, a farmer of Macquarie Rivulet. He sold it to the surveyor and engineer William Mann Thompson, who in 1903 built Nurrewin homestead, largely from locally sourced sandstone and hardwood. At that time wealthy Sydney residents were holidaying and spending summers at country retreats in the Southern Highlands. Tourism from the coast was also increasing after the railway line to Kiama opened in 1888 and the road to Macquarie Pass was upgraded in 1898.

Thompson may have planned to run the property as a guesthouse, but it originally operated as a family home and farm. There was an orchard with lemons, almonds, quinces, grapes and apples. Vegetables and flowers were grown, and cows, horses and poultry were kept. The property was not as profitable as Thompson had hoped and was sold in 1926.

Nurrewin then saw a succession of owners up to 1953, when the property was purchased by the Benedictine Community of New Norcia, Western Australia, who leased Nurrewin to the Dulhenty family. The Dulhentys established tea rooms and a guest house and sold fruit and vegetables from a stall at the front gate. They occupied Nurrewin for 33 years, remaining on

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

site after the property was resumed in 1969 for inclusion in the park, and continuing to lease the house and surrounding lands from NPWS until 1986.

Nurrewin homestead is a locally rare example of a substantial, well-designed and largely intact sandstone residence in an unusual location high on the escarpment. A conservation management plan was prepared for Nurrewin in 1993 (Jackson Teece and Rosen 1993). Nurrewin is managed consistent with this conservation management plan, which may be reviewed and updated over the life of this plan of management. Provided it is consistent with the conservation management plan, NPWS may adaptively reuse the property. This could be for conservation and cultural purposes, or for the provision of education, accommodation or other visitor services, including as a kiosk, cafe or restaurant. Such uses could be managed directly by NPWS or by a community group or commercial organisation under a lease or licence arrangement with NPWS.

The Thomas family commenced farming at nearby Clover Hill in 1894 and remained onsite, farming at Nurrewin until 1937 and at Clover Hill until 1950 when it was sold to Ben Turner. During his time at Clover Hill Ben Turner built a Tudor-style manor house encapsulating some huge rock formations. This house was affectionately known locally as 'Bens Folly'. When Clover Hill was resumed for Macquarie Pass National Park, Ben was allowed to stay for the remainder of his life. Following Ben's passing in 2001, the house was targeted by vandals and became structurally unsound. It was removed for public safety in 2010.

As discussed previously, a low-key walk-in destination for day visitors may be established at Clover Hill. Such a site would offer potential to interpret the history of the site and the surrounding area, including Nurrewin homestead.

Other historic visitor sites

The Minnamurra Falls have been visited from the early 1800s and the area became a popular picnic spot from the 1870s. A walking track to the falls was constructed in the late 1800s and other visitor facilities, including rest spots, bridges, toilets and a kiosk, were constructed by Jamberoo Council during a 1930s unemployment relief program. Barren Grounds has been popular for bushwalking since the late 1800s and Robertson Nature Reserve has long been used as a local recreation area.

Management objective

- Acknowledge, understand and protect historic heritage in the parks.

Strategies

- Protect historic heritage items consistent with their assessed significance.
- Prepare, implement and/or revise conservation management plans or heritage asset action plans for historic heritage sites as required.
- Investigate options for the adaptive reuse of buildings, including heritage buildings, and structures in the parks, and implement where appropriate.
- Provide onsite and web-based interpretation of the history of the key recreation sites.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

3.6 Infrastructure and services

Park management infrastructure and services

Park management infrastructure is required to protect park values, provide opportunities for visitors and to facilitate management operations and emergency response. Park management infrastructure includes park roads and management trails, car parks, walking tracks and lookouts, day use areas, a camping area, water mains and sewers, buildings providing visitor services, helicopter landing facilities, NPWS work locations and associated storage.

NPWS assets and infrastructure are managed and maintained through the NPWS Asset Management System. This system provides for delivering, maintaining and replacing NPWS assets necessary to support safe and sustainable visitor experiences and park management operations, and to minimise impacts on park values. Park infrastructure may be upgraded as necessary.

