NSW GOVERNMENT
Environment, Climate Change & Water
National Parks & Wildlife Service

Belford National Park

Plan of Management

BELFORD NATIONAL PARK
PLAN OF MANAGEMENT

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

December 2010

This plan of management was adopted by the Minister for Climate Change and the Environment on 31st December 2010.

Acknowledgements

The NSW National Parks and Wildlife Service (NPWS) acknowledges that Belford National Park is in the traditional country of the Wonnarua people.

This plan of management is based on a draft plan prepared by staff of the Central Coast Hunter Range Region of the NPWS, part of the Department of Environment, Climate Change and Water.

Photograph of Hunter Lowland Red Gum Forest in Belford National Park by Richard Harris, NPWS.

For additional information or any inquiries about this park or this plan of management, contact the NPWS Hunter Range Area Office, 2156 Putty Road BULGA NSW 2330, or by telephone on 02 6574 5555 or email: bulga@environment.nsw.gov.au

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FOREWORD

Belford National Park is located between Maitland and Singleton and has an area of 294 hectares.

Belford National Park protects a significant stand of remnant vegetation on the Hunter Valley floor, including two endangered ecological communities which are regionally significant and poorly reserved. It also provides habitat for eight threatened fauna species and other species of regional significance, including several migratory birds.

Belford National Park is part of the traditional country of the Wonnarua Aboriginal people and prior to reservation as a national park was Belford State Forest.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park. A draft plan of management for Belford National Park was placed on public exhibition from 19th October 2009 until 18th January 2010. The submissions received were carefully considered before adopting this plan.

The plan contains a number of actions to achieve the State Plan priority to "Protect native vegetation, biodiversity, land, rivers and coastal waterways", including monitoring of surface water runoff and erosion of creek lines, undertaking weed and pest control programs, protecting mature trees, and encouraging research and further fauna surveys.

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

Frank Sartor MP
Minister for Climate Change and the Environment

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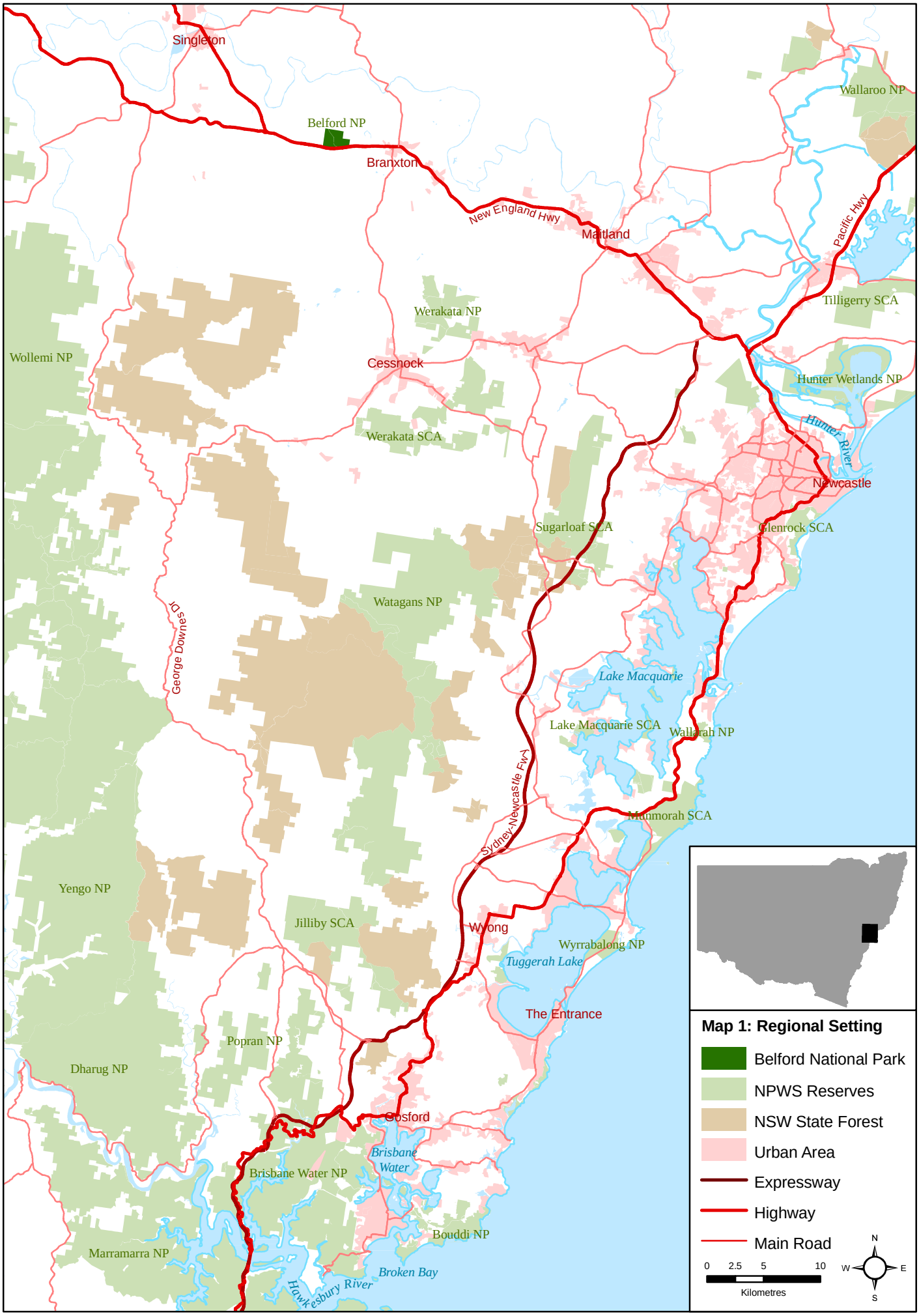
Belford National Park (called 'the reserve' in this plan) is located on the floor of the Hunter Valley 5 kilometres west of Branxton, along the New England Highway between Maitland and Singleton (Map 1). The reserve consists of 294 hectares of isolated forest bounded in the north, east and west by freehold land mainly used for grazing, and to the south by the New England Highway.

