GUY FAWKES RIVER NATIONAL PARK, NATURE RESERVE AND STATE CONSERVATION AREA

PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

Part of the Department of Environment and Climate Change (NSW)

January 2009

This plan of management was adopted by the Minister for Climate Change and the Environment on 13th January 2009.

ACKNOWLEDGMENTS

This plan of management was based on a draft prepared by staff of the North Coast and Northern Tablelands Regions of the NSW NPWS, with the assistance of staff of the Environmental Protection and Regulation Division and Northern Branch Planning and Performance Unit.

Neighbours of the planning area, NPWS specialists, the North Coast Region and Northern Tablelands Regional Advisory Committees, the relevant Local Aboriginal Land Councils, Guyra Council, Forests NSW, specialists groups and members of the public, provided valuable information and comments.

NPWS would like to thank all those who attended the neighbour and stakeholder meetings and to those who took the time to complete and submit comments with the 'Guy Fawkes River Newsletter'. Your comments and concerns were considered in the preparation of this Plan of Management and NPWS recognises the valuable contribution your comments have made to the planning process.

For additional information or enquires about any aspect of the plan, contact either NPWS Dorrigo Plateau Area Office at the Rainforest Centre, Dorrigo National Park, Dome Rd, Dorrigo NSW 2453 or phone (02) 6657 2309; or NPWS Glen Innes Area, 68 Church St (PO Box 281), Glen Innes NSW 2370, or phone (02) 6732 5133.

ISBN 978 1 74232 158 5

DECC 2009/143

FOREWORD

Guy Fawkes River National Park, Nature Reserve and State Conservation Area are located on the eastern edge of the New England Tablelands and the western edge of the Dorrigo Plateau, in north eastern NSW. Guy Fawkes River National Park consists of 100,590 hectares, Guy Fawkes River Nature Reserve consists of two sections totalling 1,534 hectares and Guy Fawkes River State Conservation Area consists of two sections totalling 5,240 hectares.

Guy Fawkes River National Park, Nature Reserve and State Conservation Area protect regionally significant geological and landscape features, 40 vegetation communities including communities that are poorly represented in the NSW system of reserves, and two areas that have been declared as Aboriginal Places due to their special significance to Aboriginal culture. They form part of a complex of forested land along the escarpment of the New England and Dorrigo plateau.

An area of 84 500 hectares within Guy Fawkes River National Park and Guy Fawkes River Nature Reserve has been declared wilderness under the *Wilderness Act 1987*.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park, nature reserve and state conservation area. A plan of management is a legal document that outlines how an area will be managed in the years ahead.

A draft plan of management for Guy Fawkes River National Park, Guy Fawkes River Nature Reserve and Guy Fawkes River State Conservation Area was placed on public exhibition from 24 April 2006 to 24 July 2006. The submissions received were carefully considered before adopting this plan of management.

This plan contains a number of actions to achieve “Better environmental outcomes for native vegetation, biodiversity, land, rivers, and coastal waterways” (Priority E4 in the State Plan) including control of introduced plants and animals, further research into threatened species, and rehabilitation of degraded areas. The plan also contains a number of actions to help achieve Priority E8 in the State Plan “More people using parks, sporting and recreational facilities, and participating in the arts and cultural activity” such as the provision of interpretive information, camping and picnicking facilities.

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

Carmel Tebbutt MP

Deputy Premier
Minister for Climate Change and the Environment

CONTENTS

TABLE OF ABBREVIATIONS

BNT	Bicentennial National Trail
CMA	Catchment Management Authority
CAMBA	China- Australia Migratory Birds Agreement (the agreement between the Government of Australia and the Government of the People's Republic of China for the protection of migratory birds and their environment, signed in Canberra, 20 October 1986)
DIPNR	Department of Infrastructure, Planning and Natural Resources
DLWC	Department of Land and Water Conservation (now DIPNR)
DPI	Department of Primary Industries
EPA Act	Environmental Planning and Assessment Act
ESFM	Ecologically Sustainable Forest Management
GFRNP	Guy Fawkes River National Park
JAMBA	Japan- Australia Migratory Birds Agreement (the agreement between the Government of Australia and the Government of Japan for the protection of migratory birds in danger of extinction and their environment, signed in Tokyo, 6 February 1974).
LALC	Local Aboriginal Land Council
LGA	Local Government Area
LPI	Land and Property Information
MOU	Memorandum of Understanding
NP	National Park
NPW Act	National Parks and Wildlife Act
NPWS	National Parks and Wildlife Service
NR	Nature Reserve
RFA	Regional Forest Agreement
RLP Act	Rural Lands Protection Act
RLPB	Rural Lands Protection Board

ROTAP	Rare or Threatened Australian Plant
RTA	Roads and Traffic Authority
SCA	State Conservation Area
TSC Act	Threatened Species Conservation Act
TSR	Travelling Stock Reserve

1. MANAGEMENT CONTEXT

1.1 LEGISLATIVE AND POLICY CONTEXT

Management of national parks, nature reserves and state conservation areas in NSW is in the context of a legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act), the *Threatened Species Conservation Act 1995* (TSC Act) and the policies of the National Parks and Wildlife Service (NPWS). The matters to be considered in the preparation of a plan of management are listed in Section 72AA of the NPW Act. NPWS policies relate to nature conservation, cultural heritage conservation, recreation, commercial use, research and communication.

Other legislation, international agreements and charters may also apply to management of the area. In particular, the *Environmental Planning and Assessment Act 1979* (EPA Act) requires the assessment and mitigation of environmental impacts of any works proposed in this plan.

Under section 72A of the NPW Act, a single plan may be prepared for a combination of related protected areas. Guy Fawkes River National Park, Guy Fawkes River Nature Reserve, Guy Fawkes River State Conservation Area and those adjoining lands that have been acquired by NPWS but not yet gazetted are considered together in this plan because they are largely contiguous and have similar management issues.

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

1.2 MANAGEMENT PURPOSES AND PRINCIPLES

National Parks

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, national parks are managed to:

- Conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and natural landscapes;
- Conserve places, objects, features and landscapes of cultural value;
- Protect the ecological integrity of one or more ecosystems for present and future generations;

- Promote public appreciation and understanding of the parks natural and cultural values;
- Provide for sustainable 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.

Nature Reserves

Nature reserves are reserved under the NPW Act to protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena.

Under the Act, nature reserves are managed to:

- Conserve biodiversity, maintain ecosystem functions, and protect geological and geomorphological features and natural phenomena;
- Conserve places, objects, features and landscapes of cultural value;
- Promote public appreciation, enjoyment and understanding of the reserve's natural and cultural values; and
- Provide for appropriate research and monitoring.

Nature reserves differ from national parks in that they do not have as a management principle to provide for visitor use.

State Conservation Areas

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

Under the Act, state conservation areas are managed to:

- conserve biodiversity, maintain ecosystem functions, protect natural phenomena and maintain natural landscapes;
- conserve places, objects and features of cultural value;
- provide for the undertaking of uses permitted under other provisions of the NPW Act (including uses permitted under section 47J such as mineral exploration and mining), having regard to the conservation of the natural and cultural values of the state conservation area;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of the area's natural and cultural values and with uses permitted in the area;

- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of the area's natural and cultural values and with other uses permitted in the area; and
- provide for appropriate research and monitoring.

The Act also requires review of the classification of SCA's every 5 years to determine whether they should receive either a national park or nature reserve classification. The classification review for SCA's is described in section 47M of the Act and is undertaken in consultation with the Minister administering the *Mining Act 1992*.

Wilderness

Over 84,500 hectares within the planning area has been declared wilderness under the *Wilderness Act 1987* and the NPW Act. Wilderness areas are large natural areas of land that, together with their native plant and animal communities, are essentially unchanged by human activity.

Wilderness areas contribute to the long-term protection of biological diversity and serve as scientific reference areas. Wilderness areas provide opportunities for solitude and appropriate self-reliant recreation, however, protection of natural values has priority over providing for recreational use.

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

In accordance with section 9 of the Wilderness Act, wilderness areas will be managed according to the following management principles:

- to restore (if applicable) and to protect the unmodified state of the area and its plant and animal communities;
- to preserve the capacity of the area to evolve in the absence of significant human interference; and
- to provide opportunities for solitude and appropriate self-reliant recreation.

The Guy Fawkes Wilderness Area excludes a 20 metre strip embracing the Bicentennial National Trail (BNT) and a travelling stock reserve (TSR). The nature of the exclusions creates two small isolated sections of declared wilderness between the BNT and TSR.

Aboriginal Places

The Devils Chimney in the Aberfoyle River gorge was declared an Aboriginal Place on 8th of August 1980. An Aboriginal Place is an area of special significance to Aboriginal culture and declaration provides recognition of the significance of the area and its heritage values which relate to traditions, observances, customs, beliefs or history of Aboriginal people.

Aboriginal Places are protected under Section 90 of the NPW Act and can not be damaged, defaced or destroyed without the consent of the Director-General. This declaration does not change the status of the land but may limit use as far as preventing activities that may destroy, damage or deface the Aboriginal Place.

Regional Forest Agreements

Regional Forest Agreements are one of the principle means of implementing the National Forest Policy Statement of 1992. Under this Statement Commonwealth, State and Territory governments agreed to work towards a shared vision for Australia's forests. This aimed to maintain native forest estate, manage it in an ecologically sustainable manner and develop sustainable forest-based industries. The Statement provided for joint comprehensive assessments of the natural, cultural, economic and social values of forests. These assessments formed the basis for negotiation of Regional Forest Agreements that provide, amongst other things, for Ecologically Sustainable Forest Management (refer section 7).

The Upper North East NSW Regional Forest Agreement (RFA) covers the region. The process leading up to the RFA provided for major additions to the reserve system, including additions to the planning area.

2. THE PLANNING AREA

2.1 LOCATION, GAZETTAL AND REGIONAL SETTING

This plan of management applies to lands reserved as Guy Fawkes River National Park, Guy Fawkes River Nature Reserve and Guy Fawkes River State Conservation Area and those adjoining lands that have been acquired by National Parks and Wildlife Service (NPWS) but not yet gazetted as part of the park, reserve or state conservation area. These lands will be managed in accordance with the management principles outlined in this plan and will be referred to in this document as the "planning area" (see Map 2).

The planning area is situated north of Ebor (30°24.2'S and 152°21.0E) on the eastern edge of the New England Tablelands and western edge of the Dorrigo Plateau (see Map 1).

Guy Fawkes River Nature Reserve was gazetted in 1970 and is 1,534 hectares in area. In 1972 the main section of Guy Fawkes River National Park (25,414ha) was gazetted. The park now (May 2007) totals 100,590 hectares. Guy Fawkes River State Conservation Area was gazetted in 2003 and comprises 5,240 hectares. The planning area therefore covers a total of 107, 364 hectares. A further 5174 hectares of land has been purchased by NPWS (see Map 2) but is yet to be gazetted as additions to the park.

The planning area is jointly managed by the Dorrigo Plateau Area of the NPWS North Coast Region and the Glen Innes Area of the NPWS Northern Tablelands Region. It lies within the areas administered by the Northern Rivers Catchment Management Authority, the Guyra Shire, Glen Innes Severn and Clarence Valley councils, and the Grafton-Ngerrie, Glen Innes, Guyra, Armidale and Dorrigo Plateau Local Aboriginal Land Councils.

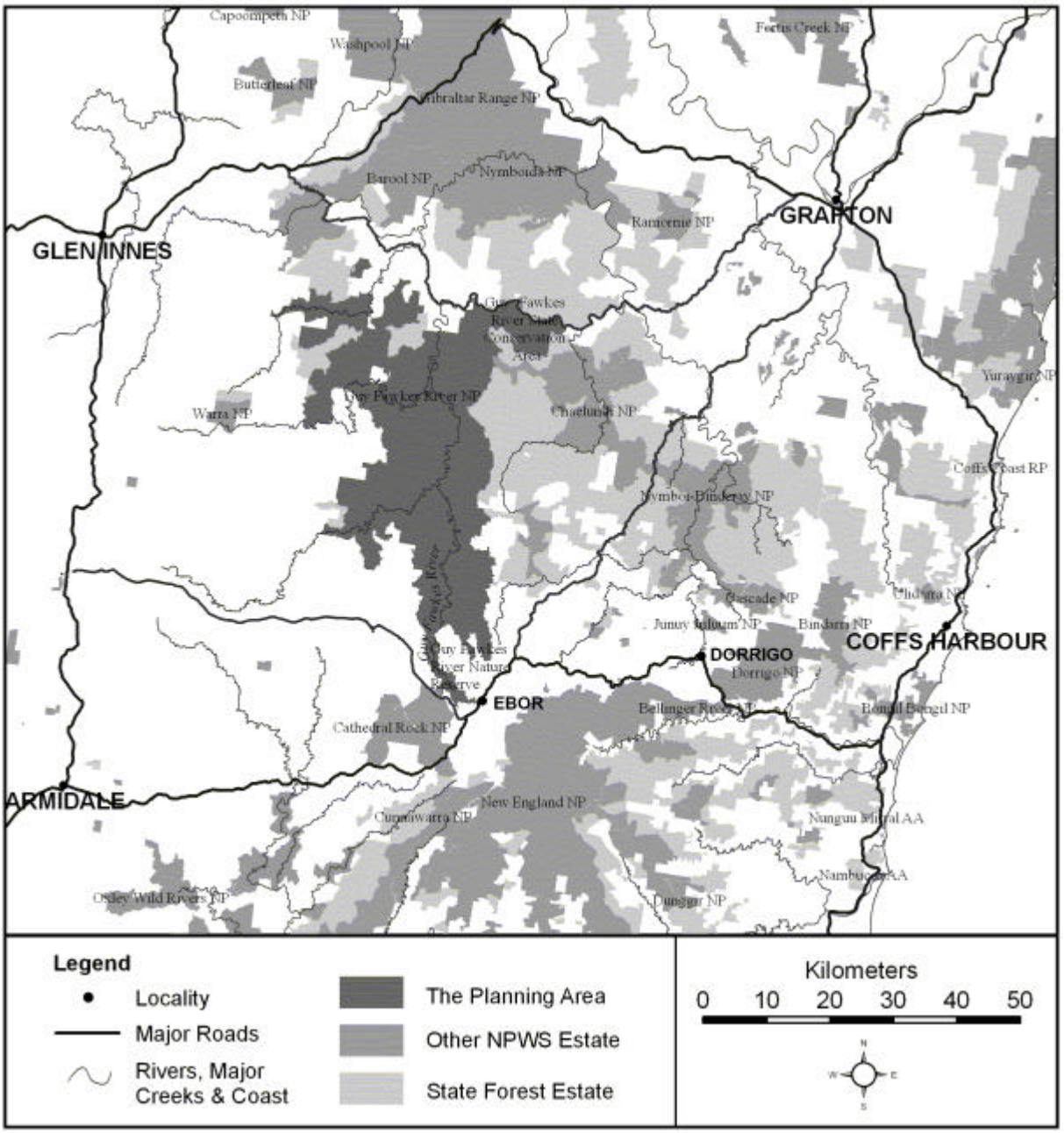
2.2 LANDSCAPE CONTEXT

Natural and cultural heritage and on-going use are strongly inter-related and together form the landscape of an area. Much of the Australian environment has been influenced by past Aboriginal and non-Aboriginal land use practices and the activities of modern day Australians continue to influence bushland through recreational use, cultural practices, the presence of introduced plants and animals and in some cases air and water pollution, as well as interference with, or changes to, natural river processes including damming, diversion and water extraction.

The geology, landform, climate and plant and animal communities of the area, plus its location, have determined how it has been used by humans. The planning area has a varied land use history including use by Aboriginal people for thousands of years. Grazing, timber harvesting, mining and recreation have had a marked influence on the

landscape. The historic township of Dalmorton is a tangible reminder of the area's past mining and pastoral history.

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



Map 1. Locality Map

3. KEY VALUES AND MANAGEMENT DIRECTIONS

3.1 VALUES OF THE AREA

The planning area is of national significance for its biological and landscape values and of regional significance for cultural heritage and recreation.

Natural values include:

- the regionally significant Demon fault and basalt derived terraces (which are poorly conserved in NSW) at Ebor Falls, Devils Chimney, Henry Falls, Hewitt's Peak;
- spectacular examples of large gorge systems in a tablelands environment;
- major riverine environments including the Guy Fawkes, Aberfoyle, Sara, Boyd and Henry River systems, which form a significant part of the Clarence River catchment;
- part of a complex of forested land along the escarpment of the New England and Dorrigo plateaux comprising State Forest, NPWS estate and private land;
- an area of high biodiversity including nearly 30 threatened plant species, 20 threatened animal species, species at their range extensions, and highly significant new populations as well as CAMBA and JAMBA species;
- significant areas of old growth forest as well as large areas of dry rainforest in which northern and southern floristic elements are intermingled; and
- the second largest area of wilderness in northern NSW.

Scenic values include:

- panoramic views from locations along the escarpment edge and from the plateau to the gorge;
- large expanses of essentially unmodified wilderness landscapes;
- examples of large scenic rivers with predominantly natural riverine vegetation; and
- a range of impressive landscape features such as Devils Chimney, deep canyons and gorges along winding river systems, and large waterfalls including Diamond, Marengo, Henry and Ebor Falls.

Cultural heritage values include:

- Aboriginal sites and landscapes of cultural and archaeological significance;
- heritage sites and relics that link to early pastoral life, mining and forestry, including the historic township of Dalmorton, stockman huts, mines, cattle yards, and forest survey trees;
- the values for people who have visited or lived in the area; and
- the site of the Chaelundi Forest campaign which led to the protection of several new national parks and wilderness areas and the establishment of the first endangered fauna legislation in NSW.

Recreation and tourism values include:

- visitor facilities provided in spectacular settings at Ebor Falls, Chaelundi and Dalmorton Camping Areas;
- opportunities for solitude and self-reliant recreation in a rugged wilderness environment;
- easy accessibility from local towns and communities such as Ebor, Guyra, Glen Innes, Armidale, Grafton, and Dorrigo as well as other nearby national parks and reserves;
- opportunities for a range of activities including walking, camping, swimming, canoeing, liloing, abseiling, bird watching, photography and sightseeing; and
- opportunities for horse riding and walking along the Bicentennial National Trail.

Research and educational values include:

- a history of scientific/educational use by individuals, scout groups, universities, school groups and other government agencies;
- geological processes, diverse and significant plant and animal communities and cultural features which provide numerous opportunities for research; and
- spectacular landscapes, geological features, biodiversity, cultural features and ready access which provide outstanding opportunities for community education.

3.2 MANAGEMENT DIRECTIONS FOR THE PLANNING AREA

The planning area will be managed to conserve its natural and cultural heritage, while providing opportunities for sustainable use. This will be achieved through:

- a partnership approach with the Aboriginal community to protect and conserve Aboriginal sites and places of significance and protection of the natural and cultural heritage;
- conservation of significant cultural values and sites as they relate to the past land use of the planning area;
- protection of significant vegetation communities, threatened and biogeographically significant plant and animal species, and geomorphological features from disturbance and inappropriate use and works;
- protection of wilderness values and provision of opportunities for solitude and appropriate self-reliant recreation;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of natural and cultural values;
- maintenance or enhancement of water quality and aquatic habitats in the catchment of all rivers and tributaries of the Guy Fawkes and Clarence River systems;
- rehabilitation of areas affected by past mining, logging or clearing;
- management of the planning area to contribute to the environmental, social and economic well being of local and regional communities;
- implementation of recovery plans for threatened species;
- control of introduced species;

- management of fire to maintain plant and animal communities and provide for the special requirements of threatened species, or application of fire regimes designed to maintain ecosystems;
- encouragement of the retention and compatible management of areas of native vegetation on neighbouring lands that link sections of the planning area or join the planning area to other large naturally vegetated areas;
- research and monitoring to improve knowledge of the area's resources and to evaluate and adapt management programs; and
- a cooperative approach with other agencies, adjoining land managers, neighbours and other relevant parties to ensure effective, efficient and cooperative management of the planning area.