Access to some parts of the parks traverses adjacent lands owned and managed by other authorities or private individuals. Reserve access strategies have been prepared for the parks and are being implemented as opportunity allows. These strategies establish the status of all existing public and management accesses and identify options for securing this access where security is uncertain.

Roads and trails

Public roads provide access to many park entry points and several key locations within the parks. Public roads are maintained by local councils, except for the Illawarra Highway which is maintained by Transport for NSW. The road reserve covering the upper section of the Illawarra Highway, located within Macquarie Pass National Park, will be realigned to follow the physical road and provide adequate area for maintenance of the road. NPWS will seek to transfer the realigned road reserve to Transport for NSW.

Beyond the public roads, sealed and unsealed park roads, maintained by NPWS, provide public access to many other destinations in the parks (see Figure 1). Park roads may be subject to temporary or partial closures and realignments for visitor safety reasons or to protect park values.

Management trails in the parks provide access for management operations such as fire management, weed control, feral animal control, maintenance of park facilities and services, and search and rescue activities. As well as providing for management access, management trails may be used by visitors for walking and, except at Barren Grounds Nature Reserve, for cycling.

Vehicle use of management trails is only available for purposes authorised by NPWS. They may be gated to prevent vehicle use other than for park management and other authorised purposes.

Some of the management trails in the parks are identified as strategic or tactical fire trails under the *Rural Fires Act 1997*. Bush fire management committee fire access and fire trail plans, which identify access requirements for fire suppression and management purposes, include NPWS-managed lands. The fire access and fire trail program involves maintaining, renewing and upgrading fire trails and the associated fire trail infrastructure to ensure they meet the statewide fire trail standards set under the *Rural Fires Act*.

When implementing works to maintain trails at the prescribed fire trail standards, NPWS will ensure these works are carried out in a manner that minimises impacts on the parks' natural

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

and cultural heritage values. Fire access and fire trail plans may also identify the need for new fire trails in the parks. Any new fire trails must be consistent with the approved fire access and fire trail plans and be subject to appropriate heritage and environmental impact assessment. As far as practicable, they will be on alignments that minimise impacts to park values.

Unsealed roads and impervious surfaces, including sealed roads and car parks, can present risks to water quality. The application of water-sensitive design principles in the design and maintenance of roads will reduce this risk. Temporary trails created in emergency situations, and where there is no prudent alternative (for example during wildfire control), will be rehabilitated as soon as practical after the incident. Management trails no longer required for park management purposes may be reduced in width and designated for recreation (for example for walking or cycling) or closed and revegetated.

Non-park infrastructure and services

The parks contain infrastructure and other assets owned and operated by other organisations or individuals and not related to the use or management of the parks. This includes electricity transmission lines, telecommunication towers and weather stations. Access will continue to be provided for the use, operation and maintenance of authorised infrastructure.

All non-NPWS infrastructure and use of the parks by third parties requires authorisation under the National Parks and Wildlife Act to lawfully occupy and use the land. This authorisation is managed by leases, licences, easements and other access agreements. These instruments define the minimum requirements for ensuring the protection of the natural and cultural values of the parks.

New infrastructure may only be constructed on the parks pursuant to authorisation under the National Parks and Wildlife Act. New infrastructure proposals would be required to demonstrate that there is no feasible alternative site outside of the parks.

NPWS will seek removal of redundant infrastructure and revegetation of disturbed sites and access roads that are no longer required, except where environmental and cultural heritage impact assessment or other considerations justify leaving them in situ.

There are inholdings of non-NPWS land within the parks where a route through a park provides the only feasible access. NPWS will facilitate access across NPWS land to these properties in accordance with the National Parks and Wildlife Act. The transport of stock or animals on such routes may be permitted.