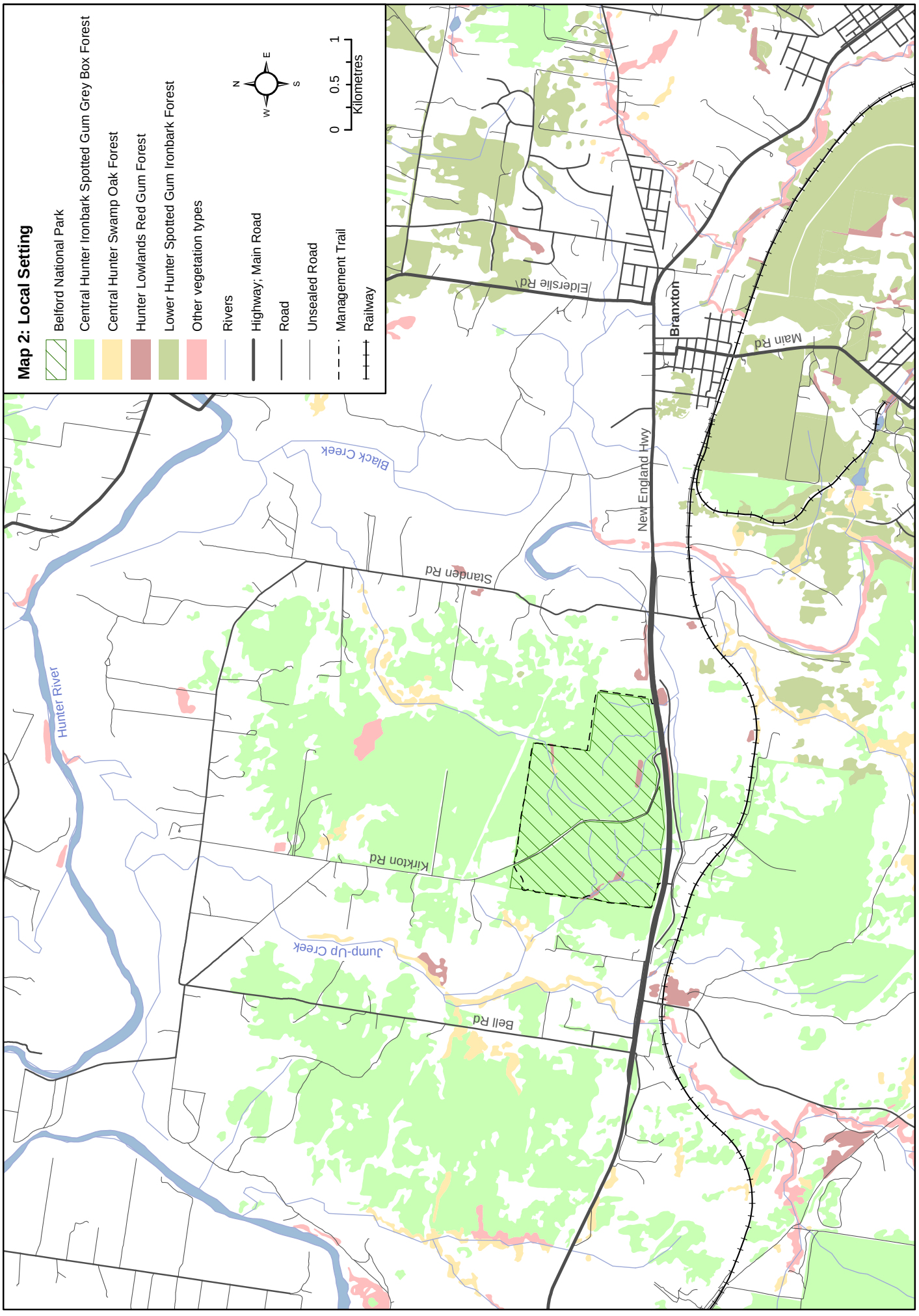
Belford National Park was formerly Belford State Forest and was gazetted as National Park in 2003 under the *National Park Estate (Reservations) Act 2002*, an outcome of the Lower North East Regional Forest Agreement 2000.