4. CONSERVATION OF NATURAL AND CULTURAL HERITAGE

4.1 GEOLOGY, LANDFORM AND CLIMATE

The planning area is situated on the eastern edge of the New England Tableland, along the Great Dividing Range. It includes the western edge of the Dorrigo Plateau, an outlier of the New England Tableland, the deeply incised Guy Fawkes River Valley and rugged gorges of the Aberfoyle, Sara and Henry Rivers.

The planning area is underlain by the geological feature known as the New England Granite batholith, which extends from Tamworth in NSW to Warwick in Queensland. It lies within the Wollumbin-Texas Block of the New England Fold Belt and is bisected by the regionally significant Demon Fault Line.

The Demon Fault Line coincides with the north-south valley of the Guy Fawkes River and occurs along the junction of two major geological blocks of Palaeozoic sediments which are largely metamorphosed sediments, the Dyamberin Block to the west and Coffs Harbour Block to the east (Department of Mines, 1974).

Terrain within the planning area is characteristic of gorge country, with severe and steep slopes between 10 and 30 degrees (Reid et al. 1996). Cliffs, sand banks, geological faults, rock outcrops, steep gullies, scree slopes, tributary junctions and terracing are all characteristic of the variable topography of the planning area. The topography includes large areas of plateau, deep gorges and narrow river flats and gently undulating landforms.

Guy Fawkes River Nature Reserve provides a spectacular example of the gorge country, with cliff lines and steep narrow gorges cutting though the tableland, roughly 1,200m elevation on each side.

Elevation in the planning area ranges from 200-300m on the floor of the Guy Fawkes River up to 1378m at Chaelundi Mountain. The majority of the eastern boundary of the planning area lies above 900m.

The eastern area of the planning area generally follows the western limit of the Dorrigo Plateau, forming an escarpment from near Macdonald's Spur in the south to Chaelundi Mountain in the north. The escarpment drops sharply into the Guy Fawkes River Gorge at an elevation of 900-1000m in the south and 800-900m in the north. The floor of the gorge ranges in elevation from 200-300m to 400-500m.

The western and north-western boundary of the planning area is formed by the eastern edge of the New England Plateau, above 800m in elevation, and is dissected by the east flowing Aberfoyle and Sara Rivers at an elevation of 300-400m (Reid et al. 1996).

Ebor Falls at an elevation of 1290m and with a drop of 120m (Mather 1993) is one of the best known and frequently visited waterfalls in the planning area. The layered basalt that forms the Ebor Falls is believed to be poorly conserved in NSW (Reid et al. 1996). Ebor Falls is one of many waterfalls found in the planning area, along with cascades and rapids, deep pools, tributary streams and water shutes.

Other well known geological features include a volcanic core referred to locally as the 'Devils Chimney', in the Aberfoyle Gorge and 'London Bridge' a saddle created by erosion over millions of years, located in the north west of the planning area.

Weather patterns in the planning area are affected by landforms and variations in elevation. Highest rainfalls occur in summer, followed by a sudden decline by the end of autumn and lower rainfall in winter and spring. The river gorges lie within a rain shadow of the plateau and are relatively dry, while higher rainfall is received on the elevated ridges and higher points of the plateau above the gorge system (Austeco 2000).

Average annual temperatures also vary with elevation, exposure (slope and aspect); paths of cold air drainage, and localised topographic features that affect average daily hours of direct radiation (Austeco 2000).

Desired Outcomes

- Significant geological and geomorphological features such as the gorges, waterfalls and 'the Devils Chimney' are protected.
- The integrity of the landscape, scenic values and natural landscape features of the planning area are protected and interpreted to visitors as appropriate.

Management Strategies

- Locate and design management infrastructure and visitor facilities to minimise their visual impact from within and outside the planning area, particularly from public access roads, lookouts and other vantage points.
- Subject to environmental assessment, continue to manage vegetation that may obstruct views at scenic lookout points at Ebor Falls, Misty Creek and Chaelindi Falls, and at the Glen Nevis, Starlight and London Bridge fire advantage points. Vegetation control for view management may involve both lopping and clearing of vegetation, but will be limited to the current area of impact.
- Liaise with neighbours and authorities to minimise the impact of adjacent land use on the scenic values of key vantage points in the planning area.
- Manage existing infrastructure such as electricity lines and associated facilities and trig stations to minimise visual impacts (refer section 8 Other uses).
- Prohibit the extraction and removal of bushrock, clay, rock, gravel or any like substance, except for essential on park management works where no practical alternative is available and where environmental impact is minimal.
- Restrict and control visitor access to the gorge and canyon systems to protect rock faces and significant vegetation communities, to minimise visual intrusion and for visitor safety. This will be achieved through planting, fencing and maintenance of existing facilities (refer section 4.2 Native Plants and 6.2 Recreational Opportunities).

- Encourage research into the geological history and values of the gorge systems, associated falls and significant and interesting geological features within the planning area (refer section 7 Research and Monitoring).

4.2 NATIVE PLANTS

The planning area forms part of a large complex of native vegetation that stretches north and south along the Great Dividing Range, taking in large areas of escarpment, plateau and tableland habitat. State forest areas adjoining the planning area provide important forested links to Mann River Nature Reserve, Mount Hyland Nature Reserve (CERRA World Heritage Area), and to Nymboida, Chaelundi and Cathedral Rock National Parks (see Map 1).

The abrupt changes in elevation, aspect, geology and climate support a diversity of plant species and vegetation communities. The poor soils of the area, together with the very steep terrain, dry exposed slopes and the rainshadow effect of the plateau to the east, cause vegetation to be sparse in a large portion of the planning area.

Systematic flora surveys have been conducted within the planning area and have found that Guy Fawkes River National Park contains about 5% of the entire flora of Australia (Austeco 2000).

Over 40 different vegetation communities have been mapped in the planning area (Reid et al. 1996) which can be grouped into seven major vegetation types (see Table 1). Structurally the vegetation communities within the planning area are described as tall open forest (most common), woodlands, heaths, sedgelands, shrublands and closed forest (Clancy & Clancy 2002). Several of the open forest types are considered to be of regional significance (Austeco 2000).

Table 1. Major vegetation communities found within the planning area.

Vegetation Types	Location/ Description
Gallery forest of river oak (*Casuarina cunninghamiana*).	Along the Guy Fawkes, Aberfoyle, Sara and Boyd Rivers.
Grassy flats with a variable cover of forest red gum (*Eucalyptus tereticornis*) and broad leaved apple (*Angophora subvelutina*).	Flood plains and river terraces next to major rivers in the gorges.
Grassy woodland and open forest dominated by eucalypts such as broad-leaved stringybark (*Eucalyptus caliginosa*), yellowbox (*E melliodora*) and Blakely's redgum (*E. blakelyi*), with angophoras in places.	Gorge slopes and ridges.
Tableland open forest in which eucalypts such as silvertopped stringybark (*E. laevopinea*), grey gum (*E. biturbinata*), broad-leaved stringybark (*E. caliginosa*), New England blackbutt (*E. andrewsii* subsp. *campanulata*) and mountain gum (*E. dalrympleana*) are commonly dominant. Other eucalypt species found are messmate (*E. obliqua*) and round leaved gum (*E. brunnea*).	High elevations on the New England and Dorrigo plateau. Variable understorey, with grassy understoreys found on drier sites and areas frequently burned.
Dry rainforest dominated by giant stinging tree (*Dendrocnide excelsa*), shatterwood (*Backhousea sciadophora*) and yellow tulipwood (*Drypetes australisica*).	Steep gullies, bordering creeks and on scree slopes with a predominantly southerly or easterly aspect in the gorges.
Lowland subtropical rainforest of the *Denrocnide-Ficus* alliance (*Ficus-Dysoxylum fraserianum / Toona Dendrocnide* suballiance).	This vegetation type occurs in two small patches on the west bank of the Boyd River near the northern boundary of the reserve. Few examples of gallery/floodplain subtropical rainforest are known in the Clarence catchment.
Moist hardwood (or wet sclerophyll) forest dominated by New England blackbutt (*E. andrewsii* subsp. *campanulata*), tallowwood (*E.microcorys*) and Sydney blue gum (*E.saligna*) often with a warm temperate-subtropical rainforest understorey.	Mid eastern boundary of the planning area. Characterised by tall, eucalypt overstorey and an understorey of shrubs and ferns. The understorey may be replaced by grasses in areas frequently burned. The previous London Bridge Flora Preserve and western Pine Creek provide a good example of old growth wet sclerophyll forest that occurs within the planning area.

Source: adapted from Reid, 1999 and State Forests, 1992.

In addition to these broad vegetation types small areas of heathland, sedgeland, subalpine grassland and examples of warm temperate rainforest are found within the planning area (Austeco 2000).

Table 2: Threatened and significant species recorded within the planning area.

THREATENED FLORA		Status*	NON-THREATENED ROTAPS		Status*
Scientific name	**Common name**		**Scientific name**	**Common name**	
Arthraxon hispidus		V	*Acacia ingramii*	gorge wattle	2RCa
Callitris oblonga subsp *parva*		V	*Asplenium aethiopicum*	shredded spleenwort	3RC-
Eucalyptus magnificata		E	*Callitris monticola*	steelhead	3RC-
Eucalyptus nicholii	narrow-leafed black peppermint	V	*Chiloglottis sphyrnoides*		3KC-
Eucalyptus rubida subsp. *barbigerorum*		V	*Cryptocarya floydii*	gorge laurel	3RCi
Gentiana wissmannii		V	*Cryptocarya nova-anglica*	mountain laurel	3RCa-
Grevillea beadleana		E	*Dipodium pulchellum*		3RC-
Hakea archaeoides		E	*Dodonaea rhombifolia*		3RCa
Haloragis exalata subsp*. venultina*		V	*Eucalyptus dorrigoensis*	Dorrigo white gum	3KC-
Macrozamia johnsonii	cycad	E	*Eucalyptus fusiformis*	grey gum	2RC-
Pterostylis metcalfei	Metcalfe's orchid	E	*Eucalyptus michaeliana*	Hillgrove gum	3RCa
Styphelia perileuca		V	*Eucalyptus olida*		2RCa
Tasmannia glaucifolia	fragrant pepperbush	V	*Euphrasia ramulosa*		2RC-
Thesium australe	Austral toadflax	V	*Hibbertia villosa*		3KC-
Tylophora woollsii		E	*Kunzea bracteolata*		3RC-
Zieria floydii		E	*Marsdenia liisae*	large-flowered milk vine	3RC-
			Olearia rhizomatica		2RCit
			Ozothamnus adnatus		3KC-
			Persoonia rufa		2RCa
			Plectranthus suaveolens		3KC-
			Schistostylus purpuratus		2RC
			Pultenaea pycnocephala		3RCa

* Status is either that given by the TSC Act (V = Vulnerable, E = Endangered) or by the following codes for Rare or Threatened Australian Plants or ROTAPs (Briggs & Leigh 1996):

2 = Geographic range in Australia less than 100km
3 = Geographic range in Australia more than 100km.
R = Rare
K = Poorly known but suspected to be Rare, Vulnerable or Endangered
C = Occurs within a conservation reserve
a = 1000 plants or more known to occur within a conservation reserve

i = less than 1000 plants are known to occur within a conservation reserve
- = reserved population size is not accurately known
t = total known population reserved

The planning area is an important core area in an extensive belt of high quality, mostly eucalypt-dominated forest, covering the northern gorge country of the eastern escarpment of the Great Dividing Range. Large areas of old growth forest including nearly the whole of the former Glen Nevis, London Bridge and Oakwood State Forests occur in the planning area (FCNSW 1992a).

It is also a refuge for many rare plants that are highly localised in their distribution (Austeco 1999). A total of 31 rare and threatened plant species have been recorded (refer Table 2).

A number of species and communities represent range extensions such as a dry rainforest community previously known only from south of the Hunter Valley. A dry open forest community indicated by the rare species brittle gum (*Eucalyptus michaeliana*) is protected within the park (Austeco 2000).

An area of about 1500ha in the north of the planning area is mapped as Dorrigo white gum (*E. dorrigoensis*) and Sydney blue gum (*E. saligna*) forest. This community is also believed to achieve its best development in the planning area and is restricted to the Glen Innes and Dorrigo districts (Austeco 2000). Range extensions within the planning area for individual species include red passionflower (*Passiflora cinnabarina*), (*Spermacoce brachystema*) and bluebell (*Wahlenbergia luteola*) (Austeco 2000).

In the south of the planning area a broadleaved stringybark *(E. rubida* spp. *caliginosa*) community is noted for the large number of significant plants that occur and another dry open forest community in this area is dominated by two rare species: candlebark (*E. rubida ssp barbigerorum*) and *E. magnificata* (Austeco 2000).

It is estimated that over 78 different species of significant plants occur within the planning area, including threatened and ROTAP species and studies suggest that with further survey work additional significant plant species are likely to be found (Austeco 2000).

Key threats to native plant species and communities include introduced species, inappropriate fire regimes and human activities. Bushfire regimes are a major determinant of the distribution and abundance of plants and animals in the planning area (refer section 5.5 Fire Management).

Under the provisions of the TSC Act recovery plans may be prepared for threatened species. A recovery plan has been prepared for *Grevillea beadleana* (DEC 2004). Other recovery plans and priority action statements are progressively being prepared and will be used to guide management of threatened species in the area.

Desired Outcomes

- The full range of native plant communities and species found in the planning area are conserved, and in particular, threatened and significant communities and species are protected from threatening processes.
- Increased knowledge of ecological requirements, including fire ecology of vegetation communities, especially for rare and threatened species.

- Vegetation structural diversity and habitat values are conserved and restored.
- Remnant native vegetation and habitat on neighbouring lands that link sections of planning area or join the planning area to other large naturally vegetated areas are protected.

Management Strategies

- Ensure that management and visitor facilities do not significantly impact on rare, threatened, significant or restricted plant communities (refer sections 5.3 Introduced Plants, 5.5 Fire Management, 6 Visitor Opportunities and Education, 8 Other Uses and 9 Management Operations).
- Allow natural revegetation of cleared areas and where necessary undertake revegetation works.
- Implement the recovery plan for *Grevillea beadleana* and plans/actions for other threatened species when they are prepared.
- Consider the requirements of dry rainforest and other significant communities when designing and undertaking management programs, especially those relating to fire and introduced plants.
- Encourage vegetation surveys throughout the planning area, in particular to identify the distribution and occurrence of significant species.
- Encourage research programs into the habitat requirements and threats to native plants, with priority to threatened species, endangered populations and endangered ecological communities (refer section 7 Research and Monitoring).
- Work with neighbours and key groups such as Landcare, Northern Rivers CMA and other relevant organisations, Rural lands Protection Boards, and other relevant agencies to encourage retention, enhancement, connection and if possible expansion, of areas of remnant native vegetation and habitat on Crown land and private land close to the planning area.
- Promote and interpret the value of native vegetation as part of interpretation of the planning area to visitors (refer to section 6.1 Visitor information).

4.3 NATIVE ANIMALS

The distribution of subtropical, temperate, tableland, coastal, northern and southern fauna are known to overlap in the planning area. This overlap is described as the 'McPherson - Macleay Overlap' (Clancy & Clancy 2002).

The planning area lies in a fauna rich part of NSW. The area is believed to be important for the movement of fauna because of its connectivity with adjoining forested areas of State Forest, other NPWS managed areas, leasehold and private land. The forest and woodlands of the southern end of the planning area, including the nature reserve, may support different avifauna to the rest of the planning area (Reid et al. 1996).

Various kangaroo and wallaby species are abundant and populations of arboreal mammals, including the greater glider (*Petauroides volans*), are high. A number of

threatened macropod species are recorded in the planning area and their occurrence is considered highly significant.
For example, the brush-tailed rock-wallaby (*Petrogale penicilliata*) is in rapid decline over much of its range, with local populations in the planning area believed to be important in maintaining the viability of the species in NSW (Clancy & Clancy 2002). A statewide Draft Recovery Plan has been developed for the brush-tailed rock-wallaby (DEC 2005).

Guy Fawkes River National Park and Guy Fawkes River Nature Reserve have been identified as containing high quality dingo (*Canis lupis*) habitat. The *Rural Lands Protection Act 1998* (RLP Act) requires public land managers, such as the NPWS, to assist in the preparation of a wild dog management plan to identify methods for the control of wild dogs and the conservation of dingoes (refer section 5.4 Introduced Animals).

Bird species are numerous and widespread (FCNSW 1992a, b) and there are significant populations of all three threatened large forest owls: the powerful owl (*Ninox strenua*), masked owl (*Tyto novaehollandiae*), and sooty owl (*Tyto tenebricosa*). The planning area is also reported to be significant core habitat and important stronghold for the threatened glossy black-cockatoo (*Calyptorhynchus lathamii*). A number of species recorded within the planning area are also at the limit of their ranges. These include the masked owl (*Tyto novaehollandiae*) which is almost at the northern limit of its distribution in the planning area, the varied triller (*Lalage leucomela*) which is near its southern geographical limit, and the turquoise parrot (*Neophema pulchella*) which is at its eastern limit at this latitude (Reid et al. 1996).

Although only limited surveys of native animals has been undertaken in the planning area, the area is known to provide essential habitat for a variety of threatened and significant fauna species. Table 3 lists threatened species and other species considered to be of 'conservation concern' because they could become vulnerable or endangered if their populations and habitats continue to be impacted upon.