Management objectives

- Provide and maintain park management infrastructure to adequately service park management needs, facilitate quality visitor experiences, and minimise impacts on park values.
- Minimise impacts on park values from non-park or third-party infrastructure and services.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Strategies

- Implement the reserve access strategies to secure park access for public and management purposes.
- Identify and rectify park boundary errors, boundary encroachments and proposed boundary adjustments in accordance with the National Parks and Wildlife Act as opportunity allows.
- Establish and maintain the fire trail network consistent with approved fire access and fire trail plans and prescribed standards.
- Ensure all approved non-NPWS uses and occupancies of NPWS land are authorised in accordance with the National Parks and Wildlife Act.
- Seek removal and site rehabilitation by the relevant owner and operator of obsolete or disused infrastructure.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

4. Park specific management policies

All operations undertaken in the park must be consistent with this plan including the park specific policies summarised in Table 2 below.

Table 2 Park specific management policies

Activity/operation	Allowed	Park specific management policy
Visitor activities		
Use of barbecues and portable stoves	Yes	Portable gas barbecues and liquid fuel stoves will be allowed in the camping area and in day use areas. Solid fuel fires will not be allowed in the parks. All fires may be restricted by a parkwide or total fire ban.
Bushwalking	Yes	Off-track walking will not be allowed in the nature reserves or at Minnamurra Rainforest, Carrington Falls, Macquarie Pass or Gerringong Falls. This is to manage impacts on sensitive ecosystems and natural and cultural values; and limit risks to visitors associated with steep, slippery and unstable ground and cliffs.
Camping	Yes	Camping will only be allowed at designated sites.
Cycling	Yes	Cycling will be allowed on park roads and management trails, except at Barren Grounds Nature Reserve where cycling will not be allowed on management trails. Cycling is not allowed on walking tracks or off-trail.
Dog walking	No	Domestic animals are not allowed in NSW national parks and reserves. A person may be accompanied by their trained assistance animal provided they meet the requirements of proof and other conditions set out in the NPWS <i>Pets in parks policy</i> .
Drones and model aeroplanes	No	Recreational use of drones and model aeroplanes will not be allowed. This protects the experience and privacy of other visitors and limits impacts on wildlife. Consent may be issued for non-recreational drone use, such as for park management, research or for commercial filming and photography.
Fossicking	No	Will not be allowed.
Horse riding	No	Will not be allowed.
Non-commercial events, functions and group gatherings	Yes	Consent is required for non-commercial group events, functions and gatherings (such as family groups, school groups) of greater than 40 people in the national parks or of greater than 15 people in the nature reserves. Consent will not be granted for events, functions or group gatherings in the state conservation area.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Activity/operation	Allowed	Park specific management policy
		Organised public events of any size (such as public ceremonies, and club and sporting events) require consent.
Public access	Yes	Seasonal or temporary restrictions on public access may be applied throughout the parks. Minnamurra Rainforest is closed overnight for general public access. Some public access may be permitted after hours with consent.
Swimming	Yes	Swimming will not be allowed at Minnamurra Rainforest to protect water quality for downstream users.
Vehicle access (including motorbikes)	Yes	Registered vehicles are allowed on public roads and park roads. Roads may be temporarily closed to prevent damage during wet weather, for maintenance or in support of management activities. Vehicles (including motorbikes, quad bikes and all-terrain vehicles) will not be allowed on management trails, off-road or on walking tracks, except for management purposes.
Wood fires	No	Will not be allowed.
Risk-based visitor activities		