The reserve protects a significant stand of remnant vegetation on the predominantly cleared Hunter Valley floor, and contains significant threatened species habitat and vegetation communities which are poorly conserved in the reserve system.

The reserve is situated within the administrative areas of Singleton Shire Council, the Hunter-Central Rivers Catchment Management Authority (CMA), Mid Coast Livestock Health and Pest Authority (formerly Hunter Rural Lands Protection Board) and the Wanaruah Local Aboriginal Land Council (LALC).

Belford National Park is zoned as Zone 7 (Environment Protection) in the Singleton Local Environmental Plan 1996.


Singleton
Belford NP
Branxton
New England Hwy
Maitland
Wallaroo NP
Pacific Hwy
Tilligerry SCA
Werakata NP
Wollemi NP
Cessnock
Hunter Wetlands NP
Hunter River
Werakata SCA
Newcastle
Sugarloaf SCA
Glenrock SCA
George Downes Dr
Watagans NP
Lake Macquarie
Lake Macquarie SCA
Wallarah NP
Sydney-Newcastle Fwy
Munmorah SCA
Yengo NP
Jilliby SCA
Wyong
Wyrrabalong NP
Tuggerah Lake
The Entrance
Popran NP
Dharug NP
Gosford
Brisbane Water
Brisbane Water NP
Bouddi NP
Marramarra NP
Broken Bay
Hawkesbury River
Map 1: Regional Setting
Belford National Park
NPWS Reserves
NSW State Forest
Urban Area
Expressway
Highway
Main Road
0 2.5 5 10
Kilometres
N
W
E
S


Map 2: Local Setting
Belford National Park
Central Hunter Ironbark Spotted Gum Grey Box Forest
Central Hunter Swamp Oak Forest
Hunter Lowlands Red Gum Forest
Lower Hunter Spotted Gum Ironbark Forest
Other vegetation types
Rivers
Highway; Main Road
Road
Unsealed Road
Management Trail
Railway
N
E
S
W
0
0.5
1
Kilometres
Hunter River
Black Creek
Standen Rd
New England Hwy
Branxton
Elderslie Rd
Main Rd
Kirkton Rd
Jump-Up Creek
Bell Rd

2 MANAGEMENT CONTEXT

2.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of national parks in NSW is in the context of the legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act), the NPW Regulation, *Threatened Species Conservation Act 1995* (TSC Act), and the policies of the National Parks and Wildlife Service (NPWS).