Table 3 Threatened animal species and species of conservation concern

Common name	Scientific Name	Status*
Fish		
freshwater eastern cod	*Maccullochella ikea*	E
Frogs		
tusked frog	*Adelotus brevis*	PE
pouched frog	*Assa darlingtoni*	V
Fletcher's frog	*Lechriodus fletcheri*	
Booroolong frog	*Litoria booroolongensis*	E
Pearson's/ leaf green tree frog	*Litoria pearsoniana/ L. phyllochroa*	
peppered frog	*Litoria piperata*	V
New England tree frog	*Litoria subglandulosa*	V
stuttering frog	*Mixophyes balbus*	E
giant barred frog	*Mixophyes iteratus*	E
Reptiles		

Common name	Scientific Name	Status*
Verreaux's skink	*Anomalopus verreauxii*	
white-crowned Snake	*Cacophis harriettae*	V
scute-snouted skink	*Calyptotis scutirostrum*	
beech skink	*Cautula zia*	
Mcphee's skink	*Egernia mcpheei*	
Martin's skink	*Eulamprus martini*	
Murray's skink	*Eulamprus murrayi*	
three-toed skink	*Saiphos equalis*	
Birds		
Pacific baza	*Aviceda subcristata*	
Australasian bittern	*Botaurus poiciloptilus*	V
glossy black-cockatoo	*Calyptohynchus lathami*	
brown treecreeper	*Climacteris picumnus*	V
forest raven	*Corvus tasmanicus*	V
grey falcon	*Falco hypoleucos*	V
hooded robin	*Melanodryas cucullata*	V
powerful owl	*Ninox strenua*	V
olive whistler	*Pachycephala olivacea*	V
osprey	*Pandion haliaetus*	V
wompoo fruit-dove	*Ptilinopus magnificus*	V
paradise riflebird	*Ptiloris paradiseus*	
speckled warbler	*Pyrrholaemus sagittatus*	V
diamond firetail	*Stagonopleura guttata*	V
pale yellow robin	*Tregellasia capito*	
masked owl	*Tyto novaehollandiae*	V
sooty owl	*Tyto tenebricosa*	V
Mammals		
rufous bettong	*Aepyprymnus rufescens*	V
dingo	*Canis lupis dingo*	
spotted-tailed quoll	*Dasyurus maculatus*	V
great pipistrelle	*Falsistrellus tasmaniensis*	V
golden-tipped bat	*Kerivoula papuensis*	V
parma wallaby	*Macropus parma*	V
whiptail wallaby	*Macropus parryi*	
eastern bent-wing bat	*Miniopterus schreibersii*	V
large-footed myotis	*Myotis adversus*	V
platypus	*Ornithorhynchus anatinus*	
yellow-bellied glider	*Petaurus australis*	V
squirrel glider	*Petaurus norfolcensis*	V
brush-tailed rock wallaby	*Petrogale penicillata*	E
koala	*Phascolarctos cinereus*	V
long-nosed potoroo	*Potorous tridactylus*	V
Hastings River mouse	*Pseudomys oralis*	E
eastern horseshoe bat	*Rhinolophus megaphyllus*	
greater broad-nosed bat	*Scoteanax rueppellii*	V
eastern broad-nosed bat	*Scotorepens orion*	
eastern cave bat	*Vespadelus troughtoni*	V

Status is that given under the TSC Act (E= Endangered, V= Vulnerable, PE = part of an Endangered Population) except for the fish species, which are listed under the *NSW Fisheries Management Act 1994*. Where no status given, the species is not threatened but is still considered of conservation concern.

Sources: NPWS Atlas 2006, Clancy & Clancy 2002.

Reptiles are believed to be abundant, but also regionally distinctive, due to the nature and extent of open habitats, rocky areas and warmer temperatures in the gorge system. The wetlands and rainforests within the planning area are also likely to be significant for frogs. One frog species in particular, New England tree frog (*Litoria subglandulosa),* may be sensitive to high sediment loads in streams following fire and soil disturbance (Reid et al. 1996).

There are a number of significant species predicted to occur within the planning area but that have not to date been recorded, including the Hastings River mouse (*Pseudomys oralis*), eastern pygmy-possum (*Cerartetus nanus*), brush-tailed phascogale (*Phascogale tapotafa*), yellow-footed antechinus (*Antechinus flavipes*), grey goshawk (*Accipiter novaehollandiae*) and little eagle (*Hieraaetus morphnoides*) (Clancy & Clancy 2002).

Two bird species in the planning area are covered by international treaties to which Australia is a signatory. These are the rainbow bee-eater (*Merops ornatus*), covered by the Japan-Australia Migratory Birds Agreement (JAMBA); and the white-throated needletail (*Hirundapus caudacutus*), covered by JAMBA and the China-Australia Migratory Birds Agreement (CAMBA) (Clancy & Clancy 2002).

Under the provisions of the TSC Act recovery plans may be prepared for threatened species. Recovery plans and priority action statements are progressively being prepared and will be used to guide management of threatened species in the area. The Recovery Plan for the Yellow-bellied Glider (NPWS 2003) describes the species as an umbrella and/or indicator species due to its requirements for large areas of complex mature and old growth eucalypt forest. The yellow-bellied glider may represent a good target species for monitoring (refer section 7 Research and Monitoring).

A Draft Recovery Plan for the Koala (NPWS 2003) has been prepared which considers the conservation requirements of the species across its known range in NSW. It identifies actions to be taken to ensure the long-term viability of the koala in nature and provides a framework for localised koala recovery efforts. Amongst other things, the recovery actions are aimed at identifying koala habitat and prioritising on-ground management actions; identifying research priorities; and increasing community and government awareness regarding the management and conservation of koalas. It is intended that the approved recovery plan will be implemented over a five year period.

Key threats to native animal species include fire, introduced species, erosion, stream degradation and inappropriate human activities. Protection of habitat and appropriate bushfire regimes are a major determinant of the distribution and abundance of animals in the planning area (refer also sections 4.2 Native Plants and 5.5 Fire Management).

Strategies to protect native animals have also been incorporated into other sections of this plan, including sections 5.2 Water Quality, 5.3 and 5.4 Introduced Species, 6 Visitor Opportunities and Education, 8 Other Uses and 9 Management Operations.

Desired Outcomes

- Animal species and their habitats are protected and maintained.
- Increased knowledge of the ecology and distribution of native animal species, including understanding the effects of fire and weeds on small mammals.

Management Strategies

- Protect the habitats of threatened and biogeographically significant animal species from visitor impacts, the effects of introduced species and inappropriate fire regimes (refer sections 5.3 Introduced Plants, 5.4 Introduced Animals, 5.5 Fire Management, 6 Visitor Opportunities and Education, 8 Other Uses and 9 Management Operations).
- Continue to record the distribution of threatened and significant animal species.
- Implement recovery plans for the yellow-bellied glider, brush-tailed rock wallaby and koala. Implement recovery plans for other threatened species as prepared.
- Encourage and/or undertake research into the role and impact of fire on fauna in the planning area.
- Encourage research into the distribution and abundance of the planning area's fauna species, in particular the distribution and abundance of frog species, Hastings River mouse, koala, brush-tailed rock wallaby and rufous bettong.
- Identify core conservation areas for dingoes and assist in preparing Wild Dog Management Plans under the RLP Act (refer to section 5.4 Introduced Animals).
- Encourage research into the genetics, movement, population dynamics and distribution of dingoes so as to define core dingo conservation area boundaries (refer section 5.4 Introduced Animals).
- Protect aquatic fish habitats within the planning area, in particular habitat for the endangered eastern fresh water cod (refer section 5.2 Water Quality and Catchment Management).
- Liaise with NSW Fisheries and local fishing clubs about installing interpretive signs at the Nymboida the top of Jordans Trail and at other strategic locations (e.g. Dalmorton rest area) about the significance and legislative protection of the eastern freshwater cod.
- Support NSW Fisheries in their implementation of regulations aimed at protecting the eastern freshwater cod, such as seasonal fishing closures and other restrictions.

4.4 ABORIGINAL HERITAGE

Aboriginal communities have an association and connection to the land. The land and the water biodiversity values within the landscape are central to Aboriginal spirituality and contribute to Aboriginal identify. Aboriginal communities associate natural resources with the use and enjoyment of foods and medicines, caring for the land, passing on cultural knowledge and strengthening social bonds. Aboriginal heritage and

nature are inseparable from each other and need to be managed in an integrated manner across the landscape.

The planning area forms part of the western territory of the Gumbaynggir nation and part of the Ngarabal, Banbai and Bundjalung country. It falls within the Local Aboriginal Land Council Areas of Armidale, Glen Innes, Grafton-Ngerrie, Guyra and Dorrigo Plateau. The Guy Fawkes and Boyd Rivers were part of important traffic and trade routes linking the Tablelands to the coast, and their waters and surrounding lands are sacred to Aboriginal people. As European settlement moved into New England the planning area may is likely to have acted as refuge for a number of tribes, allowing Aboriginal people to maintain their cultural practices much longer in the face of European settlement than Aboriginal people in more accessible areas (Umwelt 2000). The established use of travelling stock reserves by the new settlers however continued the ancient traditions of using the river valleys as routes for travelling.

'Yara Merricana' is believed to be the Aboriginal name for the Guy Fawkes Valley, which is the site of many ancestral Aboriginal ceremonies and a known plentiful hunting ground (Reid et al. 1996). The area is also thought to be referred to as ‘Martiam’ or ‘Great Falls’.

Research into the Aboriginal heritage of the planning area is limited and often has been restricted to particular areas. Aboriginal heritage surveys have been commissioned by NPWS and some archaeological work has been undertaken by Forests NSW as part of the Glen Innes Forestry Management Area (GIFMA) EIS.

Based on a review of archaeological and ethnographic literature regarding Aboriginal occupation on the Northern Tablelands, Goodwin (1992) argued that strong social networks existed between the people of the north coast and the people of the tablelands and that ceremonial sites such as stone arrangements along the escarpment represented boundary markers.

The stone arrangements generally occur on top of mountains or peaks and were also believed to be constructed for ceremonial use and as navigational aids marking traditional routes of travel. They are of high Aboriginal and archaeological significance (Umwelt 2000).

In 2000 NPWS commissioned an archaeological survey of area north of the Sara River. The study found a number of Aboriginal sites including stone arrangements; scarred trees, (which are particularly at threat from bushfires); artefact scatters; Aboriginal art; and flaked stone artefacts (Umwelt 2000).

The planning area also contains an Aboriginal Place, the ‘Devils Chimney’ (refer section 1.2). The Devils Chimney is a place of mythological and ritual significance to the Aboriginal community.

Aboriginal sites, places and objects allow insight into how the planning area may have been used by ancestral Aboriginal people and also the significance the area may hold to Aboriginal people today. It is thought that use of the planning area was focused in areas that were relatively accessible along the river valleys, watercourses and

waterbodies. These areas offer the most favourable winter climates and a wide range of resources when compared to the plateau (Unwelt 2000). The long ridgelines would have most likely been used to travel between the plateau and the river valleys and also for hunting and gathering of plant foods. The sites found along the plateau suggest that groups using these areas were smaller or stayed a shorter time than those along the river valleys.

Old campsites show that Aboriginal people camped along the ridges leading in and out of the valleys and met at a large meeting place near the river, where rock shelters provided comfortable camp. While it is expected that most of the valley floors were used for camping and that such evidence will be revealed by future surveys, it is currently known that Ballards Flat in particular was a large post- contact camp site, and is one of the most extensive open artefact scatters known from the planning area, covering many hectares. It is considered important to the interpretation of the regional archaeological resource (Umwelt 2000).

Studies have concluded that Aboriginal occupation of the planning area has a long history with a continuing association due in part to the “continuing use of Aboriginal tracks in the area by Aboriginal stockholders" (Lennon 1999).

Many of the Aboriginal sites recorded (and those not yet recorded) are believed to be well preserved due to the remote and rugged nature of the planning area. The area has the potential for further archaeological research that may provide a greater understanding of its past use by Aboriginal people.

While the NPWS presently has legal responsibility for the protection of Aboriginal sites and places it acknowledges the right of Aboriginal people to make decisions about their own heritage. It is therefore policy that Aboriginal communities be consulted and involved in the management of Aboriginal sites, places and related issues and the promotion and presentation of Aboriginal culture and history.

Desired Outcomes

- Aboriginal sites, places and landscapes of significance are conserved and protected from damage.
- There is cooperative and integrated management of Aboriginal places and objects with the Aboriginal community and relevant agencies.
- The conservation of Aboriginal cultural heritage incorporates acknowledgment of both traditional and contemporary associations of the Aboriginal people with the environment as well as physical evidence.

Management Strategies

- Manage Aboriginal heritage within the planning area in partnership with the Armidale, Glen Innes, Grafton-Ngerrie, Guyra and Dorrigo Local Aboriginal Land Councils, local community representatives, Aboriginal Elders and other representatives.
- Undertake a cultural heritage survey of the area south of the Sara River and west of the Guy Fawkes River (in particular management trails and fire vantage lines in the

Paddy's Land area) to complement and complete previous survey work undertaken north of these rivers.

- Undertake a cultural heritage assessment of the site prior to any new works and developments.
- Protect Aboriginal sites, objects, places and culturally significant features.
- Prepare site management plans for known sites if under threat, in partnership with appropriate representatives from the local Aboriginal community and Land Councils.
- Do not publicise the location of Aboriginal sites and places except where the agreement of relevant Aboriginal community organisations has been obtained. Prior to any promotion of a site or place, prepare a conservation study and undertake any management work necessary to protect the site or place.
- Interpret the Aboriginal heritage of the area in consultation with Aboriginal community representatives.
- Support Aboriginal community proposals to undertake interpretation of Aboriginal cultural values in the planning area.
- Support Aboriginal connections to country.

4.5 HISTORY SINCE COLONISATION

Guy Fawkes River was named by Major Edward Parke who camped nearby on Guy Fawkes Day 5 November, 1845. Major Parke obtained a grant of land on what is now known as Major's Creek, and established the first cattle station on the Dorrigo Plateau. The property was referred to as Old Station and later became known as Guy Fawkes Station. It extended as far west as Ebor village and was located halfway between Hernani and Ebor. Little Guy Fawkes Station, started by Major Rigney, adjoined Guy Fawkes Station and was located on the site of the current Ebor township (Fahey 1984).

The area referred to as 'Paddy's Land' was settled by the Newby brothers in the 1880s. The station stretched down to the Guy Fawkes River and included the river flats on the western bank of the Guy Fawkes River. Adjoining Paddy's Land to the west was a property selected by William Nowlands, at Ward's Mistake, now known as Nowlands Creek (Newbury 1986).

In the eastern section of the planning area Marengo Station was settled by Joseph and Henry Brown in the 1850s (Newbury 1986). David (Pardy) Brown, son of the first owner of Marengo Station, established a station in the early 1880s in the heart of the Guy Fawkes valley at Combalo Hut (Reid et al. 1996). Combalo Station was part of the original station in that area.

The ruins of Combalo Hut are located near an old orange tree, on the banks of the Guy Fawkes River below its junction with the Aberfoyle River. Brown carted his wool to Marengo Station by bullock dray along the 6km spur known as Macdonald's Ridge and in 1890 this route was gazetted as a Travelling Stock Route (TSR) (Reid et al. 1996).

In the early 1920s, another TSR was dedicated from the junction of the Sara River south to join the TSR along Macdonald's Ridge. A third TSR is located in Paddy's Land in the

west of the planning area (Reid et al. 1996). In 1923, an area of 50 hectares at the junction of the Sara and Guy Fawkes Rivers was gazetted as a Camping Reserve for holding stock overnight whilst traversing the TSR.

Settlement occurred in the planning area around the mid 1800s at Broadmeadows Station, first gazetted to William Boyd in 1849. Also in the north, the lease at Oakwood Run was recorded in 1853 by William Landsborough and William Penson. A number of the creeks in the area still bear the name of Penson's children, Julian, Roger and Myrtle (Lennon 1999).

In 1885, Oakwood Run and another lease, Mount Mitchell, were amalgamated as Mount Mitchell Pastoral Holding No. 421. The Soldiers Settlement Act also saw leases taken up in 1919 by Marsden and Kilner. Marsden established a dairy farm on the block now generally known as 'Bayly's' (later held by Charlie Bayly). Kilner established a dairy farm on the block known as 'Bowens' named for a subsequent occupant, Ella Bowen. This part of the planning area became state forest in 1932 and was added to the park in 1997. The graves of many of the early settlers are still believed to be located in the planning area (Lennon 2000).

Evidence of the pastoral history of the planning area includes the many huts that are scattered throughout including Pine Creek, Braziers, Boban, Bowens (chimney only, remainder burnt down), Fattening Paddock, Sawpit, Perry's, Housewater (burnt down) and Combalo Huts (ruins). Cattle yards, fencelines and TSRs also occur throughout the area.

Mining occurred sporadically, beginning in the 1860s and 1870s, utilising alluvial and reef mining methods. Some of the roads and trails in the area were developed for this purpose, such as the Star Light Trail. From 1866 to 1899, gold mining was largely focused to the west with alluvial and reef gold mining and was undertaken along the Sara River upstream from Ballard's Flat. Gold mining also occurred at Ballard's Flat in the 1980s and abandoned machinery and a transportable hut are still present (Umwelt 2000).
Shaft depressions, stone walls, sluicing scars, water races, tailings piles and habitation sites are still evident throughout the planning area and provide a tangible link to the area's past mining history.

One of the early settlements in the planning area, the historic township of Dalmorton, is located on the Old Grafton-Glen Innes Road near the Boyd River. Dalmorton was once a thriving town, which developed following the discovery of gold in nearby Quartz Pot Creek in 1871. A small collection of buildings from a variety of periods remain at the site, including the police station's stable/jail, a butcher shop (circa 1900s) and some more recent buildings in poor condition. The original police residence and court house burnt down in 1991.

There is also a cemetery, mines and Pine Creek Stockman's Hut located just outside the town precinct. A TSR also runs along the river between the Dalmorton township and the Boyd River.

A conservation analysis of the Dalmorton Township and surrounds has been undertaken for NPWS (Jill Sheppard Heritage Consultants 2003). As well as reflecting a number of significant themes, some of the buildings in the township have been found to be of regional significance. The Pine Creek Stockman's Hut (circa 1930s) and its nearby yards are of local significance. The hoop pines within the police reserve are also recognised as having regional significance and possibly state significance.

The conservation analysis for Dalmorton provides recommendations for management of cultural plantings, pest control, management of the historic buildings, including the lock-up/stables and butcher shop. It also recommends management of the structures of low significance (tennis court, generator-shed ruins, yards and sheds, NPWS accommodation hut and fibro cottage). The conservation analysis also assessed the development of camp ground near the historic site.

Cedar Creek and Sawpit Creek at the northern end of the planning area testify to the area's logging history. In the southern sections there was limited forestry activities due to distances and the difficult terrain. In the north of the planning area small sections of the previous London Bridge, Oakwood and Glen Nevis State Forests were logged up until after 1987 (FCNSW 1992a). Evidence of past logging activities includes ringbarked trees, stumps and log landings.

The planning area also has an interesting conservation history. The first area to be given protection was Ebor Falls, due in part to its popularity as a local picnic spot. Ebor Falls was made a reserve for Public Recreation in 1895 and in 1972 was transferred to the NPWS as part of Guy Fawkes River National Park. The gorge below the falls was dedicated in 1970 as Guy Fawkes River Nature Reserve.

In September 1996, the Pine Creek Catchment of Chaelundi State Forest was proposed for addition to Guy Fawkes River National Park and subsequently gazetted in 1997. This area of forest was part of a landmark campaign to protect tall old growth forest that spanned many years, numerous court cases and arrests and became one of the most significant events in NSW conservation history. The campaign led to the establishment of the first endangered species legislation, the *Endangered Fauna (Interim Protection) Act 1991*, (since replaced by the *Threatened Species Conservation Act 1995),* and also resulted in the creation of several new national parks and wilderness areas. The campaign was waged from 1990 to 1996, with John Corkill and the North East Forest Alliance being the principal advocates (Colong Foundation1999).

The wilderness values of the planning area were first recognised by Helman *et al.* in 1976 (NPWS 2001). This report also identified the Guy Fawkes River system and the Henry River as being "wild and scenic". In 1990, the Armidale Branch of the Wilderness Society submitted a proposal for the identification and declaration of approximately 111,000ha of land on the eastern edge of the New England Tablelands as the Guy Fawkes Wilderness. The outcome was that 49,700ha of the planning area was declared as wilderness in 1996, and in 2002 a further 34,870ha was added to the Guy Fawkes Wilderness, which now totals more than 84,500 hectares.