Abseiling and canyoning	Yes	Abseiling and canyoning will only be allowed under consent at Macquarie Rivulet in Macquarie Pass National Park. No permanent fixtures may be left in the park. Participants in these activities are solely responsible for their own safety. The maximum group size for abseiling and canyoning will be 8 people.
Other risk-based activities	No	Other risk-based activities will not be permitted. Other risk-based activities include (but are not limited to) the following: base jumping, bungee jumping, hang-gliding, parachuting, paragliding, parasailing, rock climbing, slack-lining and highlining, via ferrata and zip lining.
Visitor facility development		
New or upgraded visitor facilities and infrastructure	Yes	New or upgraded visitor facilities and infrastructure may be established at Minnamurra Rainforest, Carrington Falls, Macquarie Pass, Barrengarry Creek, Gerringong Falls and Mount Murray Road.
Adaptive reuse of existing buildings	Yes	Confined to Nurrewin homestead and Kelly's Cottage. Nurrewin homestead may be adaptively reused for suitable purposes including to provide education or interpretation, as a kiosk, cafe or restaurant, or to provide accommodation. Kelly's Cottage may be adaptively reused for suitable purposes, including providing education or cultural heritage interpretation, serving as a base for volunteers, functioning as an office, or offering accommodation.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Activity/operation	Allowed	Park specific management policy
New buildings for accommodation	Yes	Confined to the former Sport and Rec site at Minnamurra Rainforest.
Park management infrastructure and management of utilities		
New park management infrastructure	Yes	Management trails and other infrastructure associated with management of the parks may be established after appropriate assessments and approval.
Development of utilities infrastructure	Yes	Development of utility infrastructure that is in the public interest and consistent with the provisions of the National Parks and Wildlife Act may be approved. Any proposals would be subject to necessary assessments and confirmation that alternative locations outside the parks are not feasible.
Access to and maintenance of utilities infrastructure	Yes	Access to and maintenance of utility infrastructure may be authorised in accordance with the National Parks and Wildlife Act and any other necessary approvals.
Research and monitoring		
Research and monitoring	Yes	Research may be undertaken with consent. Additional permissions may be required under other legislation.
Commercial activities		
Accommodation	Yes	Visitor accommodation may be constructed at the former Sport and Rec site at Minnamurra Rainforest. Kelly's Cottage may be adaptively reused, including to provide accommodation for managers to support any new accommodation at Minnamurra Rainforest. Nurrewin homestead may be adaptively reused, including for visitor accommodation. Any accommodation businesses would be owned by NPWS, but commercial services may be engaged to operate them or support their operation.
Kiosk/cafe/restaurant	Yes	Facilities for a kiosk, cafe or restaurant are in place within the Minnamurra Rainforest Centre. Establishment and operation of an additional kiosk, cafe or restaurant may be undertaken in existing buildings at Nurrewin. Operation of a kiosk, cafe or restaurant at either of these locations would occur under a lease or licence. The operation of mobile vendors under a licence may also be considered and approved.
Filming and photography	Yes	Commercial filming and photography may be approved through a consent.
Commercial educational/recreational activities and tours	Yes	Commercial tours, recreational and educational activities may be allowed under a licence. A group size limit of 8 applies to abseiling and canyoning activities.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Activity/operation	Allowed	Park specific management policy
Commercial events, functions and other services	Yes	Commercial events, functions and other services provided for a fee (including mobile food vendors, transport services and celebrants) may be allowed under a consent or licence.
Extractive industries		
Exploration, mining and petroleum/gas production	Yes	Exploration, mining and petroleum/gas production may be authorised in Macquarie Pass State Conservation Area under a consent after all necessary environmental and cultural heritage impact assessments, and all necessary approvals under other relevant legislation. These activities are not allowed elsewhere in the planning area.