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

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

2.2 MANAGEMENT PURPOSES AND PRINCIPLES

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

Under the Act (section 30E), national parks are managed to:

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

2.3 STATEMENT OF SIGNIFICANCE

Belford National Park is considered to be of significance for its biological values. It contains:

- Remnant vegetation on the predominantly cleared Hunter Valley floor
- Central Hunter Ironbark – Spotted Gum – Grey Box Forest endangered ecological community, which is regionally significant, poorly reserved and threatened by clearing
- Central Hunter Swamp Oak Forest which is regionally significant, restricted, and poorly reserved
- Hunter Lowlands Red Gum Forest endangered ecological community, which is regionally significant, poorly conserved and threatened by clearing
- Threatened and regionally significant flora and fauna

2.4 SPECIFIC MANAGEMENT DIRECTIONS

In addition to the general objectives of management, the following specific objectives apply in the management of Belford National Park:

- To manage the reserve as an IUCN Category 1a Strict Nature Reserve to protect its ecological values
- To protect and conserve the full range of species, populations and ecological communities representative of the original condition of the reserve, with particular emphasis on those of conservation significance
- To reduce threats and assist the recovery and maintenance of natural ecosystems and established ecological processes
- To minimise disturbance by careful planning and execution of research, management and other approved activities.

3 VALUES

The location, landforms and plant and animal communities of an area have determined how it has been used and valued. Both Aboriginal and non-Aboriginal people place values on natural areas, including aesthetic, social, spiritual and recreational values. These values may be attached to the landscape as a whole or to individual components, for example to plant and animal species used by Aboriginal people. This plan of management aims to conserve both natural and cultural values. For reasons of clarity and document usefulness, various aspects of natural heritage, cultural heritage, threats and on-going use are dealt with individually, but their inter-relationships are recognised.

3.1 GEOLOGY, LANDSCAPE AND HYDROLOGY

Belford National Park is comprised of Middle to Late Permian strata, part of the Maitland Group of Permian rocks. It is exposed in three major formations; Mulbring Siltstone, Muree Sandstone and the Branxton Formation, respectively increasing in age (Beckett 1988).

The reserve occurs on a broad low hill, with minor erosional gullies and streams incising parts of it. The maximum elevation is 95 metres above sea level (ASL) in the centre-east of the reserve, with the lowest being about 50 metres ASL in the south-east along the New England Highway.

The Rothbury soil landscape covers the reserve. It occurs on Permian sediments, including sandstone, siltstone, shale, tuff, conglomerate, mudstone, limestone and coal. The unit is characterised by red podzolic soils, yellow podzolic soils, yellow solodic soils, brown soloths and prairie soils (Kovac & Lawrie 1991).

Belford National Park is located within the Sydney Basin Bioregion, seven kilometres south of the NSW North Coast Bioregion boundary, within the Central Hunter Foothills Mitchell landscape.

The reserve lies within the Hunter River catchment, to the south of the Hunter River. Creeks within the reserve drain to the Hunter River via Black Creek and Jump-Up Creek.

3.2 NATIVE PLANTS

The vegetation communities of Belford National Park have been described and mapped by Hill and Peake (2005). All three vegetation communities found within the reserve are regionally significant, being restricted and under significant threat within both the Hunter and Central Coast regions (Peake 2006).

Central Hunter Ironbark – Spotted Gum – Grey Box Forest, an endangered ecological community (EEC) under the TSC Act, dominates almost all of the reserve. This community is typically dominated by spotted gum (*Corymbia maculata*), narrow-leaved ironbark (*Eucalyptus crebra*) and grey box (*Eucalyptus moluccana*), however in Belford National Park broad-leaved ironbark (*Eucalyptus fibrosa*) can co-dominate. This vegetation community is closely related to the Lower Hunter Spotted Gum – Ironbark Forest EEC.