Desired Outcomes

- Historic heritage resources are recorded and assessed, and where appropriate are protected, conserved and interpreted.
- Further investigation is undertaken into the history of the planning area.

Management Strategies

- Manage the Dalmorton precinct and surrounds in accordance with the Conservation Analysis and archaeological and interpretation management plan (Tuck 2007). This includes:
  - repair and restore the historic police lock-up and stables;
  - remove the black bamboo suckers from 1.5 metres around the lock up building and fence with a buried root barrier;
  - remove the silky oak trees behind the northern side of the stables and the NPWS accommodation hut to prevent damage to these structures;
  - remove the regenerating hoop pine close to the butcher shop to prevent damage to the building. Retain the silky oak tree to the east of the butcher shop;
  - treat the lock up, stables, butchers shop and Pine Creek Stockman's Hut for termite infestations;
  - undertake an engineering assessment of works required to bring the stables and lock up to cyclical maintenance standard;
  - do not locate a camp ground on the historic town site (refer Section 6.2.4 Camping)
- Provide interpretive signage at Dalmorton outlining the historical significance of the township and its buildings (refer to section 6.1 Visitor information).
- Retain existing exotic trees at the Combalo Hut site until they die but remove those trees with the potential to spread. Do not replace or allow the exotic trees to regenerate and become invasive.
- Retain tennis court at Dalmorton for use by day visitors and campers but do not upgrade it beyond its current standard.
- Progressively survey and record other historic places, assess their significance and develop appropriate management strategies.
- Record and assess the mining relics within the planning area. Determine their heritage significance and conservation measures required, and investigate any public safety implications (refer 8.5 Mining and Mineral Exploration).
- Encourage surveys of areas not yet assessed for cultural heritage and documentation of the oral history of the planning area.
- Undertake conservation assessment of huts within the planning area and develop conservation plans for those identified as being of heritage significance.
- Pending an assessment of the above:
  - Retain Boban hut and assess the feasibility of restanding.
  - Retain Braziers hut and the other huts/ruins but do not actively maintain.

5. PLANNING AREA PROTECTION

5.1 SOIL EROSION

Soils vary in the planning area according to parent material and landform. Lithosols occupy the steepest slopes and occur as shallow stony soils with little structural development apart from accumulation of organic matter at the surface. Colluvial material is plentiful and deep mantles have developed on lower slopes due to high rates of weathering and hill slope movement. Alluvial sediments occur along the lower river stretches (Reid et al. 1996).

The Palaeozoic sediments and metamorphosed sediments found along the Guy Fawkes River typically have mostly infertile red and yellow podzolics and yellow earths. Soils of the north eastern section of the planning area derived from the intrusive pluton of granite adamellites are gravelly and vary from sandy lithols to deeper sandy-clay loams and textured yellow earths (Reid et al. 1996). Other soils types within the planning area include: deep structured red clay loams; shallow loams; well structured red brown earths, yellow and red textured contrast soils. The dominant soil type is considered to be the shallow loams with the red podsolic in the more heavily forested areas and yellow and grey podsolic in areas of lesser quality forest (Lea et al. 1977). Podzolic soils are acid soils with strong texture contrast between loamy topsoils and clay subsoils.

Soils within the planning area are all classified as highly erodible, with a high to extreme erosion hazard rating (Milford 1996). The water erosion hazard is classified as being high and all have a localised mass movement hazard (Milford 1996). However, most of the soils have low to moderate erodibility if undisturbed, although granite-based soils are easily eroded (Milford 1996). Erosion occurs on steep slopes and in areas where vegetation cover has been disturbed by grazing, vehicle use such as trail bike riding, or by heavy recreation use.

Hard hoofed animals such as horses and animals can also impact on soil and erosion, through the creation of tracks and compaction and destruction of stream banks (refer section 5.4 Introduced Animals).

The erosive qualities of soils and their parent materials have important implications for management, particularly for roads, track and trail maintenance. Erosion is recognised as a natural process however a number of events can accelerate the rate of erosion. Soils are particularly vulnerable to erosion after large fire events, especially when followed by high rainfall. Torrential rainfall events can also trigger bulk soil movement and landslides.

A number of areas within the planning area have been affected by erosion and require remediation works. Such areas include an area adjacent to the Marengo Creek junction with the Guy Fawkes River where there is an area of considerable gully and sheet erosion. The gully head is still active and works are required to control the erosion and to

assist regeneration. The Department of Land and Water Conservation (DLWC) prepared a plan for the remediation of the area.
During the 2002 fires in the northern part of the planning area a number of trails were opened up including Pony Trail. Work will need to be undertaken to rehabilitate and close these trails.

Desired Outcomes

- Park maintenance works and recreational use do not impact on the natural rates and magnitudes of soil erosion and sedimentation in the planning area.
- Areas of disturbance are rehabilitated.

Management Strategies

- Ensure management activities are carried out in a manner that minimises soil erosion, siltation and water pollution.
- Undertake appropriate erosion prevention and sedimentation control in association with all developments and road maintenance works.
- Undertake works to control erosion and rehabilitate the erosion gully at the junction of Marengo Creek and Guy Fawkes River in accordance with the plan prepared by DLWC.
- Rehabilitate areas disturbed by fire suppression operations as soon as practical after any fire, including Pony Trail (refer also to section 5.5 Fire Management).
- Identify and monitor other major points where sediment enters the creek systems and undertake erosion and sedimentation control works as necessary.
- Map the location of all clearings within the planning area and assess the need for revegetation or other rehabilitation programs (refer to section 4.2 Native Plants).
- Monitor areas of erosion and treat if found to be extending.
- Prevent domestic stock entering the planning area and remove wild horses (refer section 5.4 Introduced Animals).

5.2 WATER QUALITY AND CATCHMENT MANAGEMENT

The planning area is located within the Clarence River Catchment and is divided into 5 sub-catchments, the Sara-Oban, Boyd, Henry, Guy Fawkes and Aberfoyle Rivers.

The Sara, Boyd and Henry Rivers are fed by numerous tributaries that drain the eastern side of the Northern Tablelands between Ebor and Glen Innes and form part of the southwestern portion of the Clarence River Catchment.

The Henry, Sara, Boyd, Guy Fawkes and Aberfoyle Rivers are all permanent, however, most of the creeks that drain the plateau within the planning area are seasonal and are dry during spring and early summer.

In 1972 the Guy Fawkes and the Henry River systems, including (at least in part) the Henry, Sara, Guy Fawkes and Aberfoyle Rivers, were identified as having wild and

scenic values (Helman *et al* 1976). These river systems are now proposed for investigation for declaration as wild rivers under section 61 of the NPW Act.

Wild rivers are defined under the Act as a watercourse or watercourse network which exhibits substantially natural flow and contains substantially undisturbed biological, hydrological and geomorphological processes associated with river flow and in the catchment with which the river is intrinsically linked. Wild rivers are managed to maintain these natural processes.

Guy Fawkes River is a perennial river and flows generally north for about 70km to its junction with the Sara River to become the Boyd River. Guy Fawkes River is the best known of the river systems in the planning area. The headwaters of the Guy Fawkes River occur near Majors Point (1538m) on the New England Plateau and the river then flows ten kilometres through undulating farming country before plunging 120 metres over the series of falls that make up Ebor Falls where it enters the planning area. The river then follows the Demon Fault Line heading north in a rugged system of steep-sided gorges before it meets the Boyd and Sara Rivers.

High suspended sediment load, extensive siltation and green filamentous algae, indicative of nutrient enrichment and unshaded conditions in the upper catchment, are conditions often observed of Guy Fawkes River at Ebor (Reid et al. 1996).

However, the natural vegetation and undisturbed nature of much of the planning area contributes to the maintenance of and reinstatement of high water quality in the planning area. This has been confirmed by Jellife (2000). The high water quality and catchment values are reflected in the importance of the area as habitat for a diversity of frog species and the endangered eastern cod. A number of property owners within the surrounding area have licences to draw water directly from the creeks and rivers within the catchment of the planning area.

In 2001, the NPWS conducted the NSW North Coast Water Quality Habitats study to assist the NSW Water Management Committees with water management planning (Graham 2001). The study included an assessment of water habitats of the Sara-Oban, Boyd, Henry, Guy Fawkes and Aberfoyle Rivers. The study identified a number of water habitats important for threatened species and water quality maintenance. These included fresh water wetlands, rainforests, riparian forests, moist heathy vegetation and moist eucalypt forests that occur in the planning area. The maintenance of natural flow regimes and water quality within the catchment is important for the maintenance of riparian habitats and hence the conservation of a number of fauna species (refer also section 4.2 Native Plants).

The *Catchment Management Act 1989* provides a framework for achieving cleaner water, less soil erosion, improved vegetation cover, the maintenance of ecological processes and a balanced and healthier environment. It also provides a focus to balance conservation needs and development pressures and encourages a more aware and involved community. An important means of achieving these aims is the formation and support of catchment management authorities at a regional level. The reserve is within the area of the Northern Rivers Catchment Management Authority.

Catchment disturbance and pollution of the waterways can impact downstream on the river hydrology, habitat use and recreational enjoyment. Fire and introduced species such as cattle and horses have a detrimental influence at a local scale especially when disturbance is followed by heavy rainfall (refer section 5.3 Introduced Plants). Trampling and tracks can also de-stabilise stream banks and increases stream turbidity. Faecal pollution may add to the bacterial, organic and particularly nitrogen loads in streams (FCNSW 1992a).

Careful consideration will need to be given to road work within the planning area and any future facilities as the steep terrain creates the potential for sediment and mass movement.

Desired Outcomes

- Catchment values and the water quality and health of streams and rivers in the planning area is maintained, and where possible improved.
- The wild river values in the planning area are protected.

Management Strategies

- Design and undertake all works in a manner that minimises water pollution. This will include:
  - exclusion of livestock (refer section 5.4 Introduced Animals);
  - maintenance of roads, trails and tracks in accordance with erosion and sediment control practices to minimise sedimentation of waterways (refer section 5.1 Soil Erosion).
- Liaise with the Northern Rivers Catchment Management Authority, local government, other authorities and landowners about protection of water quality and catchment values.
- Assess the Guy Fawkes and Henry River systems for declaration as wild rivers under the NPW Act.
- Manage wild river(s) within the planning area to restore (wherever possible) and maintain the natural biological, hydrological and geomorphological processes associated with the wild rivers and their catchments, including natural flow variability; and identify, conserve and appropriately manage Aboriginal objects and Aboriginal places.

5.3 INTRODUCED PLANTS

Introduced plants, commonly referred to as weeds, are species that are not native to an area. These species have a range of impacts on natural and cultural values and can reduce the economic viability of agricultural enterprises on adjoining properties. The *Noxious Weeds Act 1993* places an obligation upon public authorities to control

noxious weeds on land that they occupy to the extent necessary to prevent such weeds spreading to adjoining lands.

Regional Pest Strategies have been prepared for both the NPWS North Coast and NPWS Northern Tablelands Regions. These strategies cover the planning area and outline the pest species present and the various control options available. The strategies also prioritise the control of these pest species.

The occurrence of introduced species is a major concern along river flats. The penetration of introduced species has been so successful in some areas that there has been virtual displacement of the native plants and consequent impacts on native animal species such as frogs. Vegetation communities that appear to be the most seriously affected by introduced species are the riparian forests, forests bordering the riparian zone, grasslands and sedgelands.

Other heavily infested areas are associated with disturbance such as along tracks and trails, recent logging areas, old stockyards, stock routes, floodlines of major waterways and areas of increased nutrients. Table 4 lists introduced plant species known to occur within or immediately adjacent to the planning area.

Table 4. Introduced plant species found within or adjacent to the planning area.

Common name	Scientific Name
African lovegrass *G	*Eragrostis curvula*
black locust	*Robinia pseudoacacia*
blackberry *	*Rubus fruticosus* aggregate sp.
Coolatai grass	*Hyparrhenia hirta*
farmers' friend	*Bidens pilosa*
giant Parramatta grass *	*Sporobolus fertilis*
lantana *	*Lantana camara*
mysore thorn *C	*Caesalpinia decapetala*
narrow-leaf cottonbush	*Gomphocarpus fruticosus*
Noogoora burr *	*Xanthium occidentale*
prickly pear *	*Opuntia stricta*
purple top	*Verbena bonariensis*
tobacco bush	*Solanum mauritianum*
weeping willow	*Salix babylonica*

* A noxious weed declared under the *Noxious Weeds Act 1993* in the planning area.
*G = declared noxious only within that part of the planning area in Guyra Shire LGA
*C = declared noxious only within that part of the planning area in Clarence Valley LGA

Blackberry has been identified as a major pest plant species, particularly in the recent additions to the planning area. Blackberries can be difficult to eradicate from an area and once established, harbour feral animals. A Blackberry Pest Management Strategy has been prepared by the North Coast Region. The strategy recommends control measures for blackberry and the associated techniques that can be applied to the whole of the planning area.

Lantana occurs downstream from the junction of the Sara and Guy Fawkes Rivers. It is at its altitudinal limit and as such NPWS has a real opportunity to eliminate it from the planning area. Lantana inhibits natural succession of the forest following disturbance and it chokes access along river and creek valleys. It also changes the structure, fire dynamics and nutrient cycles of forests and other ecosystems. Giant Parramatta grass is also a concern especially in the northern sections of the planning area.

Coolatai grass, an invasive grass from Africa and the Middle East, occurs in the upper Sara River catchment and is expanding downstream further into the park. Its spread from localised areas in northern NSW since the 1940s indicates that, once Coolatai grass has established a toehold in an area, it progressively displaces native grasses and ground cover plants, even in the absence of disturbance. Ground cover eventually becomes completely dominated by the grass, severely impacting on the diversity of native plants. It can also affect the abundance of fauna, such as reptiles and frogs, and produces combustible fuel for wild fires that can burn at high intensity.

Mysore thorn (also known as thorny Poinciana) occurs downstream of the park on the Boyd River and has the potential to colonise areas upstream in the park. It is a vigorous growing thorny plant capable of climbing and smothering native vegetation. It especially favours creek lines where it forms dense thickets, restricting access and water flow.

Coordinated blackberry control programs have been undertaken within the Guy Fawkes catchment since 1998, and in the Aberfoyle catchment since 2000. Lantana has been controlled in the Guy Fawkes catchment since 2001. Programs for the control of black locust, blackberry and weeping willow have been undertaken in the Sara River catchment between the early 1990s to present. A cooperative control program involving Clarence Valley Council, NPWS and the Northern Rivers CMA commenced in 2006 to map and eradicate mysore thorn along the Boyd River.

Desired Outcomes

- Reduced threat to natural, cultural and catchment values from introduced plants.
- Introduced plants are controlled and, where practicable, eradicated.
- Native vegetation in disturbed areas is restored.

Management Strategies

- Carry out pest plant control in accordance with the priorities outlined in the North Coast and Northern Tablelands Regional Pest Management Strategies.
- Use control techniques that have minimal environmental impact.
- Give priority for control of introduced plants to species listed in Table 4 and other species that:
    - are declared noxious;
    - have a significant environmental impact, including damage to wilderness values;
    - may affect neighbouring lands;
    - are new isolated occurrences;

  - have the potential to be spread through internal access systems;
  - occur in floodlines; and
  - that block access routes such as fire tracks and river valleys.
- Actively participate in research programs into effective biological control of lantana. In the interim, develop effective herbicide control techniques to suppress the further spread of lantana. Continue annual lantana control program along the Boyd River and extend the program to new additions.
- Introduce management techniques to reduce the spread of weeds when using vehicles and machinery.
- Develop cooperative, integrated weed control strategies involving neighbours and RLPB to prevent introduction and spread of weeds in planning area and neighbour lands.
- Continue blackberry control programs within the Guy Fawkes, Aberfoyle, Boyd Sara and Pantons River catchments.
- Continue the willow control program along the Sara and Boyd Rivers.

5.4 INTRODUCED ANIMALS

Introduced animals are defined in this plan as any animal that is not native to the planning area. Introduced animals have an impact on the natural environment through competition for resources, predation, disturbance and transmission of diseases and may also have an economic impact on neighbouring properties.

Many of the introduced animals recorded in the planning area occur in isolated pockets and their impact is at times sporadic. The Regional Pest Management Strategies for both the North Coast and Northern Tablelands Regions outline pest animal problems and the best control options for these species. High priority pest species for the planning area include wild horses, cattle, wild dogs and foxes, with other species being of lesser threat (refer table 5).

Rabbits, wild dogs and feral pigs are declared noxious under the *Rural Lands Protection Act, 1989* (RLP Act). Impacts of these feral animals include effects on native biodiversity as well as the profitability of adjoining grazing enterprises through stock losses and damage to pasture.

The RLP Act identifies statutory requirements relating to management of declared noxious pest animals (NPWS 2001). Recovery Plans and Threat Abatement Plans also include specific control programs for introduced animals.

Table 5. Introduced animal species.

Introduced Animal Species	
Common Name	**Scientific Name**
European Red Fox	*Vulpes vulpes*
European Rabbit	*Oryctolagus cuniculus*
Feral Cat	*Felis catus*
Deer	*Cervidae*
Cattle	*Bos indicus*

Feral Goats	*Capra hircus*
Feral Pig	*Sus scrofa*
Wild Horses	*Equus caballus*
Wild Dog	*Canis lupis familiaris*

Predation by the red fox has been listed as a key threatening process under the TSC Act. A threat abatement plan has been prepared for the fox which provides best practice guidelines for fox control. These guidelines aim to maximise the effectiveness of control programs, whilst minimising the impact of control methods on non-target species (NPWS 2001b).

Wild dogs, including dingoes, occur in the planning area. Wild dogs have been declared as pest animals throughout NSW under the RLP Act and hence the NPWS has a statutory obligation to control wild dogs on its estate. Under the RLP Act, however, public lands which are identified as significant habitat for dingoes in Schedule 2 of the Wild Dog Control Order will be managed with the dual objectives of managing wild dogs while at the same time conserving dingoes. Guy Fawkes River National Park and Guy Fawkes River Nature Reserve are Schedule 2 areas and public land managers, such as the NPWS, are required to assist in the preparation of local wild dog management plans in accordance with the RLP Act. These plans are to identify methods for the control of wild dogs and the conservation of dingoes and are to be developed in cooperation with the local Rural Lands Protection Board (RLPB).

Wild dog control programs have been undertaken in the planning area in conjunction with Wild Dog Associations in response to stock loss problems on neighbouring properties including 1080 bait stations, trapping, strategic wild dog fence construction and, in some sections, aerial baiting.

In March 2000, NPWS undertook a dog survey of the eastern section of the planning area to assess the abundance and genetic make up of wild dogs. The western section of the planning area was surveyed in May 2002. These surveys form part of a program that is being undertaken for the North Coast Region which aims at identifying the abundance of pure dingoes and is part of a wider NSW program to assess the distribution and abundance of dingoes. A total of 9 dogs were captured in 2000 and 15 in 2002 in the planning area. An analysis of their scats found that their diet was predominantly swamp wallaby. Pure dingoes were found during both programs. There was no evidence of wild dogs in both samples.

Wild horses occur within the planning area and on adjoining lands. NPWS has been carrying out control programs in conjunction with local stockmen since 1992. In October 2000, following a prolonged dry period, a severe wildfire burnt out almost all the lands occupied by horses and feed resources for the horses were severely limited. A decision was made to aerial cull the remaining horses in the park.