Appendices

Appendix A: Objects of the *National Parks and Wildlife Act 1974*

The objects of the Act, set out in section 2A are:

- a. The conservation of nature, including, but not limited to, the conservation of—
 - i. habitat, ecosystems and ecosystem processes, and
 - ii. biological diversity at the community, species and genetic levels, and
 - iii. landforms of significance, including geological features and processes, and
 - iv. landscapes and natural features of significance including wilderness and wild rivers,
- b. the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to—
 - i. places, objects and features of significance to Aboriginal people, and
 - ii. places of social value to the people of New South Wales, and
 - iii. places of historic, architectural or scientific significance,
- c. fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation,
- d. providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation.

Budderoo National Park, Macquarie Pass National Park, Barren Grounds Nature Reserve and Robertson Nature Reserve and Macquarie Pass State Conservation Area draft plan of management

Appendix B: Management principles

National parks

The management principles for national parks, as set out in section 30E of the National Parks and Wildlife Act are:

- (a) the conservation of biodiversity, the maintenance of ecosystem function, the protection of geological and geomorphological features and natural phenomena and the maintenance of natural landscapes,
- (b) the conservation of places, objects, features and landscapes of cultural value,
- (c) the protection of the ecological integrity of one or more ecosystems for present and future generations,
- (d) the promotion of public appreciation and understanding of the national park's natural and cultural values,
- (e) provision for sustainable visitor or tourist use and enjoyment that is compatible with the conservation of the national park's natural and cultural values,
- (f) provision for the sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to the conservation of the national park's natural and cultural values,
- (fa) provision for the carrying out of development in any part of a special area (within the meaning of the *Hunter Water Act 1991*) in the national park that is permitted under section 185A having regard to the conservation of the national park's natural and cultural values,
- (g) provision for appropriate research and monitoring.

Nature reserves

The management principles for nature reserves, as set out in section 30J of the National Parks and Wildlife Act are:

- (a) the conservation of biodiversity, the maintenance of ecosystem function, the protection of geological and geomorphological features and natural phenomena
- (b) the conservation of places, objects, features and landscapes of cultural value,
- (c) the promotion of public appreciation, enjoyment and understanding of the nature reserve's natural and cultural values,
- (d) provision for appropriate research and monitoring,
- (d) provision for the carrying out of development in any part of a special area (within the meaning of the *Hunter Water Act 1991*) in the nature reserve that is permitted under section 185A having regard to the conservation of the nature reserve's natural and cultural values.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

State conservation areas

The management principles for state conservation areas, as set out in section 30G of the National Parks and Wildlife Act are:

- (a) the conservation of biodiversity, the maintenance of ecosystem function, the protection of natural phenomena and the maintenance of natural landscapes,
- (b) the conservation of places, objects and features of cultural value,
- (c) provision for the undertaking of uses permitted under other provisions of this Act in such areas (including uses permitted under section 47J) having regard to the conservation of the natural and cultural values of the state conservation area,
- (ca) provision for the carrying out of development in any part of a special area (within the meaning of the *Hunter Water Act 1991*) in the state conservation area that is permitted under section 185A having regard to the conservation of the natural and cultural values of the state conservation area,
- (d) provision for sustainable visitor or tourist use and enjoyment that is compatible with the conservation of the state conservation area's natural and cultural values and with uses permitted under other provisions of this Act in such areas,
- (e) provision for the sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to the conservation of the state conservation area's natural and cultural values and with uses permitted under other provisions of this Act in such areas,
- (f) provision for appropriate research and monitoring.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Appendix C: Threatened plants and ecological communities

Table 3 Threatened native plants recorded or observed in the parks

Common name	Scientific name	BC Act status	EPBC Act status
Carrington Falls grevillea	<i>Grevillea rivularis</i>	CE	CE
Carrington Falls pomaderris	<i>Pomaderris walshii</i>	CE	CE
Deane's boronia	<i>Boronia deanei</i>	V	V
Illawarra Irene	<i>Irenepharsus trypherus</i>	E	E
Illawarra socketwood	<i>Daphnandra johnsonii</i>	E	E
Illawarra zieria	<i>Zieria granulata</i>	E	E
Kangaloon sun orchid	<i>Thelymitra kangaloonica</i>	CE	CE
Scrub turpentine	<i>Rhodamnia rubescens</i>	CE	CE
White-flowered wax plant	<i>Cynanchum elegans</i>	E	E
Waterfall greenhood orchid	<i>Pterostylis pulchella</i>	V	V
–	<i>Persoonia oxycoccoides</i>	E	E
–	<i>Solanum celatum</i>	E	E

BC Act = *Biodiversity Conservation Act 2016*; EPBC Act = *Environment Protection and Biodiversity Conservation Act 1999*; CE = critically endangered; E = endangered; V = vulnerable