Central Hunter Swamp Oak Forest occurs on two minor streams within the reserve. This is a mid-high to tall forest characterised by swamp oak (*Casuarina glauca*) typically occurring as a dense or closed forest in more or less pure stands along minor streams. A native understorey is generally not present, due to the density of the tree canopy. However, in many places the introduced African olive (*Olea europaea* subsp. *cuspidata*) forms a dense understorey.

Belford National Park presents a rare situation in that its stands of Central Hunter Swamp Oak Forest are buffered on all sides by other forest vegetation communities. Across much of the rest of this vegetation community's range it occurs in open areas that have been largely cleared.

Hunter Lowlands Red Gum Forest, an EEC under the TSC Act, occurs in three locations within the reserve, covering a relatively small area. This is a mid-high to tall open forest to woodland with a grassy understorey. It is dominated by forest red gum (*Eucalyptus tereticornis*), narrow-leaved ironbark (*Eucalyptus crebra*) and rough-barked apple (*Angophora floribunda*).

Actions listed in the Priorities Action Statement (PAS) for the Hunter Lowlands Red Gum Forest EEC include reducing human access to remnants (e.g. erecting fencing and gates or closing tracks) and targeted bush regeneration.

Slaty Red Gum (*Eucalyptus glaucina)*, listed as vulnerable under the TSC Act, is found within the reserve. It has been recorded in both the Central Hunter Spotted Gum - Ironbark - Grey Box Forest and Central Hunter Swamp Oak Forest.

Communities and species considered to be regionally significant (Peake 2006) are listed in Table 1. Several other species are at the limit of their known range (Hill & Peake 2005).

Table 1. Significant ecological communities and plant species recorded in Belford National Park

Species / Community Name	**Status**
Ecological Communities	
Hunter Lowlands Red Gum Forest	EEC *
Central Hunter Ironbark - Spotted Gum - Grey Box Forest	EEC *
Central Hunter Swamp Oak Forest	Regional significant [1]
Species	
Slaty Red Gum *Eucalyptus glaucina*	Vulnerable *#
Diuris sp. aff. *dendrobioides* (Hunter Valley) sensu Bishop (2000)	Regionally significant [1] Recommended ROTAP[1]
Macrozamia flexuosa	ROTAP^

* Status under TSC Act
# Status under EPBC Act
^ Rare or Threatened Australian Plant (Briggs & Leigh 1996)
[1] Peake (2006)

3.3 NATIVE ANIMALS

Belford National Park provides an important refuge for fauna. Native animals recorded within the reserve include 4 species of amphibians, 4 species of reptiles, 49 species of birds, and 19 species of mammals (NSW Wildlife Atlas). Eight species are listed as vulnerable under the TSC Act (Table 2).

Table 2. Threatened animal species (vulnerable under TSC Act) recorded in Belford National Park

Common Name	Scientific Name
Birds	
Powerful Owl	*Ninox strenua*
Grey-crowned Babbler (eastern subspecies)	*Pomatostomus temporalis temporalis*
Speckled Warbler	*Pyrrholaemus sagittatus*
Mammals	
Spotted-tailed Quoll	*Dasyurus maculatus*
Eastern Bentwing-bat	*Miniopterus schreibersii oceanensis*
Eastern Freetail-bat	*Mormopterus norfolkensis*
Large-footed Myotis	*Myotis adversus*
Squirrel Glider	*Petaurus norfolcensis*

Additional threatened (TSC Act) fauna species that have been recorded close to the reserve in contiguous habitat include the Brush-tailed Phascogale (*Phascogale tapoatafa*) and the Grey-headed Flying-fox (*Pteropus poliocephalus*).

Other species of regional significance include several migratory birds (Fantailed Cuckoo, Common Koel, Rufous Whistler), uncommon birds (Eastern Shrike-tit, Brown Gerygone, Black-faced Monarch, Weebill), and the uncommon Short-eared Possum (Hill & Peake 2006).