In 2001, a Heritage Working Party was established to study the heritage value of wild horses in the planning area following recommendations from an independent inquiry into the horse culling operation in October 2000. The Working Party concluded that the horses have significant local heritage value and that they should be managed on this basis.

The Minister for the Environment has stated that should horses be found to have heritage value then any such horses would be humanely removed from the park so that they can be managed properly in another location by those with an interest in breeding them for their heritage value.

In recognition of the local community interest in the park's horses and the horses' local heritage value, the NPWS established the Guy Fawkes River National Park Horse Steering Committee in October 2002. This local community- based committee provided assistance to the NPWS in the consultation process and advice on the humane removal of the remaining horses from the park. A draft horse management plan was exhibited from December 2003 to March 2004. This drew on the knowledge, experience and skills of the steering committee and others, and outlined methods and techniques for the humane capture and removal of horses.

In December 2004, the steering committee was replaced by a Horse Reference Group, and expert panel set up to assist in reviewing the planning and implementation of the horse capture and removal program. The GFRNP Horse Reference Group includes representatives from the RSPCA, the National Parks Association, horse interest groups, local landholders, the NPW Regional Advisory Committee and researchers.

Techniques for trapping and removing horses from the park have been refined in light of a trial capture program conducted in 2004-05, during which 157 horses were removed. All comments received during the exhibition of the draft horse management plan were also taken into account. *The Guy Fawkes River National Park Horse Management Plan* was approved in 2006 and seeks an outcome where the park is managed free of horses within five years and the local heritage significance of the horses is conserved by others through their management outside the park (NPWS 2006).

The current number of horses in the park is not known. Estimates based on aerial and ground counts indicates the population in 2003/2004 was between 150 to 300 horses. NPWS is working with the University of New England to develop an appropriate technique to monitor the horse population in the park. Data on foaling rates derived from the horses captured during the trial in the planning area showed the foaling rate at 26% indicating the horses may be breeding at maximum potential.

In April 2005, a PhD research project sponsored by the Australian Research Council commenced to assess the ecological impacts of wild horses in the planning area.

There have been three studies on the impact of horses in the planning area. A study by Andreoni (1998) found extensive erosion associated with horse movement, with the majority of erosion commonly occurring on steeper slopes in woodland areas. Andreoni reported a high density of manure pads in the park with an average of 51 pads found along 100m X 10m transects on the valley floor and within grassland communities, and an average of 184 square metres of pad per hectare. Taylor (1995) undertook glasshouse germination trials of free-ranging horse manure collected from the planning area. The study showed that viable seeds were present in the manure. Sieving of samples found that one horse is capable of passing 19,412 seeds in one day and the viability of seeds from free ranging horse manure was 6.7%. A study by Schott (2002)

mapped and recorded numerous areas where horses have been chewing the bark of various eucalypt species on Paddys Land Plateau area of the planning area.

Desired Outcomes

- Threats to natural ecosystems, native fauna populations, catchment values and neighbouring properties and livestock from pest animals is minimised.
- Introduced animals are controlled and where possible eliminated from the planning area.
- Introduced animals are controlled and managed in consultation with relevant stakeholders and surrounding landholders.

Management Strategies

- Carry out pest animal control in accordance with both the North Coast and Northern Tablelands Regional Pest Management Strategies.
- Seek the cooperation of neighbours in implementing pest animal control programs.
- Undertake control programs, planning and development of techniques in cooperation with both the Northern New England and Grafton RLPBs.
- Give priority for the control of introduced species to those species that:
  - are declared noxious, for which a national emergency control program has been declared or are known to be an important problem in other parks or states;
  - have a significant environmental or social impact, including damage to threatened species, catchment values and recreation values;
  - may affect neighbouring lands or are considered of high priority by the community;
  - where management is needed to maintain benefits gained from previous control programs or to allow another high priority management program to be effective; or
  - where a window of opportunity occurs.
- Continue wild dog baiting programs in liaison with RLPB and local Wild Dog Associations and neighbours. This includes continuing 1080 bait stations, trapping and strategic wild dog fencing. Aerial baiting programs within the Glenn Innes area and on the planning area perimeter will also be continued.
- Control of wild dogs will focus on boundary areas/zones where there is a history of stock losses with the dual objective of minimising predation on neighbouring properties and maintaining core dingo areas.
- Assist the local RLPB in the preparation and implementation of a local wild dog plan in accordance with the RLP Act.
- Continue research including dingo DNA sampling within the planning area to determine areas of pure dingoes and determine core dingo habitat.
- Provide fencing assistance (through fencing agreements) where possible and appropriate to exclude stock (refer section 9 Management Operations). Encourage maintenance of fencing on boundaries with grazing properties.
- Implement the GFRNP Horse Management Plan.
- Humanely remove the remaining horses from the planning area to where they can be managed in locations outside the planning area.

- Continue to research and monitor the impact of wild horses on the fauna, flora and soils of the planning area.
- Implement pest animal actions in threat abatement plans.
- Determine the population and distribution of feral goats and pigs in the planning area and develop an appropriate control program.

5.5 FIRE MANAGEMENT

Fire is a feature of the Australian environment and one of the physical factors considered essential for maintaining native plant and animal habitat biodiversity. Fire frequency, intensity, season of occurrence and the subsequent path of fire, are major factors influencing distribution and composition of plant and animal communities.

Inappropriate fire regimes can damage property, natural and cultural heritage values and endanger visitors and neighbours. Management of bushfire in the planning area is a complex issue. Fire management must aim to achieve long-term conservation of native plant and animal communities and ongoing protection of life and property within and adjacent to the planning area. NPWS recognises that protection of life and property and prevention of native plant and animal extinction is dependent on effective fire management.

Official records of fires within the planning area began in 1972/73. Anecdotal reports and analysis of fire history reveals that the planning area experienced many fires before this time. The pattern of burning appears to be closely related to the past use of the planning area for grazing, and burning activities on neighbouring land.

Research indicates that the past fire regimes have been detrimental to the natural values of the planning area and that fire frequency in some localities has been too high. Vegetation communities that have been impacted by fire include riparian vegetation, rainforest along the river valleys and adjacent slopes and much of the eucalypt forests. A study of the fire ecology and fire management in the planning area demonstrated that shrub and tree species richness declined with successive fires that occurred without appropriate intervals. The study also showed that there was a sharp decline in the abundance of woody shrubs and an accompanying simplification of the structure of the vegetation communities (Kitchin 2001). A complementary soil seed bank study indicated a reduced abundance of shrub species in the seed bank of sites with a history of frequent fires (Kitchin 2001).

The information from these studies has been used to develop a management framework based on fire thresholds for species and vegetation communities that incorporate biodiversity goals. The study provides the first fire ecology study in this region and a baseline on which to build future research within the planning area.

Other studies done in the planning area also show that past burning practices have had a substantial impact on the woody understoreys of the north east escarpment forests within the planning area (Henderson and Keith 2000). Within the planning area rainforest, river oak gallery forests, populations of threatened plants and animals such

as *Grevillea beadleana* and the Hastings River Mouse (*Pseudomys oralis*) are particularly sensitive to damage from a single wildfire.

Cultural heritage sites are sensitive to fire and fire suppression works. Sites such as old huts, stone artefacts, campsites, scarred trees, ceremonial sites, burial sites and tools can be threatened directly by fire and through the construction of fire trails and use of machinery such as dozers, tractors, motor vehicles and hand tools.

Bushfires can also affect nutrient cycles, erosion patterns and hydrological regimes. Erosion as a result of fire is a concern within the planning area particularly with widespread fire that is of moderate to high intensity and in areas of steep topography.

Overall the bushfire threat to life and structural assets, such as houses and farm sheds within the area, is regarded as relatively low as the few dwellings that occur are mostly surrounded by grazing land. However fire does pose a threat to the adjoining grazing land and associated fences. The town of Ebor is located at the very southern point of the planning area. NPWS will be involved in the development of a cooperative village protection plan for the town, which will ensure appropriate strategies are implemented to protect the village from the potential threat of wildfires.

A fire management strategy has been approved for the planning area (NPWS 2007). This incorporates many of the various findings and recommendations arising from the fire research undertaken in the planning area.

The fire management strategy identifies requirements for conservation of native plants and animals and community protection measures in areas where fire is a threat to property. A variety of fire management strategies including fuel reduction, fire trail maintenance, strategic and ecological burning, fire detection and cooperative arrangements are identified and will be implemented. Close to boundary areas, fuel reduction programs and fire trail maintenance will be designed and implemented in cooperation with neighbours. Water points and fire advantages are identified and mapped.

In the south of the planning area, the western and eastern perimeter fire trails are located on private property and assist in fire suppression. These trails will be maintained by the NPWS in cooperation with neighbours of the planning areas and will be used as control lines during hazard reduction burning programs and during wildfire events.

Under the *Rural Fires Act 1997* the NPWS is a fire authority and is responsible for controlling fires on the reserve and ensuring that they do not cause damage to other land or property. An important part of the NPWS fire management is participation in local co-operative fire management arrangements, including implementation of Bush Fire Risk Management Plans developed by District Bush Fire Management Committees. The NPWS is an active member of the Clarence Valley, New England and Northern Tablelands Bushfire Management Committees.

Desired Outcomes

- Life, property and natural and cultural values in and adjacent to the planning area are protected from bushfire.
- Fire regimes are appropriate for the conservation and enhancement of native flora and fauna communities and the maintenance of biodiversity.
- Neighbours and nearby communities have knowledge of fire management objectives and prescriptions for the planning area.
- Wild fires are prevented and spread of fires on, from, or into the planning area is minimised.

Management Strategies

- Continue to implement early detection methods using a combination of remote sensing, aerial detection, fire towers, advantage points, and information from the local community.
- Identify and maintain fire advantage points/lines (refer section 9 NPWS management facilities and operations).
- Implement the Fire Management Strategy for the planning area and update prior to the start of each fire season.
- Use prescribed fire to achieve a variety of fire regimes that maintain fire thresholds for each vegetation community in accordance with the Fire Management Strategies.
- Avoid use of heavy machinery for fire suppression in areas of rare plants, Aboriginal sites and historic places.
- Rehabilitate areas disturbed by fire suppression operations as soon as practical after the fire.
- Encourage research into the ecological effects of fire in the planning area, particularly the fire response of significant plant species and the fire requirements of these communities.
- Identify, plan for and implement research which may assist with fire management in the planning area.
- Continue to actively participate in the New England, Clarence Valley, and Northern Tablelands Fire Management Committees.
- Maintain coordinated and cooperative arrangements with Rural Fire Service Brigades, local councils and neighbours with regard to fuel management and fire suppression.
- Where appropriate, carry out fuel management in cooperation with neighbours for mutual protection.
- Support neighbour efforts to contain fire on their own properties, protect assets and report unplanned ignitions.
- Inform visitors to the planning area on matters of fire safety.
- Continue to maintain the eastern and western perimeter fire trails on private property adjacent to the planning area and extend these trails with the cooperation of neighbours.
- Where possible plan to exclude fire from all rainforest areas within the planning area and wherever possible avoid use of dry rainforest patches for fire control.

- Consider, incorporate and implement, where relevant and appropriate, the recommendations and strategies identified in the various studies done into the effects of fire within the planning area.
- Assess and identify those existing dams within the planning area needed for fire-fighting purposes (refer section 8.2 Grazing).

6. VISITOR OPPORTUNITIES AND EDUCATION

6.1 VISITOR INFORMATION

Promotion and presentation of natural and cultural heritage is a core function of NPWS. NPWS is committed to encourage and support community stewardship of natural and cultural heritage across the landscape and to share an appreciation and enjoyment of this heritage.

Information provision in general assists the protection of natural and cultural heritage, promotes support for conservation and increases the enjoyment and satisfaction of visitors.

The planning area has a number of natural and cultural features of interest to visitors particularly the rivers, waterfalls and associated gorge systems, areas of old growth forest and the remote and rugged forest environment, including the Guy Fawkes Wilderness. It also provides special opportunities due to its size and naturalness to increase public awareness of values associated with the environment and biodiversity. These features will be promoted and interpreted to visitors in a manner which protects their special values and encourages appropriate use within and beyond the planning area.

Promotion of the planning area currently includes directional signs and interpretation signs at existing recreational facilities. Pre-visit information in the form of brochures and off-park displays is also available at NPWS offices and tourist information centres. The NPWS web site also contains information on the planning area and other national parks in the area.

Self-guide interpretive signs are placed on selected walking tracks to identify and explain significant features. Guided interpretive activities are provided through the NPWS Discovery program at peak visitation periods and on request and are popular and effective forms of education.

The planning area is an important resource for environmental study and education. The University of New England and Southern Cross University include studies of the planning area in their biological sciences and management courses. Field naturalists and Australian Plants Society groups from as far away as Brisbane and Sydney also use the planning area for study purposes.

Community support and good relationships with neighbours of the planning area are important components of effective management. Communication with neighbours can also help to improve management techniques and ensure that consideration is given to the impact of activities in the planning area on neighbours.

Desired Outcomes

- Visitors and the local community are aware of, understand and support the area's natural and cultural values and their responsibilities for minimal impact use.
- Visitors are aware of the planning area's recreation opportunities and can easily find their way to facilities.
- There is increased awareness and use of the area as an educational resource by educational institutions and community organisations.
- There is widespread community understanding and cooperation with management programs such as fire management and introduced species control.
- There is increased awareness about wilderness values and the current wilderness boundaries.
- Visitors and neighbours are aware of the appropriate activities allowed in wilderness areas and nature reserves.

Management Strategies

Signage and Displays

- Develop an interpretation strategy for the planning area.
- Provide orientation and/or interpretive signs at key locations including:
  - the boundary of Guy Fawkes River National Park on London Bridge Road (highlighting the wilderness values and the recreation activities allowed);
  - Henry Falls (identifying park boundary);
  - Corner Camp Fire trail on the Bicentennial National Trail (BNT) directing users as to the appropriate route of the BNT along the Boyd River;
  - Dalmorton township (refer to section 4.4 Aboriginal Cultural Heritage and 4.5 History since colonisation); and
  - Dalmorton campground (refer to section 4.4 Aboriginal Heritage and 4.5 History since colonisation).
  - Ebor Falls Day Use area promoting the conservation values of the reserve, information maps showing the planning area and other nearby reserves.
- Coordinate interpretation with facility development within the planning area.
- Promote minimal impact recreation practices through interpretation and track head signs.
- Provide and maintain accurate walking track information at picnic and camping areas and at track heads (refer also Appendix 1).
- Install signage at key locations for the protection of the endangered eastern freshwater cod in conjunction with NSW Fisheries. Key locations include Broadmeadows, Dalmorton, Corner Camp and the Sara and Boyd Rivers.
- Maintain existing signage and displays and progressively update or extend information, with special attention given to ensuring that wilderness values are presented.

- Liaise with the RTA, Forests NSW, RLPB and the relevant local councils to provide directional signage to visitor facilities in the planning area.

Publications

- Develop a new park information brochure for the planning area. The brochure should promote wilderness values, new additions to the planning area, bushwalking opportunities, BNT, recreational facilities, vehicular touring drives and access, and minimal impact visitor use.
- Promote visitor feedback through visitor books and visitor surveys at strategic locations.

Education Programs

- Promote community understanding of the planning area's values and management strategies with neighbours and local community.
- Continue to promote the importance and purpose of management programs relating to natural and cultural heritage protection, fire management and control of introduced species within the local community and particularly neighbours.
- Support and assist educational use of the planning area by schools, community groups and individuals through provision of information and programs such as walks and talks where appropriate.
- Where appropriate provide assistance with education programs for schools and universities, with an emphasis on nature conservation and national park management.
- Provide assistance where appropriate to commercial tour operators and tourism representatives through NPWS familiarisation visits and/or workshops.
- Emphasise the following themes in promotion and interpretation programs:
  - Wilderness values and the wild and scenic rivers;
  - Biodiversity and importance for threatened species;
  - Cultural heritage values;
  - Catchment management in the Clarence River system;
  - Readily accessible recreation facilities at the lookouts and waterfalls along the escarpment and self-reliant recreation elsewhere in the planning area;
  - Protection of the eastern freshwater cod;
  - Appropriate use of the BNT;
  - The geology of the planning area and geological features such as Ebor Falls, the Demon Fault, Lucifers Thumb, and London Bridge;
  - The significance of the planning area in the region and its importance for conservation, its role as part of regional vegetation corridors and wilderness areas.
- Encourage Discovery Programs in the planning area.

6.2 RECREATION

6.2.1 Recreation opportunities

The planning area's location between the New England Tableland and the NSW North Coast as well as its natural features make it a desirable location for visitors wishing to undertake a range of recreation activities, such as bushwalking, camping, picnicking, bird watching, car touring, canoeing, horse riding, swimming and rock climbing. Formal visitor facilities including picnic areas, walking tracks and lookouts are provided at Ebor Falls and Chaelundi Camping Area (see Map 2). The lookouts and other visitor facilities provide opportunities for visitors to enjoy the spectacular landscape values of the planning area by vehicle and on foot.

Demand for wilderness walking away from facilities is expected to increase. Large parts of the planning area provide opportunities for self-reliant recreation in an undisturbed setting and these areas generally correspond with the Guy Fawkes Wilderness.

Nature based recreational opportunities in the area are complemented by opportunities provided in adjoining national parks and other public and private lands, where there is a more extensive range of visitor facilities. These include the Mann River Nature Reserve, Nymboi Binderay National Park, Gibraltar Range Group of National Parks, Cathedral Rock National Park and New England National Park. Accordingly, this plan seeks to provide a unique and diverse recreation experience rather than to replicate facilities provided elsewhere.

The management actions below are designed to maintain the low key, remote scenic and natural settings, which are special features of the planning area. They also provide for future use in a manner that protects ecological integrity and cultural heritage values while contributing to the environmental, social and economic well being of local and regional communities.

Desired Outcomes

- An appropriate range of nature based recreation opportunities and facilities are provided in the planning area with minimal impact on natural and cultural values.
- Visitor facilities are safe and accessible.
- Recreational opportunities provide for enhanced enjoyment of the planning area and contribute to the environmental, social and economic well being of the local and regional communities.

Management Strategies

- Develop, maintain and upgrade visitor facilities and infrastructure consistent with Appendix 1.

- Visitor facilities and infrastructure will not be developed in the Guy Fawkes Wilderness areas.
- Undertake risk assessment of visitor facilities on a regular basis and implement precautionary action to maintain visitor safety. This may include the de-limbing or removal of trees at high-risk sites, or the modification of visitor use.
- Monitor the impacts of visitor use and if necessary close areas permanently or temporarily or otherwise restrict access if there is unacceptable damage to natural or cultural values.
- Close or otherwise restrict visitor use as necessary during periods of high to extreme fire danger or in the event of bushfires (refer section 5.5 Fire Management).
- Monitor and record visitation levels within the planning area.

6.2.2 Vehicle access and touring

Vehicle access to the planning area is via the Grafton-Armidale Road, Ebor-Guyra Road, Waterfall Way, Paddys Land Road, Pinkett Road and Old Grafton Glen Innes Road (see Map 2).

Roads and trails within the planning area provide access for management purposes and for public access to visitor facilities and sites of interest. There is a demand in the region for vehicle touring opportunities in a natural setting. Currently vehicle access within the planning area is via a network of roads and trails of varying standard and condition (refer Map 2).