Table 4 Threatened ecological communities known or likely to occur in the parks

Community	BC Act status
Coastal upland swamp in the Sydney Basin Bioregion	E
Illawarra lowlands grassy woodland in the Sydney Basin Bioregion	E
Illawarra subtropical rainforest in the Sydney Basin Bioregion	E
Robertson basalt tall open forest in the Sydney Basin and South Eastern Highlands Bioregions	CE
Robertson rainforest in the Sydney Basin Bioregion	E
Southern Highlands shale woodlands in the Sydney Basin Bioregion	E
Southern Highlands shale forest and woodland in the Sydney Basin Bioregion	E

BC Act = *Biodiversity Conservation Act 2016*; EPBC Act = *Environment Protection and Biodiversity Conservation Act 1999*; CE = critically endangered; E = endangered

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Appendix D: Threatened native animals

Table 5 Threatened native animals recorded or observed in the parks

Common name	Scientific name	Parks	BC Act status	EPBC Act status
Frogs				
Giant burrowing frog	<i>Heleioporus australiacus</i>	BNP, BGNR, MPNP	V	V
Stuttering frog	<i>Mixophyes balbus</i>	BNP, MPNP	E	V
Watson's tree frog	<i>Litoria watsoni</i>	BNP, BGNR	E	E
Birds				
Barking owl	<i>Ninox connivens</i>	BNP, BGNR	V	Not listed
Black falcon	<i>Falco subniger</i>	BGNR	V	Not listed
Dusky woodswallow	<i>Artamus cyanopterus cyanopterus</i>	BNP, BGNR	V	Not listed
Eastern bristlebird	<i>Dasyornis brachypterus</i>	BNP, BGNR	E	E
Eastern ground parrot	<i>Pezoporus wallicus wallicus</i>	BNP, BGNR	V	Not listed
Flame robin	<i>Petroica phoenicea</i>	BNP, BGNR	V	Not listed
Gang-gang cockatoo	<i>Callocephalon fimbriatum</i>	BNP, BGNR, MPNP	V	Not listed
Glossy black-cockatoo	<i>Calyptorhynchus lathami</i>	BGNR, BNP	V	Not listed
Little eagle	<i>Hieraaetus morphnoides</i>	BNP, BGNR	V	Not listed
Little lorikeet	<i>Glossopsitta pusilla</i>	BNP, BGNR	V	Not listed
Masked owl	<i>Tyto novaehollandiae</i>	MPNP	V	Not listed
Olive whistler	<i>Pachycephala olivacea</i>	BNP, BGNR, MPNP	V	Not listed
Powerful owl	<i>Ninox strenua</i>	BNP, BGNR, MPNP	V	Not listed
Scarlet robin	<i>Petroica boodang</i>	BNP, BGNR	V	Not listed
Sooty owl	<i>Tyto tenebricosa</i>	BNP, BGNR, MPNP, MPSCA	V	Not listed
Spotted harrier	<i>Circus assimilis</i>	BNP, BGNR	V	Not listed
Square-tailed kite	<i>Lophoictinia isura</i>	BNP, BGNR	V	Not listed
Swift parrot	<i>Lathamus discolor</i>	BNP, BGNR	E	CE
Turquoise parrot	<i>Neophema pulchella</i>	BNP, BGNR	V	Not listed
Varied sittella	<i>Daphoenositta chrysoptera</i>	BNP, BGNR	V	Not listed
White-bellied sea-eagle	<i>Haliaeetus leucogaster</i>	BGNR	V	Not listed

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

Common name	Scientific name	Parks	BC Act status	EPBC Act status
Mammals				
Eastern false pipistrelle	<i>Falsistrellus tasmaniensis</i>	BNP	V	Not listed
Eastern pygmy possum	<i>Cercartetus nanus</i>	BNP, BGNR	V	Not listed
Grey-headed flying-fox	<i>Pteropus poliocephalus</i>	BNP, BGNR	V	V
Koala	<i>Phascolarctos cinereus</i>	BNP, MPNP	V	E
Large bent-winged bat	<i>Miniopterus orianae oceanensis</i>	BNP, BGNR	V	Not listed
Large-eared pied bat	<i>Chalinolobus dwyeri</i>	BNP, BGNR	V	V
Long-nosed potoroo	<i>Potorous tridactylus</i>	BNP, BGNR, MPNP	V	V
Southern brown bandicoot	<i>Isoodon obesulus obesulus</i>	BNP, MPNP	E	E
Southern greater glider	<i>Petauroides volans</i>	BNP, BGNR, MPNP	E	E
Southern myotis	<i>Myotis macropus</i>	BNP	V	Not listed
Spotted-tailed quoll	<i>Dasyurus maculatus</i>	BNP, BGNR, MPNP, MPSCA	V	E