Hollow bearing trees and/or understorey leaf litter and fallen timber are important habitat for many of these species (Hill & Peake 2006, DEC 2006).

Threats to the fauna of the reserve include isolation and fragmentation of habitat, altered forest structure, degradation of habitat by weeds, and predation by pest animals. The restriction of access and recreational use would assist in the recovery of fauna populations (Hill & Peake 2006).

3.4 CULTURAL HERITAGE VALUES

3.4.1 Aboriginal Heritage

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

Belford National Park is located within Wanaruah LALC area, 2.5 kilometres west of the Mindaribba LALC boundary. The Wanaruah LALC, Mindaribba LALC and Wonnarua Tribal Council are represented on the Central Coast Hunter Range Region Aboriginal Co-management Committee.

There is one Aboriginal artefact scatter site recorded within the reserve, and others in the vicinity of the reserve. Other site types are unlikely to occur in the reserve due to the lack of sandstone outcrops and previous logging history (Kinhill 1995).

3.4.2 Historic Heritage

Belford National Park makes up most of what was previously Belford State Forest. The land was originally reserved from sale for the preservation of timber in 1878, before approximately 800 acres (320 hectares) were dedicated as Belford State Forest in 1918.

Belford State Forest was logged intermittently until 1984 when the then Forestry Commission of NSW reserved the area from harvesting under the preserved management system, and was later protected as a spotted gum reserve through the State Forests Forest Management Zoning System (State Forests 1999). Such zoning indicates that the area was under special management, not permitting timber harvesting, grazing and quarrying activities. However, most of the forest had been already thoroughly logged, with very few mature trees being retained.

There are no known historic sites within the reserve.

3.5 VISITOR USE

Bushwalking is considered the only ecologically sustainable recreational use of the reserve due to: its small size; its importance as protected remnant vegetation; the presence of EECs and threatened species; and highly erodible soils.

There are no visitor facilities established within the reserve. Cycling, horse riding and public vehicular use of management trails is not permitted for environmental reasons. Orienteering events have been held in the reserve in the past. Consent for appropriate group activities (20 or more people) or events will be considered on an individual basis.

The collection of timber for firewood is not permitted within the reserve, as there are no BBQ or camping facilities provided.

4 ISSUES

4.1 EROSION

Soils in the reserve are highly erodible. Much of the reserve's terrain is undulating and likely to erode if disturbed. Care must be taken to avoid activities likely to lead to erosion. The creek lines are also susceptible to water erosion during heavy rains, particularly from run-off from the New England Highway.

4.2 INTRODUCED SPECIES

4.2.1 Weeds

African Olive (*Olea europaea* subsp. *cuspidata*) is significantly impacting on the ecology of natural vegetation in the reserve. Other species that are impacting on the reserve are Prickly Pear and Tiger Pear (*Opuntia* spp.) and Mother of Millions (*Brophyllum* sp.). Each of these species competes with native vegetation for resources (Hill & Peake 2006).

4.2.2 Pest Animals

Eight fauna species recorded in the reserve are not native to the area. Of these, the dog (*Canis familiaris familiaris*), European red fox (*Vulpes vulpes*), rabbit (*Oryctolagus cuniculus*), cat (*Felis catus*), black rat (*Rattus rattus*) and Indian mynah (*Acridotheres tristis*) are considered to be feral. Each of these species impact on native fauna either through competition or predation. Cattle and horses have also been recorded within the reserve.

Competition by the European rabbit, and predation by both the European red fox and feral cats are listed as key threatening processes under the TSC Act. There is an adopted Threat Abatement Plan (TAP) for control of the red fox. Belford National Park is not listed as a priority site for fox control within the Fox TAP.

4.3 FIRE

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

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

There are no recorded wildfires (records 1943-2008) or hazard reductions (1971-2008) for Belford National Park in the records held by NPWS. Forests NSW have confirmed that they also have no records of wildfire or hazard reduction for the area when it was under their management.