Maintaining roads requires a major commitment of resources. A network of former forestry roads and trails exists on some of the recent additions to the planning area. Some of these are in excess of management requirements for nature conservation purposes and can have significant environmental impacts.

In determining the roads that will remain open to the public and those that will be maintained for management purposes only, consideration has been given to a range of factors including: physical constraints; fire management; park zoning and wilderness boundaries.

Some park management vehicle access is through adjoining freehold and leasehold land. It may be necessary for the NPWS to enter into an agreement with appropriate landholders and contribute to the cost of maintaining these access roads.

Public roads

Public Roads are not part of the planning area and are managed by Guyra Shire Council, Clarence Valley Council, Glen Innes Severn Council and the RTA. Public roads that provide access to the planning area include: Grafton-Armidale; Ebor-Guyra; Waterfall Way; Paddys Land; Old Grafton-Glen Innes; Pinkett; London Bridge; Oakwood; Lands End and Tablelands Roads.

RLPB Trails

The Boban Hut Trail, which links Paddys Land Road to Boban Hut follows a TSR under the control of the RLPB. Boban Hut Trail is, however, managed and maintained by NPWS as a management trail with the agreement of the RLPB.

State Forest Roads
State Forest Roads are managed by Forest NSW and in many cases provide public access to the planning area. NPWS assists Forests NSW with the maintenance of some of these roads.

Park roads and most management trails link with adjoining roads managed by Forests NSW. A Memorandum of Understanding has been developed between the NPWS and Forests NSW regarding joint interest roads and their maintenance. These roads include Chaelundi, Broadmeadows, Misty Creek, Oakwood Road and Hardens Forest Roads.

Ministerial Roads
The planning area includes 'Ministerial Roads', which are vested in the Minister for the Environment on behalf of the Crown for the purposes of Part 11 of the NPW Act. These roads do not form part of the gazetted area of the national park estate and were created under the *Forestry and National Parks Estate Act 1998* to ensure that the access arrangements which existed immediately before the park's creation (primarily for timber hauling and private property access) could continue, even if they were for purposes that did not meet the objectives of the NPW Act. The management of these roads is subject to the NPW Regulations and the requirements of the EPA Act.

Ministerial roads in the planning area include Stop-a bit Trail, and Duddys, Indigo and Paddys Land Roads.

Park Roads
Park roads are roads that form part of a park or reserve and are maintained by NPWS for public use, primarily to access visitor facilities and points of interest. The Misty Creek Forest Road, a 12km unsealed park road partly in Guy Fawkes River National Park provides access to Chaelundi camping area. This road is generally two-wheel drive accessible but during wet conditions forest roads which provide access to Misty Creek Road may be temporarily closed to two-wheel drive vehicles.

The Ebor Falls Road is a 1.5km sealed road which provides access to the Upper and Lower Ebor Falls day use areas. It is jointly managed by the Service and Guyra Shire Council. Guyra Shire has responsibility for the road to the Upper Falls Car Park and NPWS manages and maintains the remainder.

Paddy Ross Ridge Trail provides access to Ballards Flat on the Sara River. The corridor of this trail lies outside the declared wilderness. A section of this trail relies on permission of the adjoining land manager as part of the trail is outside the Crown road reserve. This trail was closed to public access by the former DLWC due to major concerns of stability. Substantial works by NPWS have repaired major erosion along the trail that had resulted from uncontrolled access and little erosion control.

Consideration is being given to permitting access on Paddy Ross Ridge Trail for recreational purposes via a permit system to protect park values, remote settings in the park and address safety considerations (refer also section 6.2.4 Camping). A risk assessment of the Paddy Ross Ridge Trail was undertaken and determined the trail could be opened to the public, after some minor modifications to the trail and the placement of signage.

Management Trails

Implementation of the management programs identified in this plan requires a network of management trails in addition to the access provided by the public and park road system (see Map 2). The purpose of management trails is to enable vehicle access for fire, weed, feral animal and public activity management. Vehicle access to the trails is restricted to essential management purposes and other essential purposes authorised by the Regional Manager. Several of the management trails also form part of the walking track network of the planning area.

The western and eastern perimeter fire trails run along or close to the planning area boundaries in the southern end of the planning area and are located on private property. It is intended that these trails will be maintained by the NPWS in cooperation with neighbours of the planning areas and will be used as control lines during hazard reduction burning programs and during wildfire events.

Desired Outcomes

- The provision of public vehicle access has minimal impact on the planning area's values and compliments regional recreational opportunities.
- Any adverse environmental impact from the use or maintenance of roads is minimised.
- Adjoining public and state forest roads that link to park roads are managed in a coordinated manner with Forests NSW, Guyra Shire, Clarence Valley and Glen Innes Severn Councils.
- Existing access is maintained to private property in-holdings which have no other practical means of access and to State Forest lands.
- A network of management trails with restricted access is maintained to allow management of the planning area.

Management Strategies

- Maintain the roads and management trails shown on Map 2. Close and where necessary rehabilitate all other trails.
- Maintain Ebor Falls Road as an all weather bitumen road to the Ebor Falls Day Use Area. Maintain Misty Creek Road into Chaelundi Camping Area to dry-weather two-wheel drive standard.
- Gate management trails as necessary (see Map2). Management trails will not be available for public vehicle use.
- Undertake works to the Broadmeadows Fire Trail to make the trail safe for 4WD vehicles during fire operations.

- Liaise with Forests NSW, Guyra, Glen Innes / Severn and Clarence Valley Shire Councils regarding management of joint interest roads and trails.
- Ensure ministerial roads providing access to State Forests are managed in accordance with the MOU between NPWS and Forests NSW.
- Liaise with neighbours in the north of the park about continued management access along Blady Grass Fire Trail with the objective of developing a formal access agreement.
- Liaise with Crown leaseholder regarding the management of the fire trail linking Paddys Land Road to Paddys Ross Ridge Trail.
- Manage Paddy Ross Ridge Trail as a 4WD dry weather park road. If satisfactory access arrangements can be determined with the RLPB, Guyra Shire Council and the Crown leaseholder, public vehicle access will be managed by a permit system.
- Temporarily close park roads to the public during potentially dangerous situations such as fire or prolonged wet periods and notify relevant tourist information centres of road closures.
- Install traffic calming devices (speed humps, cross drainage, etc) where necessary to limit speeds. Set speed limits on all roads and trails in the planning area that are single lane to a maximum of 40 km/hr.
- Install and monitor vehicle counters on all major access points to monitor levels of use.
- Liaise with neighbours, local bush fire brigades, Councils and the Rural Fire Service regarding road maintenance and access requirements for fire fighting and hazard reduction works.

6.2.3 Day use facilities

Ebor Falls and Chaelundi Camping Area are currently the major day use destinations in the planning area. The Dalmorton Campground also has a small day use area within the campground with picnic tables, toilets and barbeques.

Ebor Falls is the most popular destination in the planning area and is promoted through tourism initiatives associated with the Waterfall Way and as a driver rest area promoted by the RTA. Visitation to Ebor Falls is expected to increase. Facilities at Ebor Falls have been in place for many years and require some redesign and upgrading. During 2004 four new toilets were constructed, along with new bollards in the carparks. Facilities such as the walking track between the Upper and Lower Falls and viewing platforms are in good condition and require only routine maintenance.

Community groups from Ebor Village have approached the NPWS regarding the linking of the Ebor Falls Walking Track back to the Ebor Village. The route for the track would follow the western bank of the Guy Fawkes River from the Upper Ebor Falls to the bridge on the Waterfall Way.

Chaelundi Camping Area is used by day visitors as well as campers. Day use facilities at Chaelundi Camping Area include lookouts, toilets, interpretation displays, picnic facilities and walking tracks (refer section 6.2.5 Bushwalking). Spring Gully picnic area

is located at the southern end of the Escarpment Walking Track beside Misty Creek Road. It provides a picnic spot for people walking the track. The short walking track off Misty Creek Road to a lookout is also a day use destination.

A description of key visitor locations as well as existing and proposed facilities is provided in Appendix 1, which details provision for toilets, lookouts, picnicking, car parking and other facilities.

Desired Outcomes

- Day use areas are managed to provide sustainable day use opportunities.

Management Strategies

- Maintain the existing visitor facilities at Ebor Falls, Chaelundi and Dalmorton Camping Areas, Spring Gully and Misty Creek lookout in accordance with Appendix 1.
- Provide firewood and/or gas barbecues at day use areas to prevent collection of firewood from the surrounding forest.
- Construct a walking track from Ebor Falls to the park boundary as part of the Ebor Village link track.
- Liaise with the Ebor community regarding management and development in the Ebor Falls precinct.

6.2.4 Camping

Chaelundi Camping Area is located on the eastern escarpment in the central section of the Guy Fawkes River valley adjacent to Chaelundi Creek. The Chaelundi Camping Area is popular with car-based campers and is a starting point and base for visitors undertaking overnight or extended walking trips in the Guy Fawkes River Valley (refer section 6.2.5 Bushwalking). The Chaelundi Camping Area has been recently upgraded and there are no plans for any future development other than routine maintenance (refer Appendix 1). Self-registration park use fees are applicable at Chaelundi Camping Area and Dalmorton Camping Area.

A new camping area in the Dalmorton precinct along the southern bank of the Boyd River has been constructed (refer Appendix 1). This area provides a riverine setting for car-based campers adjacent to the Guy Fawkes Wilderness, which is currently not provided elsewhere in the park. The campground is also consistent with the recommendations in the conservation analysis prepared for the Dalmorton precinct (refer section 4.5 History since colonisation). Camping has also occurred in the past along the northern bank of the Boyd River between Dalmorton and Broadmeadows Station. This area is outside the planning area and permission is required from the RLPB or landholders for access to and camping along the northern bank between Dalmorton and Broadmeadows Station. Camping is not permitted on the southern side of the river on the TSR at Dalmorton, which is also outside the planning area.

The local Guyra community has identified a need for camping facilities on the western side of the planning area to improve recreation opportunities close to Guyra and Glen Innes. Local residents have identified Ballard's Flat, adjacent to the Sara River, as an area they would like to see reopened to the public on a permit system and a low level of camping facilities developed. This area was used as a camping area prior to the trail's closure 1996. The area proposed for camping is an inholding of Rural Lands Protection Board land within the planning area and is a dedicated camping reserve.

NPWS has undertaken a risk analysis and safety assessment of that section of Paddys Ross Ridge Trail within the park. The assessment identified that if the trail was to be opened up to the public then it should become a 'Restricted Access Road' and that access should be by a permit system for use by 4WD vehicles only due to the grade and condition of the trail.

The risk assessment concluded that the "risk involved in accessing the trail and use of 4WD fire vehicles are comparative for a Restricted Access Road for the public". Provision of visitor access to this area will be dependent upon access arrangements through private property (refer section 6.2.2 Vehicle access) and the support of the Rural Lands Protection Board and Guyra Shire Council. NPWS will not develop the camping area unless the access arrangements are finalised, including a commitment from Guyra Shire Council to maintain Paddys Land Road.

Self-reliant overnight camping (remote or bush camping) occurs in some of the more remote and rugged areas of the planning area and along the BNT. Designated horse camps are proposed along the BNT at Sawpit Creek Hut and at Jordan's Camp Yards (refer section 6.2.7 Horse Riding) to formalise camping facilities within specific areas. Current use levels and impacts are relatively small, but are increasing as the planning area becomes more popular. It is not intended to prohibit overnight pack camping within the planning area, however monitoring is required to determine any environmental impacts or user conflicts.

Desired Outcomes

- Camping areas are managed to provide sustainable overnight visitor opportunities.

Management Strategies

- Maintain the Chaelundi and Dalmorton Camping Areas (refer Appendix 1).
- Allow remote or bush camping throughout the planning area at locations more than 500m from public access roads and visitor facilities, and 200m from management trails within the planning area.
- Monitor remote or bush camping and if necessary restrictions may be implemented in the future to minimise impacts on natural or cultural values and other users.
- Encourage minimal impact camping and 'no trace' camping ethic.
- Negotiate with the Rural Lands Protection Board over the development of camping facilities at Ballards Flat.
- Negotiate with neighbours and Guyra Shire Council to determine if suitable public access arrangements to Ballard's Flat are achievable. If suitable access arrangements are put in place, including Guyra Shire Council taking full responsibility

for the maintenance of Paddys Land Road, develop Ballard's Flat as a camping area to be accessed using a permit system and manage as a Restricted Access Road (refer section 6.2.2 Vehicle Access). Development of the camping area will include a toilet and fireplaces and a limit of 10 vehicles max (refer to Appendix 1).

- Maintain the existing hut and yards at Sawpit Creek Hut as a designated horse camp for users of the BNT (refer section 6.2.7 Horse riding).
- Jordans Yards to be promoted as the second designated horse camp for users of the BNT (refer section 6.2.7 Horse riding).
- If necessary for environmental protection or to maintain a remote area experience, place limits on the size of groups using the planning area.
- Provide firewood at all designated camping areas (no firewood to be supplied for BNT campsites) to prevent collecting of firewood from the surrounding forest.
- Camping facilities will not be provided in Guy Fawkes River Nature Reserve or within the Guy Fawkes Wilderness.
- Camping will not be permitted in day use areas including Ebor Falls or within the historic Dalmorton township.
- The garbage pit at Chaelundi Camping Area will be removed as part of a policy of change to ensure visitors are responsible for removing their own waste from the planning area. No garbage pit or collection facilities will be provided at the Dalmorton Camping Area.

6.2.5 Bushwalking

Bushwalking provides visitors with the opportunity to experience developed and undeveloped recreational settings and to reach particular destinations and attractions. Walking tracks are also a valuable means of promoting the natural and cultural heritage of the planning area.

Due to the proximity of the planning area to regional centres such as Grafton, Glen Innes, Armidale, Guyra and Dorrigo as well as the growing population of the Mid North Coast, demand in the planning area for short, and especially loop, formed walking tracks is expected to increase in the next 10 years. Similarly, demand for wilderness walking away from facilities is also expected to increase.

Formal walking tracks are provided at Ebor Falls and Chaelundi Camping Area. These range from short walks between lookouts at Ebor Falls to the longer Escarpment Walking Track from Chaelundi Camping Area. The 8km long Escarpment Walking Track provides day visitors with extensive views into the Guy Fawkes Wilderness. The track has some eroded sections along its length. The section from the Rest Area to Chaelundi Falls has recently been upgraded. Both tracks provide easy to moderate grade walks along the rim of the Guy Fawkes River Gorge with numerous lookouts along their length.

Bushwalking is also undertaken along roads and management trails, the BNT and informal paths and off trail throughout the planning area. The planning area is ideally suited for overnight and extended self-reliant bushwalking. Management trails and

walking routes along ridgelines from Chaelundi Camping Area provide good access for walking opportunities along the Guy Fawkes, Aberfoyle, Sara and Boyd Rivers.

Opportunities for isolation, solitude and self reliant bush walking is available in much of the planning area, particularly in the rugged wilderness of the Guy Fawkes, Aberfoyle, Sara and Henry River Gorges. Access for remote walking is mainly available from visitor areas or roads adjacent to the planning area.

Access to other walking routes can be obtained from the Boban Hut area and Paddy's Land. The Liberation Fire Trail provides a good walking route through old growth forests in the northeast of the planning area. Access to other areas is generally through private property subject to the permission of the landholder. Walks of the route standard will be identified in the western side of the planning area. Track heads and information may need to be provided once these are identified, however in accordance with the Australian Standards, there would be neither markers nor improvements along the track itself.

The BNT generally follows the TSR and provides opportunities for visitors seeking a remote and rugged bushwalking experience along the Guy Fawkes and Boyd Rivers.

Management of bushwalking will need to ensure that the natural and cultural values of the planning area are protected and impacts of the walking track system are minimised.

Desired Outcomes

- Bushwalking opportunities are sustainably managed in the planning area.

Management Strategies

- Maintain the existing walking tracks at Ebor Falls and Chaelundi Camping Area and carry out upgrading where needed.
- Maintain a system of walking tracks as described in Appendix 1.
- Maintain and undertake erosion control works on walking tracks at visitor facility areas. Map, signpost and maintain walking tracks to acceptable NPWS standards which are appropriate to the recreational setting in which they occur (refer section 6.2 Recreational Opportunities).
- Investigate other bushwalking opportunities of the 'route standard' on the western side of the planning area in particular the Aberfoyle gorge.
- Encourage adherence to minimal impact bushwalking codes.
- Continue to allow self-reliant bush walking throughout the planning area.

6.2.6 Cycling

The planning area offers limited opportunities for cycling, in particular mountain bike riding along the BNT, and on roads and trails such as London Bridge and Glen Nevis management trails. At present the current level of use by cyclists is low.

Desired Outcomes

- Cycling opportunities are provided in appropriate sections of the planning area on a sustainable basis, using a network or route options that allow visitors to experience a range of environments.

Management Strategies

- Permit cycling on the BNT, park roads and London Bridge and Glen Nevis management trails only. Cycling will not be permitted on walking tracks.
- Close trails to cycling where they are found to be an unacceptable environmental impact or risk to cyclists and other users.

6.2.7 Horse Riding and the Bicentennial National Trail

Recreational horse riding occurs along the BNT, which passes through the planning area. The BNT is a 5,300km continuous route through the Great Dividing Range of eastern Australia designed for self reliant, non-motorised trekking. The BNT is used for horse riding, walking and mountain bike riding.

The route of the BNT in the planning area generally follows a TSR which runs from Marengo Station to Broadmeadows Station and follows the Guy Fawkes and Boyd Rivers. The BNT also comes down Macdonald's Spur and follows the Guy Fawkes and Boyd Rivers to the old Grafton-Glen Innes Road. The BNT is situated on a 20 metre wide easement, which is excluded from the Wilderness area.

A Memorandum of Understanding (MOU) between NPWS and the Bicentennial National Trail Ltd sets out principles for management and use of the trail. Amongst other matters, the MOU provides that use, development and management of the BNT must be in accordance with the plan of management. Regularly spaced campsites with access for horses are an integral part of the BNT and two sites have been identified at Sawpit Hut and the yards at the Jordan's Camp Yards. Sawpit Hut and Jordan's Camp Yards are both along the BNT route. The BNT Guidebook also identifies other sites suitable for camping which are not in the planning area.

The soil types within the planning area are susceptible to erosion and horse riding can have unacceptable impacts in terms of erosion as well as increase nutrient inputs into watercourses and safety concerns. As most of the planning area is very steep with high conservation values, and a large proportion is wilderness, horse riding will only be permitted on the BNT.

The surrounding region provides numerous opportunities for horse riding on large rural holdings and in State forests as well as the BNT.

Under NPWS policy, horse riding is not permitted in the Guy Fawkes Wilderness or the nature reserve.

Desired Outcomes

- Horse riding opportunities are provided in appropriate sections of the planning area on a sustainable basis, using the Bicentennial National Trail route, that allows visitors to experience a range of environments.