Records from BioNet Atlas, NPWS *Highlands Area Biodiversity Action Plan 2010* (NPWS internal document), and staff observations.

BNP = Budderoo National Park; BGNR = Barren Grounds Nature Reserve; MPNP = Macquarie Pass National Park; MPSCA = Macquarie Park State Conservation Area.

BC Act = *Biodiversity Conservation Act 2016*; EPBC Act = *Environment Protection and Biodiversity Conservation Act 1999*; CE = critically endangered; E = endangered; V = vulnerable.

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

References

DCCEEW (NSW Department of Climate Change, Energy, the Environment and Water) (2024) '[NSW biodiversity outlook report 2024](#)', DCCEEW, Parramatta.

DPI (2012) [Fitzroy Falls spiny crayfish \(Euastacus dharawalus\) factsheet](#), Department of Primary Industries, Port Stephens.

DPI (2023) '[NSW invasive species plan 2023–2028](#)', Department of Primary Industries, Orange.

Jackson Teece and Sue Rosen Pty Ltd (1993) 'Conservation Plan, Nurrewin, Macquarie Pass National Park' [unpublished report to NPWS], Jackson Teece Chesterman Willis Consultants Pty Ltd, Millers Point, Sydney.

Freeman P Pty Ltd, O'Keefe D, Robinson M and Grant M (2004) 'Kelly's Cottage Precinct, Budderoo National Park, Conservation Management Plan' [unpublished report to NPWS].

OEH (NSW Office of Environment and Heritage) (2010) '[NSW threat abatement plan: predation by the red fox \(*Vulpes vulpes*\)](#)', OEH, Sydney.

WaterNSW (2022) '[Neutral or beneficial effect on water quality assessment guideline](#)', WaterNSW, Parramatta.

More information

- [AdaptNSW](#)
- [Assets of intergenerational significance](#)
- [Biodiversity Conservation Program](#)
- [Collaborative Australian Protected Area Database 2022](#)
- [Developing a new model for Aboriginal joint management of national parks](#)
- [Map of planning area](#) (at A3 scale with additional detail) (PDF 518KB)
- [National Parks and Wildlife Service \(NPWS\) website](#)
- [NSW Department of Climate Change, Energy, the Environment and Water](#)
- [NPWS fire management strategies](#)
- [NPWS park policies](#)
- [Zero extinctions – threatened species framework](#)

**Budderoo National Park, Macquarie Pass National Park, Barren Grounds
Nature Reserve and Robertson Nature Reserve and Macquarie Pass State
Conservation Area draft plan of management**

© 2025 State of NSW and Department of Climate Change, Energy, the Environment and Water

With the exception of photographs, the State of NSW and Department of Climate Change, Energy, the Environment and Water (the department) are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required to reproduce photographs.

Learn more about our copyright and disclaimer at www.environment.nsw.gov.au/copyright

Cover photo: Carrington Falls, Budderoo National Park. Michael Van Ewijk/DCCEEW

Published by:

Environment and Heritage
Department of Climate Change,
Energy, the Environment and Water
Locked Bag 5022, Parramatta NSW 2124
Phone: +61 2 9995 5000 (switchboard)
Phone: 1300 361 967 (Environment and Heritage enquiries)
TTY users: phone 133 677, then ask for 1300 361 967
Speak and listen users: phone 1300 555 727, then ask for 1300 361 967
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

ISBN 978-1-76186-043-0
EH 2025/0368
November 2025



Find out more about your environment at:

environment.nsw.gov.au