The closest built assets to the reserve are two dwellings approximately 50 metres and 150 metres to the north of the northern boundary. There are several dwellings to the east of the reserve with the closest of these being 450 metres away. All of these dwellings are surrounded by cleared and/or grazed land.

A separate fire management strategy has been prepared for the reserve (DEC 2006). The fire management strategy outlines the recent fire history of the reserve, key assets within and adjoining the reserve including sites of natural and cultural heritage value, fire management zones, and fire control advantages such as management trails and water supply points. Hazard reduction programs, ecological burning proposals and fire trail works are submitted annually to the Singleton Bush Fire Management Committee (BFMC).

4.4 PAST LAND USE

4.4.1 Logging History

The majority of trees within the reserve are regrowth from past logging. Small numbers of mature trees are found along tracks and Kirkton Road. Protection of mature and hollow bearing trees is important to provide habitat for known and potential fauna species.

4.4.2 Isolation and Fragmentation

The area surrounding Belford National Park has been extensively cleared, resulting in a high loss of biodiversity and fragmentation of habitat in the region. The Hunter region supports extensive mining, agriculture and power generation industries. The majority of extant vegetation within the Hunter River catchment is found in the rugged country around the fringes (e.g. Wollemi and Yengo National Parks). The remnant vegetation of the valley floor is highly fragmented, poorly linked, predominantly regrowth, and very poorly represented by formal reservation (Peake 2006).

Long term conservation of biodiversity depends upon the protection, enhancement and connection of remaining habitat across the landscape, incorporating vegetation remnants on both public and private lands. Maintaining the integrity of the remaining habitat within the reserve and, where possible, linking this to adjacent areas of vegetation to facilitate wildlife corridors is important in ensuring long term viability of the region's biological values.

4.5 CLIMATE CHANGE

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

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

4.6 VISITOR IMPACTS

Cycling, horse riding and public vehicular use of management trails is not permitted for environmental reasons.

Illegal activities that occur within the reserve include motorcycle riding, and firewood and fence post collecting. Occasional horse riding has occurred in the past.

4.7 INFRASTRUCTURE

The Perimeter Fire Trail traverses all except the southern boundary of the reserve, with entry points off the New England Highway and Kirkton Road. Kirkton Road is a public road bisecting the reserve. It is excluded from the boundaries of the reserve.

A boundary fence shared with neighbouring properties surrounds the perimeter of the reserve. There is also a fence on both sides of Kirkton Road through the reserve. Locked gates are situated in the fences at entry points to the management trail.

There is no other built infrastructure within the reserve. There are no easements or alien uses.

5 REFERENCES

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6 IMPLEMENTATION

Priority:
High priority activities are those imperative to achievement of the objectives and desired outcomes. They must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.
Medium priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent.
Low priority activities are desirable to achieve objectives and desired outcomes but can wait until resources become available.
Ongoing is for activities that are undertaken on an annual basis or statements of management intent that will direct the management response if an issue arises.

Current Situation	Desired Outcomes	Management Response	Priority
On-Park Ecological Conservation			
Geology			
Soils in the reserve are susceptible to erosion if disturbed. Water erosion occurs along creek lines during heavy rain Illegal motor bike use creates tracks and increases erosion potential	Soil erosion is minimised	5.1.1. Undertake all works in a manner that minimises soil erosion 5.1.2. Monitor surface water run-off and erosion of creek lines and rehabilitate as required 5.1.3. Rehabilitate illegal tracks 5.1.4. Any rehabilitation works will use natural materials	High Medium Medium Medium
Native Plants and Animals			
Vegetation in the region is highly fragmented and poorly conserved. The reserve contains regionally significant ecological communities and flora and fauna species	Significant communities and species are conserved	5.1.5. Work with Hunter-Central Rivers CMA regarding regional vegetation management planning and vegetation linkage programs	Medium