Management Strategies

- Recreational horse riding will only be permitted along the BNT and will not be permitted in the Guy Fawkes Wilderness, the nature reserve or elsewhere in the planning area.
- Management and use of the BNT for horse riding will be in accordance with the Memorandum of Understanding (MOU) between NPWS and the Bicentennial National Trail Ltd. Where necessary for rider safety or environmental protection, route markers may be installed on the BNT and essential maintenance and trail improvements undertaken.
- Review the route of the BNT in consultation with the BNT coordinator to avoid sensitive environments.
- In order to maintain conservation values and visitor experience, allow a maximum of 40 horses not in a group and for groups, allow a maximum of 20 horses (including packhorses), on the BNT at any one time. The maximum number of horses at a campsite at any one time must not exceed 20.
- Provide interpretation at entry points outlining the route of the trail to ensure wilderness and streambed areas are avoided wherever possible.
- Allow overnight horse camping as part of and along the BNT at designated sites at Sawpit Hut and Jordan's Camp Yards only.
- Formalise overnight holding yards at Sawpit Hut near the junction of Sawpit Creek and the Boyd River and at Jordan's Camp Yards at the bottom of Jordan's trail.
- Construct a fenced area using plain 'horsesighter wire' at the above designated horse campsites and remove old fencing. Posts with insulators will be provided within the fenced holding areas so BNT riders can partition off sections of the holding area to ensure the area is not overgrazed (refer to Section 9. Management Operations).
- Establish joint management arrangements of Sawpit Hit and Jordan's Camp Yards with the BNT Ltd.

6.2.8 Fishing

Fishing occurs at a low level within the planning area. NPWS does not have legislative responsibility for fish or fishing. All fishing activities in NSW waters are regulated under *Fisheries Management Act 1994*. Recreational fishing must also be in accordance with licence conditions specified by NSW Fisheries.

Rivers in the planning area are considered to constitute important habitat for endangered eastern fresh water cod (refer to section 4.3 Native Animals).

Desired Outcomes

- Fishing is undertaken in a way that is sustainable and does not threaten native species, in particular the eastern freshwater cod and pygmy perch.

Management Strategies

- Fishing will not be promoted in the planning area.
- Liaise with NSW Fisheries about installing signage at major entry points and at the Chaelundi and Dalmorton Camping Areas advising of restrictions and penalties for targeting and catching eastern freshwater cod (refer section 6.1 Visitor Information).
- Assist NSW Fisheries to monitor fishing in the planning area and work cooperatively in law enforcement, such as seasonal fishing closures for the protection of the Eastern Freshwater Cod.
- Liaise with NSW Fisheries to seek the establishment of an eastern freshwater cod sanctuary in the waters of the planning area.

6.2.9 Other Recreational Activities

Canoeing and liloing occur along the Guy Fawkes and Boyd Rivers. Access to the rivers is difficult within the planning area and requires carrying of equipment over several kilometres. This results in only a minor level of activity and this activity can also be affected by low stream flows.

As the planning area is not continuous along the Boyd River near Dalmorton, permission is required from the RLPB or landholders for access along the northern bank between Dalmorton and Broadmeadows Station. Access through the TSR is permitted during daylight hours to access waterways, although a permit is required for camping within a TSR.

The basalt cliffs at Ebor Falls in the southern section of the national park (and outside the declared wilderness) are used for rock climbing and abseiling, utilising a range of climbing styles (including top- roped and traditional lead climbing). Current use is low and is unlikely to increase in the future; not new routes have been established since 1996. A code of conduct has been developed in consultation with the Mountaineering Club of the University of New England. Under this code of conduct, ropes may not be tied to structures or trees, and only climbing routes located between the upper and lower platforms on the southern side of the gorge are to be used. There are currently five bolts in place to tether ropes.

Desired Outcomes

- All recreation activities are conducted where appropriate and in a safe manner that minimises impacts on the planning area's values.

Management Strategies

- Other recreation activities such as rock climbing and abseiling will be permitted only where such activities can be safely and sustainably undertaken and do not conflict with park values or park users.
- Monitor other recreation activities to ensure the natural or cultural values of the planning area are not threatened. If necessary, permanently or temporarily close sites to allow the rehabilitation and if possible look for an alternative site or relocate use.

- Permit existing bolts to be maintained and replaced if necessary by the Mountaineering Club. No new routes are to be bolted.
- Climbing/ abseiling activities must comply with the code of conduct, which will be promoted in on- site signage and in publications.
- Promote minimal impact use for other recreation activities.
- Continue to liaise with rock climbing and adventure sport groups.
- Require groups larger than 10 to seek consent before undertaking climbing, abseiling or other similar activities.

6.2.10 Commercial Operations

Commercial recreation activities require a licence from NPWS to operate in national parks and state conservation areas. The NPWS is currently reviewing its licensing system with an aim to introduce a new system for all commercial operators State-wide and this may also consider requirements for accreditation.

At present coach and other bus tours visit Ebor Falls along the Waterfall Way and commercial tour operators visit Chaelundi Camping Area. There have been commercial horse riding tours along the BNT in the past.

Commercial operations can assist management through encouraging appropriate visitor use and understanding of values of the planning areas. They can also provide high quality visitor experiences that may not otherwise be available to visitors.

Commercial operations are important within the planning area but are presently at low levels. They can contribute to the regional economy and increase the range of recreational opportunities available to park visitors. If conducted properly, they foster a greater appreciation and understanding of values of the planning area, and provide a means for NPWS to better manage visitor impacts and care for visitor safety.

Conversely, these activities have the potential to impact on values of the planning areas and on the experience of other visitors due to competition for facilities and overcrowding at sites. Commercial recreation can also lead to the deterioration of certain sites if not carefully managed.

Commercial tours can provide access for people who would not otherwise be able to visit the planning area and can increase environmental understanding and support for conservation. Commercial operations are subject to controls through licensing that may include conditions such as maximum group size or frequency of use in order to minimise impacts and conflicts with other visitors.

Desired Outcomes

- Commercial tourism activities are conducted in accordance with NPWS licensing and in a manner that is sustainable, safe and compatible with other visitor use.

Management Strategies

- Ensure all commercial activities are licensed to operate in the planning area.
- No commercial activities will be permitted in the Guy Fawkes Wilderness or Guy Fawkes River Nature Reserve.
- Licences and consent for special events, group activities and commercial tours will only be issued for activities that are safe, have minimal impact on the park's values and other park visitors, and which enhance visitor understanding of the planning area.
- Use of specific areas may be regulated to protect natural and cultural features, minimise park user conflicts, prevent over crowding or for public safety.
- Specific facilities for commercial activities will not be provided.
- Commercial operations will be encouraged to provide accurate and high quality interpretation leading to increased environmental understanding and support for conservation.
- Licences and consents will prescribe the approved activities, location and frequency of activities, maximum group sizes and minimum guide ratios for each activity, guide standards, appropriate behaviour, fees and other special provisions to ensure the long term protection of the park, park visitors and recreation opportunities. Licence and consent conditions will be kept under review and amended as necessary.
- Commercial recreation activities will not be granted any rights of access which are exclusive of the public or which exceed normal public rights within the terms of this plan.

7. RESEARCH AND MONITORING

Scientific study can improve understanding of the planning areas natural and cultural heritage, and the processes which affect them. Research can also establish the requirements for management of particular species.

Research efforts should be directed towards the areas of greatest need and concentrate on threatened and protected flora and fauna, cultural heritage values and the effects of fire on the planning area's values.

Under the Upper North East NSW Regional Forest Agreement (RFA) all forest managers including Forests NSW and the NPWS must demonstrate ecologically sustainable forest management (ESFM). ESFM aims to maintain or increase the full suite of forest values for present and future generations across the NSW native forest estate, including:

- ecosystem biodiversity, health, vitality, productive capacity and functional processes;
- soil and water productive capacity and functional processes;
- long term social and economic benefit; and
- natural and cultural heritage values.

ESFM is an over-riding management principle and will be applied to all ecosystem types, not just forests. It will be implemented primarily through monitoring to provide feedback on management programs and directions for future adaptive management. Performance indicators of ecologically sustainable forest management have been identified. Monitoring programs will be developed using the indicators to demonstrate the impact of management actions on ecological functions. Remedial management actions will then be undertaken as required.

Research priorities identified under the RFA will be pursued along with topics identified in this plan of management. Key areas of research and monitoring will be:

- the effects of fire on flora and fauna species;
- introduced species including weed surveys, wild horses and wild dogs;
- native fauna including spotted tailed quolls, dingoes, brush tailed rock wallabies, rufous bettongs, glossy black cockatoos and koalas;
- amphibians, reptiles and aquatic species in particular the eastern freshwater cod;
- correlation of burning and grazing indicators with the composition of the woody understorey in parts of Guy Fawkes River National Park;
- Aboriginal and non-indigenous heritage;
- vegetation surveys of rainforest;
- geology;
- targeted surveys of new additions;
- water quality using existing flow stations;
- visitor behaviour and attitudes; and
- carrying capacities for visitor recreation and camping areas.

Additional research programs will be considered where they complement ESFM criteria and indicators. The results of research and monitoring will be used to guide management programs.
Research in the majority of the planning area has largely focused on plant communities and fire with limited research on landforms, biodiversity and cultural heritage.

The accessibility and proximity of the planning area to the University of New England and Southern Cross University (Coffs Harbour Campus) heightens the educational values and opportunities of the planning area. The planning area has provided field study sites for students from various institutions.

Research by other organisations and students may provide valuable information for management. A list will be prepared to encourage involvement of other organisations in priority research areas. Some important research topics have been mentioned in earlier sections of this plan.

Desired Outcomes

- Research is undertaken that enhances the information base and assists management of the planning area.
- Research causes minimal environmental damage.
- Monitoring programs are in place to detect any changes in the status of planning area resources.
- Improved management by incorporating the results of research into management decision making.
- Increased knowledge of wilderness areas, biodiversity and cultural resources of the planning area.
- Opportunistic research will be encouraged when environmental events occur.

Management Strategies

- Use the principles of ESFM to guide management operations. Work with other authorities and stakeholders in implementing ESFM principles across the landscape.
- Undertake and/or encourage research to provide information about the planning area's natural and cultural heritage and human use in order to facilitate management.
- Require any research structures and long term markers to be placed in locations that will minimise their visual impact and require their removal upon completion of the research.
- Permit appropriate research by other organisations and individuals and promote research that is directly useful for management purposes. Preferred topics of research will be those of direct relevance to management and will include:
    - ecological significance of fire, especially for threatened flora and fauna;
    - management of introduced species;
    - Aboriginal and non-indigenous;
    - threatened species surveys, habitat requirements, abundance and distribution of rare and threatened flora and fauna;
    - flora and fauna surveys.

  - best practice pest species management;
  - visitor use, expectations and satisfaction; and
  - impacts of visitor use.
  - traditional ecological knowledge in consultation with the Aboriginal community.
- Encourage bird watchers, remote area walkers or similar groups to pass on information gathered in the planning area.
- Liaise with local universities to encourage research in priority projects in the planning area.
- Incorporate the outcomes of research into NPWS databases and into park management practices where there is an opportunity to improve management.
- Continue to monitor and research methods for the control, removal and impacts of wild horses within the planning area.
- Establish and utilise permanent photo monitoring points at the designated campsites on the BNT to asses the impacts of their use.

8. OTHER USES

8.1 Bee keeping

There are five bee sites within Guy Fawkes River National Park that pre-date its gazettal. These sites were transferred from London Bridge State Forest when it became part of the park. The European honeybee *(Apis mellifera)* can have adverse impacts upon some native plants and animals (Paton 1996). NPWS policy on bee keeping allows existing sites to continue but does not allow any new or additional sites.

Access to apiary sites requires the use of roads or management trails, some of which are not available to public vehicles because they are located in the Guy Fawkes Wilderness. It may be necessary to relocate existing bee sites where apiary activities result in unacceptable environmental impacts, user conflicts or are inconsistent with park management.

Desired Outcomes

- Balance the NPWS conservation responsibilities and the needs of the apiary industry within the planning area.
- Apiary sites within the Guy Fawkes Wilderness and in other areas where apiary activities may result in unacceptable environmental impacts or conflict with park management or visitor uses are relocated.

Management Strategies

- Wherever possible, maintain access trails and sites by slashing to minimise disturbance.
- Develop an agreement with the apiarist for management and maintenance of access trails to apiary sites, including the potential recovery of access maintenance costs should the tracks not be required for management. The agreement should stipulate that the apiarists do not access the planning area in wet weather or fire emergency. NPWS also is to be informed when access is required.
- Relocate apiary sites near high visitation areas and located in the Guy Fawkes Wilderness to less sensitive sites elsewhere within the planning area. This relocation process will consider access requirements to sites and likely adverse environmental impacts.

8.2 Grazing

Most of the planning area has had a history of forest grazing for over 100 years. Following the dedication of the national park and nature reserve, grazing has been progressively phased out.

In many places the boundary of the planning area is immediately adjacent to farming land. Where possible, fencing is maintained and management vehicle access is

established in cooperation with neighbours. In some areas, however, it is impossible for fences to follow the true boundary of the planning area.
The impact of grazing stock can be significant on important and vulnerable plant and grass communities, and compromise other introduced species control programs. Exclusion of domestic livestock from these areas will be given a high priority.

In the north and eastern parts of the planning area some boundaries adjoin State Forest with Crown Leases, which have only limited fencing. NPWS is continuing to work with lesees to fence areas to prevent movement of stock into the planning area.

In the northern section of the planning area adjacent to the Boyd River the park adjoins three TSRs between Broadmeadow Station and Louis Point. These TSRs are leased annually under grazing permits, however, there is limited fencing, allowing cattle to enter the planning area at many locations. The NPWS has been working with the RLPB to fence part of these TSRs with approximately half the area requiring fencing completed to date.

NPWS encourages construction and maintenance of boundary fences with neighbours. The responsibilities and obligations of neighbours for boundary fencing are largely defined by legislation. Under the *Dividing Fences Act 1991*, the Crown is not bound, and therefore, NPWS has no legal responsibility to contribute to boundary fencing. However, NPWS recognises that boundary fencing can enhance conservation values and resolve management problems within the planning area. Accordingly, despite the Crown's limited legal responsibility, NPWS contributes to priority boundary fences as funds permit.

Desired Outcomes

- Stray livestock are excluded from the planning area.

Management Strategies

- Stray livestock will be excluded from the planning area by means of fencing or if necessary removed.
- Fences no longer required for management purposes, especially internal fencing of former pastoral holdings, will be removed. Fence posts may remain where they are of historic interest or present no hazard to park users and wildlife (refer to section 4.5 History since colonisation).
- Negotiate construction and/or maintenance of boundary fences with neighbours in accordance with NPWS policy on fencing. Priority areas will include the northern and eastern boundaries.
- Dams that were utilised for grazing and are not identified as a fire advantage (refer section 5.5 Fire Management and section 9 NPWS Management Facilities and Operations) will be decommissioned and, where required rehabilitated.
- Negotiate with the RLPB regarding the future management of TSRs along the Boyd River adjacent to the planing area.

8.3 Non-NPWS Infrastructure

Electricity lines

The Transgrid electricity transmission line traverses Guy Fawkes River Nature Reserve at one of the narrowest sections of the reserve and is suspended across the Upper Guy Fawkes River Gorge.

Management of transmission lines is under the "Agreement between the NPWS and TransGrid for the inspection and maintenance of TransGrid infrastructure on NPWS areas" (TransGrid and NPWS 2002). Amongst other matters the Agreement addresses threatened species and cultural heritage issues; sets up consultation and notification processes regarding maintenance and inspection works; and provides a framework for the progressive preparation of environmental management plans specific to reserves. The Agreement applies only to existing transmission lines. Any new activities are subject to the normal approval processes.

Trig stations

A number of trig stations, managed by the Land and Property Information NSW (LPI) are located within the planning area. These are:

- Hewitt's Peak Trig
- Indigo Trig
- Broadmeadows Peak
- Mount Gardiner
- Diamond Falls
- Chaelundi Mountain
- Nullama Trig Station
- Bees Nest

Desired Outcomes

- No new non-NPWS infrastructure is developed in the planning area.
- Existing non-NPWS infrastructure is managed to minimise impacts on natural and cultural values.

Management Strategies

- In accordance with the agreement between the Crown Lands Office, Central Mapping Authority and NPWS, ensure that any access or vegetation management associated with trig stations in the planning area only occur following a full assessment of environmental impacts on wilderness values.
- Ensure that the management of powerlines in the planning area is in accordance with the Agreement between the NPWS and TransGrid for the inspection and maintenance of TransGrid infrastructure on NPWS areas (TransGrid and NPWS 2002). This will include allowing access by TransGrid along existing formed roads

and trails to inspect and maintain its infrastructure subject to any directions of NPWS.

- Where infrastructure or easements within the planning area are no longer required, seek to have the land added to the planning area.

8.4 Travelling Stock Routes (TSRs)

There are a number of TSRs which bisect the planning area. TSRs No. 30781, 54961, 62890 and 1047 run from Marengo Station down the Macdonald's Spur and along the Guy Fawkes River to Broadmeadows Station. They run predominantly along the western bank of the river and range in width from 60 to 100 metres. The Bicentennial National Trail generally follows these TSRs through the planning area. Another TSR No. 60953 bisects the western side of the planning area from Paddy's Land and links to the above TSRs at Combalo Flat via Sliding Spur. There is a shorter dead end TSR No 52968 associated with this TSR. All these TSRs have only been used infrequently for the movement of travelling stock over the last twenty years.

There is also a RLPB camping reserve at Ballards Flat which is a inholding. This reserve is not linked to any TSR's and there is no formal access (see Section 6.2.4 Camping).

TSRs also adjoin the northern boundary between Broadmeadows Station and Dalmorton. These TSRs, which are outside the planning area, are unfenced in many locations and there are management issues regarding cattle from the TSRs entering the planning area.

TSRs are not gazetted as National Park estate. Even though they traverse the planning area, they do not form part of the National Park or the Guy Fawkes Wilderness Area and are managed by the RLPB. To use the TSR a grazier needs to apply for a permit from the RLPB, who in turn consult with the NPWS. Many TSRs have cultural heritage values which should be considered.

Desired Outcomes

- TSRs within the planning area are gazetted as part of Guy Fawkes River National Park or managed consistent with management priorities for the planning area.
- To work cooperatively with the RLPBs regarding management issues relating to the TSR Network within the planning area.

Management Strategies

- Undertake discussions with the Northern Tablelands and Grafton RLPBs about gazettal of the TSRs into the planning area.
- Undertake discussions with RLPBs regarding management of TSRs, including fencing and water quality issues for all TSRs not to be gazetted.
- Develop a MOU with RLPBs regarding use of TSRs that traverse the planning area in consultation with NPWS if a grazier wishes to obtain a permit for the TSR.

- Negotiate with the RLPB regarding the future management of the TSRs along the Boyd River.

8.5 Mining and Mineral Exploration

The planning area has a long and varied history of mainly alluvial and reef mining with a number of historic sites and mines (refer section 4.5 History since colonisation).

Previous exploration licences in the planning area have identified deposits of antimony, gold, copper, lead, zinc and arsenic. There is currently one mineral exploration licence for lands within Guy Fawkes River SCA.

The Department of Mineral Resources (DPI Minerals) is the lead authority for mining, mineral exploration and mine site rehabilitation. DPI (Minerals) is required under the EPA Act to undertake environmental assessments for mining and exploration activities in all SCAs. The existing Memorandum of Understanding (MoU) between NPWS and DPI (Minerals) describes the management and consultative arrangements associated with exploration and mining in SCAs.

The NPW Act requires that the classification of all SCAs is to be reviewed every 5 years to determine whether or not they should receive either a national park or nature reserve classification in accordance with section 47M of the Act and in consultation with the Minister administering the *Mining Act 1992*.