Current Situation	Desired Outcomes	Management Response	Priority
Central Hunter Ironbark – Spotted Gum – Grey Box Forest Endangered Ecological Community (EEC), Hunter Lowland Red Gum Forest EEC and the vulnerable Slaty Red Gum occur in the reserve The vegetation is predominantly regrowth, containing few mature, hollow bearing trees Information on fauna species is limited. There are 8 threatened fauna species recorded within the reserve, and others recorded in contiguous habitat	Native plant and animal species are conserved	5.1.6. Undertake targeted weed control within Hunter Lowland Red Gum Forest 5.1.7. Monitor the condition of and threats to EECs and the Slaty Red Gum population 5.1.8. Retain ground cover, leaf litter and fallen timber as far as possible 5.1.9. Protect mature trees during all management operations 5.1.10. Where research and monitoring indicate, implement programs to enhance the habitat values of the reserve 5.1.11. Conduct further fauna survey, including targeted surveys for potential threatened species (e.g. Grey-headed Flying-fox and Brush-tailed Phascogale) 5.1.12. Encourage research into the distribution and ecology of significant communities and species, and their response to threats and management programs	High Medium Medium High Medium Medium Medium

Current Situation	Desired Outcomes	Management Response	Priority
Weeds and Pest Animals			
Several weed and pest animal species have been recorded within the reserve The Regional Pest Management Strategy identifies priorities and details weed and pest animal control strategies and programs	Introduced plants and animals are controlled and where possible eliminated Negative impacts of weeds and/or pest animals on reserve values are stable or diminishing	5.2.1. Implement the Regional Pest Management Strategy 5.2.2. Implement weed control program for African olive 5.2.3. Implement weed control programs for *Opuntia* species and mother of millions 5.2.4. Continue implementation of pest control programs for wild dog and fox 5.2.5. Monitor the effectiveness of pest control actions on pest species abundance and biodiversity response	High High Medium Medium Medium
Cultural Heritage			
The reserve is within the Wanaruah LALC area There is one recorded Aboriginal site in the reserve There are no recorded historic sites in the reserve	Aboriginal and historic sites and values are identified and protected Understanding of the cultural values of the reserve is improved	5.3.1. Consult and involve the Regional Co-management Committee, Wanaruah LALC and other relevant Aboriginal community organisations in the management of Aboriginal sites and values 5.3.2. Undertake an archaeological survey and cultural assessment prior to all works with the potential to impact on Aboriginal or historic heritage sites	Medium Medium

Current Situation	Desired Outcomes	Management Response	Priority
		5.3.3. Encourage further research into the Aboriginal and historical heritage values of the reserve	Medium
Visitor Use			
There are no visitor facilities within the reserve and none are proposed other than signs Bushwalking, nature study and scientific research are permitted within the reserve	Visitor use is appropriate and ecologically sustainable	5.4.1. Erect signs prohibiting cycling and horse riding on management trails 5.4.2. Investigate placement and design of interpretive signs 5.4.3. Promote visitor use and recreational activities at alternate locations such as Werakata National Park 5.4.4. Encourage scientific research and monitoring programs	High Low Low Medium
Fire			
The Belford Fire Management Strategy details fire management assets, risks and zoning	Life, property and natural and cultural values are protected from fire	5.5.1. Implement the Fire Management Strategy 5.5.2. Participate in the Singleton BFMC and maintain cooperative arrangements with RFS, other fire authorities and surrounding landowners in regard to fuel management and fire suppression	High High

Current Situation	Desired Outcomes	Management Response	Priority
		5.5.3. Avoid felling hollow-bearing trees	High
		5.5.4. Protect drainage lines from disturbance during fire operations	Medium
		5.5.5. Limit fire control operations to existing roads, trails and fence lines	Medium
Infrastructure and Maintenance			
The Perimeter Fire Trail traverses the east, north and west boundaries of the reserve There is a fence line around the reserve boundary and along Kirkton Road No other infrastructure is proposed for the reserve	Infrastructure adequately serves management needs and has minimal impacts	5.6.1. Maintain the boundary management trail	High
		5.6.2. Maintain gates on the management trail to prevent unauthorised use	High
		5.6.3. Maintain the fence along Kirkton Road	Medium
		5.6.4. Maintain boundary fences in cooperation with neighbours	Medium