Desired Outcomes

- Mining and mineral exploration activities have minimal impact on natural and cultural values.

Management Strategies

- Applications for mining or mineral exploration in the SCA will be subject to environmental assessment in accordance with the MoU between NPWS and DPI (Minerals).
- Investigate public safety implications and responsibilities through liaison with DPI (Minerals) regarding former mining and exploration sites in the planning area. Following a risk assessment, prioritise and ensure appropriate remedial action is undertaken to reduce public hazards and impacts on the area's natural, cultural and wilderness values.

9. NPWS MANAGEMENT FACILITIES AND OPERATIONS

The planning area is jointly managed by the Northern Tablelands and North Coast Regions and administered by Glen Innes and Dorrigo Plateau Area offices. The Dorrigo Plateau Area has an office located in Dorrigo and depots at Dorrigo and Ebor. The Glen Innes Area has an Office and Depot at Glen Innes.

The planning area will be managed and promoted in an integrated manner due to its contiguous nature and similarity of management issues. Implementation of the management programs identified in this plan requires a system that defines the organisation and operation of staff and resources.

Managers, rangers, sites officers, specialists and field staff undertake organisational operations within the planning area. In order to effectively deploy their duties, NPWS staff and contractors utilise a variety of resources to complete tasks.

Major management facilities some which are external to the planning area include:

- Glen Innes and Dorrigo Plateau Area offices and workshops (located outside the planning area at Glen Innes and Dorrigo);
- a system of ground access including the public road system and a network of management trails (refer section 6.2.2 Vehicle Access);
- depots for NPWS staff working in the planning area at Paddy's Land, "Tallagandra" and at Dalmorton. Staff also occasionally use the Sawpit Creek Hut and camping facilities at Chaelundi Camping Area;
- fire management infrastructure such as dams, fire vantage points and towers, and boundary fire breaks;
- permanent heli-pads at the Fattening Paddock (Chaelundi Camping Area), Bowens hut, London Bridge, corner camp, Kitty's Creek Ridge, Bees Nest Ridge, Tallagandra and Long-Range which are used during wild fire operations.

Desired Outcomes

- Integrated management of Guy Fawkes River National Park, Nature Reserve, and State Conservation Area.
- Management, staffing and facilities that adequately serve the needs of management with acceptable environmental impact.
- A cooperative relationship is maintained with reserve neighbours.
- Reserve infrastructure is maintained to high visitor and environmental standard including visitor safety.

Management Strategies

- Integrate management and promotion of the planning area as a single management unit.
- Maintain close liaison between the Glen Innes and Dorrigo based managers of the planning area to ensure consistent management.

- Maintain close liaison with the planning area's neighbours to deal with matters of mutual concern.
- Maintain and where necessary, carry out improvements to Tallagandra and Dalmorton buildings to provide depots for staff and researchers.
- Maintain fire lookout advantage points at London Bridge, Starlight and Glen Nevis.
- Maintain helipads at Corner Camp Fire trail, Bowens Fire trail, London Bridge, Fattening Paddock (Chaelundi Camping Area), Bowens Hut, Kitty's Creek Ridge, Bees Nest Ridge, Tallagandra and Mount Gardiner for use during wild fire operations (refer to Section 5.5 Fire Management).
- Maintain and use management trails and facilities in a manner that minimises impact on natural and cultural heritage. Exclude public vehicular access from all management trails by signs, gates and/or other appropriate means.

10. PLAN IMPLEMENTATION

This plan of management establishes a scheme of operations for the planning area and is part of a system of management developed by the NPWS. The system includes the NPW Act, management policies, established conservation and recreation philosophies, and strategic planning at corporate, branch and regional levels. The latter may include development of related plans such as regional recreation plans, species recovery plans, fire management plans and conservation plans.

Section 81 of the Act requires that this plan of management shall be carried out and given effect to, and that no operations shall be undertaken in relation to the planning area unless they are in accordance with the plan.

Implementation of this plan will be undertaken within the annual programs of the NPWS North Coast and Northern Tablelands Regions. The strategies identified in the plan are those to which priority will be given in the foreseeable future.

Relative priorities for identified activities are set out in the table below. These priorities are determined in the context of branch and regional strategic planning, and are subject to the availability of necessary staff and funds and to any special requirements of the Director-General or Minister. The implementation of the plan will be monitored and its success in achieving the identified objectives will be assessed.

The environmental impact of proposed activities will be assessed at all stages in accordance with established environmental assessment procedures. Where impacts are found to be unacceptable, activities will be modified in accordance with the plan policies.

This plan of management has a ten year period of currency and will stay in force until amended or replaced in accordance with the Act. The plan applies both to the land currently reserved and to any future additions. Where management strategies or works are proposed for additions (or the existing area) that are not consistent with the plan, an amendment to the plan will be required.

Management Strategies

- Undertake an annual review of progress in implementing this plan of management.
- Undertake an assessment after 5 years of the effectiveness of managing the planning area in accordance with this plan and the degree of success in achieving the plans objectives.

Implementation Table (Summary of Strategies)

Section	Activity	Priority
4. Conservation of Natural and Cultural Heritage		
4.1 Geology and Landform	• Locate and design management infrastructure and visitor facilities to minimise visual impact.	Medium
	• Allow maintenance of appropriate clearing to maintain scenic lookouts and fire vantage points, within the current footprint of disturbance subject to environmental assessment.	Medium
	• Liaise with neighbours and authorities to minimise the impact of adjacent land use.	Low
	• Manage existing infrastructure to minimise visual impacts (refer section 8 Other uses).	Medium
	• Prohibit the extraction and removal of bushrock, clay, rock gravel or any like substance, except for essential on park management works where no practical alternative is available and where environmental impact is minimal.	Low
	• Restrict visitor access to gorges and canyons to minimise impacts.	Medium
	• Encourage research (refer section 7 Research and Monitoring).	Medium
4.2 Native Plants	• Ensure management and visitor facilities do not significantly impact on rare, threatened, significant or restricted plant communities (refer sections 5.3 Introduced Plants, 5.5 Fire Management, 6 Visitor Opportunities and Education, 8 Other Uses and 9 Management Operations).	High
	• Allow natural revegetation of cleared areas and where necessary undertake revegetation works.	Medium
	• Implement recovery plans for threatened species as prepared.	High
	• Consider requirements of dry rainforest and other significant communities when designing and undertaking management programs.	High
	• Encourage vegetation surveys throughout the planning area.	Medium
	• Encourage research into habitat requirements and threats to native plants (refer sections 5.4 Fire	Medium

	Management and 7 Research and Monitoring).	
	• Work with neighbours and stakeholders to encourage retention, enhancement, connection and if possible expansion of areas of remnant vegetation.	Low
	• Promote and interpret the value of native vegetation (refer 6.1 Visitor Information).	Low
4.3 Native Animals	• Protect the habitats of threatened and biogeographically significant fauna species (Refer sections 5.3 Introduced Plants, 5.4 Introduced Animals, 6 Visitor Opportunities and Education, 8 Other Uses and 9 Management Operations).	High
	• Continue to record the distribution of threatened and significant fauna.	High
	• Implement recovery plans for threatened animal species as prepared.	High
	• Encourage and/or undertake research into the role and impact of fire on fauna in the planning area.	Medium
	• Encourage research into the distribution and abundance of fauna in the planning area.	Medium
	• Identify core conservation areas for dingoes and assist in preparing wild dog management plans (refer section 5.4 Introduced Animals).	Medium
	• Encourage research into the genetics, movement, population dynamics and distribution of dingoes (refer section 5.4 Introduced Animals).	Low
	• Protect aquatic fish habitats within the planning area. (refer section 5.2 Water Quality and Catchment Management).	Medium
	• Liaise with NSW Fisheries and fishing clubs in developing and installing interpretive signage for protecting fish habitat.	Medium
	• Support NSW Fisheries in administering fishing regulations in the planning area.	Medium
4.4 Aboriginal Heritage	• Manage Aboriginal heritage within the planning area in partnership Local Aboriginal Land Councils and the Aboriginal community.	High
	• Undertake a cultural heritage survey of the area south of the Sara River and west of the Guy Fawkes River.	High
	• Undertake cultural heritage assessment for any new works and developments.	High
	• Protect Aboriginal sites, objects, historic places and	

	culturally significant features.	High
	• Prepare site management plans for known sites, in partnership with the local Aboriginal community (refer section 4.4 Aboriginal Heritage)	Medium
	• Do not publicise the location of Aboriginal sites.	
	• Interpret the Aboriginal heritage of the area with the Aboriginal community representatives.	High Medium
	• Support Aboriginal community proposals to undertake interpretation in the planning area.	
	• Support Aboriginal connections to country	Medium High
4.5 History since colonisation	• Manage the Dalmorton precinct and surrounds in accordance with the Dalmorton Conservation Analysis. (refer 4.5 History since colonisation)	High
	• Provide interpretive signage at Dalmorton outlining the historical significance of the township and its buildings. (refer to section 6.1 Visitor Information)	High
	• Retain existing exotic trees at Combalo Hut site.	Medium
	• Retain tennis court at Dalmorton.	Low
	• Progressively record other historic places, assess their significance and develop appropriate management strategies.	Medium
	• Record and assess the mining relics within the planning area. (refer 8.5 Mining and Mineral Exploration)	Medium
	• Encourage surveys of areas not yet assessed for cultural heritage and document oral history.	Medium
	• Undertake conservation assessment of the huts within the planning area.	High
	• Pending conservation assessment, retain Boban and Brazier's Huts.	Medium
5. Park Protection		
5.1 Soil Erosion	• Ensure management activities are carried out in a manner that minimises soil erosion, siltation and water pollution.	High
	• Undertake appropriate erosion prevention and sedimentation control.	Medium
	• Undertake works to control erosion and rehabilitate the erosion gully at the junction of Marengo Creek and Guy Fawkes River.	Medium
	• Rehabilitate areas disturbed by fire suppression	

	operations as soon as practical after any fire (refer to section 5.5 Fire Management).	High
	• Identify and monitor other major points where sediments enters the creek systems and undertake erosion and sedimentation control works.	Low
	• Map the location of all clearings within the planning area and assess the need for revegetation or other rehabilitation programs (refer section 4.2 Native plants).	Low
	• Monitor areas of erosion and treat if found to be extending.	High
	• Prevent domestic stock entering the planning area and remove wild horses (refer section 5.4 Introduced Animals)	High
5.2 Water Quality	• Design and undertake all works in a manner that minimises water pollution.	High
	• Liaise with the Northern Rivers Catchment Management Authority, local government, other authorities and landholders about protection of water quality and catchment values.	Medium
	• Assess the Guy Fawkes and Henry River systems for declaration as wild rivers under the NPW Act.	Low
	• Manage wild rivers within the planning area to restore and maintain natural biological, hydrological and geomorphological processes.	High
5.3 Introduced plants	• Carry out pest plant control in accordance with the priorities outlined in the North Coast and Northern Tablelands Region Pest Management Strategies.	High
	• Use control techniques that have minimal environmental impact.	High
	• Give priority for control of introduced plants to those declared noxious, have significant environmental impact, may affect neighbours, isolated occurrence and have potential to spread through internal access systems.	High
	• Support research programs into effective biological control of lantana. In the interim continue to develop effective herbicide control techniques.	High
	• Introduce management techniques to reduce the spread of weeds when using vehicles and machinery.	High
	• Develop cooperative weed control strategies involving neighbours and the RLPB.	Medium
	• Continue blackberry control programs within the Guy Fawkes, Aberfoyle, Boyd, Sara and Panton's River	

	Catchments.	High
	• Continue the willow control program along the Sara and Boyd Rivers.	High
5.4 Introduced Animals	• Carry out pest animal control in accordance with both the North Coast and Northern Tablelands Regional Pest Management Strategies.	High
	• Seek the cooperation of neighbours in implementing pest animal control programs.	Medium
	• Undertake control programs, planning and development techniques in co-operation with both the Northern New England and Grafton RLPBs.	High
	• Give priority for control of introduced species that are declared noxious, have significant environmental impact, may effect neighbours and where windows of opportunity occur.	High
	• Continue dog-baiting programs in liaison with RLPB and Wild Dog Associations and neighbours.	High
	• Control of wild dogs will focus on boundary areas/zones where there is a history of stock loses.	High
	• Assist the local RLPBs in the preparation and implementation of a wild dog management plan.	High
	• Continue dingo DNA sampling within the planning area to determine areas of pure dingoes and determine core dingo habitat.	Medium
	• Provide fencing assistance where possible and appropriate to exclude stock.	High
	• Implement the GFRNP Horse Management Plan.	High
	• Humanely remove the remaining horses from the planning area where they can be managed in locations outside the planning area.	High
	• Continue to research and monitor the impact of wild horses on the fauna, flora, and soils of the planning area.	High
	• Implement pest animal actions in Threat abatement plans.	High
	• Determine the population and distribution of feral goats and pigs in the planning areas and develop an appropriate control program.	Medium
5.5 Fire Management	• Continue to implement early detection methods.	Medium
	• Identify and maintain fire advantages (refer section 9	High

	NPWS management facilities and operations).	
	• Implement the Fire Management Strategy for the planning area and update prior to the start of each fire season.	High
	• Use prescribed fire to achieve a variety of fire regimes that maintain fire thresholds.	High
	• Avoid use of heavy machinery for fire suppression in areas of rare plants, Aboriginal sites and historic places.	High
	• Rehabilitate areas disturbed by fire suppression operations as soon as practical after the fire.	High
	• Encourage research into the ecological effects of fire in the planning area.	Medium
	• Identify, plan for and implement research which may assist with fire management in the planning area.	High
	• Continue to actively participate in the New England, Clarence Valley and Northern Tablelands Bush Fire Management Committees.	High
	• Maintain coordinated cooperative arrangements with the RFS, local councils and neighbours in regard to fuel management and suppression.	High
	• Where appropriate, carry out fuel management in cooperation with neighbours for mutual protection.	Medium
	• Support neighbour efforts to contain fire on their own properties, protect assets and report unplanned ignitions.	High
	• Inform visitors to the planning area on matters of fire safety.	Medium
	• Continue to maintain the eastern and western perimeter fire trails and extend them with cooperation with park neighbours.	High
	• Where possible plan to exclude fire from all rainforest areas within the planning area and wherever possible avoid use of dry rainforest patches for fire control.	Medium
	• Consider, incorporate and implement, where relevant and appropriate, the recommendations and strategies identified in various studies done into the effects of fire within the planning area.	High
	• Assess and identify those existing dams within the planning area needed for fire fighting purposes (refer section 8.2 Grazing).	Medium

6. Visitor Opportunities and Education		
6.1 Visitor information	• Develop an interpretation strategy for the planning area.	High
	• Provide orientation and/or interpretive at key locations.	Medium
	• Co-ordinate interpretation with facility development within the planning area.	Medium
	• Promote minimal impact recreation practices through interpretation and track head signs.	Medium
	• Provide and maintain accurate walking track information at picnic, camping areas and at track heads (refer Appendix 1).	High
	• Install signage at key locations for the protection of Eastern Freshwater Cod.	Medium
	• Maintain existing signage and displays and progressively update or extend information.	Low
	• Liaise with RTA, Forests NSW, RLPB and the relevant local councils to provide directional signage to visitor facilities.	High
	• Develop a new park information brochure for the planning area (refer section 6.1 Visitor Information).	Medium
	• Promote visitor feedback through visitor books and visitor surveys.	Medium
	• Promote community understanding of the planning area's values and management strategies.	Low
	• Promote the importance and purpose of management programs. (refer 6.1 section Visitor Information)	Medium
	• Support and assist educational use of the planning area.	Low
	• Where appropriate provide assistance with education programs for schools and Universities.	Medium
	• Provide assistance to commercial tour operators and tourism representatives.	Low
	• Promote identified themes in interpretation programs (refer 6.1 section Visitor Information).	Medium
	• Encourage Discovery Programs in the planning area.	High

6.2 Recreation **6.2.1 Recreation Opportunities**	• Develop, maintain and upgrade visitor facilities and infrastructure consistent with Appendix 1.	High
	• Visitor facilities and infrastructure will not be developed in Guy Fawkes Wilderness areas.	High
	• Undertake risk assessment of visitor facilities on a regular basis.	High
	• Monitor the impacts of visitor use.	Medium
	• Close or otherwise restrict visitor use as necessary during periods of high fire danger periods or in the event of bushfires (refer section 5.5 Fire Management).	High
	• Monitor and record visitation levels in the planning area.	Medium
6.2.2 Vehicle Access and Touring	• Maintain the roads and management trails (see Map 2) and close and where necessary rehabilitate all other trails.	High
	• Maintain Ebor Falls Road as an all weather bitumen road to Ebor Falls Day Use Area. Maintain Misty Creek Road into Chaelundi Camping Area to dry-weather two wheel drive standard.	Medium
	• Maintain management trails and gate as necessary.	Medium
	• Maintain the Broadmeadows Station Fire Trail.	High
	• Liaise with Forests NSW, Guyra, Glen Innes / Severn, and Clarence Valley Councils regarding management of joint interest roads.	High
	• Ensure ministerial roads are managed in accordance with the MOU between NPWS & Forests NSW.	Medium
	• Liaise with neighbours in the north of the park about continued access along Blady Grass Fire Trail.	High
	• Liaise with Crown leaseholder regarding the management of the trail linking Paddy's Land road and Paddy's Ross Ridge Trail.	High
	• Manage Paddy Ross Ridge Fire Trail as a 4WD dry weather road. If satisfactory access arrangements can be determined with the RLPB, Guyra Shire Council and the Crown leaseholder, public vehicle access will be managed by a permit system.	Medium
	• Temporarily close park roads to the public during potentially dangerous situations such as fire or flood.	High
	• Implement traffic calming measures and set speed limits on all roads and trails that are single lane to a maximum of 40km/hr and.	Medium

		Medium
	• Install and monitor vehicle counters on major access points to monitor levels of use. • Liaise with neighbours, Local Rural Fire Service Brigades and councils regarding road maintenance and access requirements for fire fighting and hazard reduction works.	High
6.2.3 Day Use Facilities	• Maintain the existing visitor facilities at Ebor Falls, Chaelundi and Dalmorton Camping Areas, Spring Gully and Misty Creek Lookout in accordance with Appendix 1. • Provide firewood and/or gas barbecues at day use areas to prevent collection of firewood from the surrounding forest. • Construct a walking track from Ebor Falls to the park boundary as part of the Ebor Village link track. • Liaise with the Ebor community regarding management and development in the Ebor Falls precinct.	High High Medium High
6.2.4 Camping	• Maintain the Chaelundi and Dalmorton Camping Areas (refer to Appendix 1). • Allow remote camping or bush camping throughout the planning area at locations more than 500m from public roads and facilities, and 200m from management trails (refer 6.2.6 Camping). • Monitor remote or bush camping for environmental impacts (refer 6.2.6 Camping). • Encourage minimal impact camping and 'no trace' camping ethic. • Negotiate with the RLPB over the development of camping facilities at Ballards Flat. • Negotiate with neighbours and Guyra Shire Council about determining suitable public access arrangements to Ballard's Flat. If suitable access can be determined, develop Ballard's Flat as a camping area to be accessed using a permit system and managed as a Restricted Access Road. Development of camping area will include a toilet and fireplaces and a limit of 10 vehicles. • Maintain the existing hut and yards at Sawpit Hut as designated horse camp for users of the BNT (refer 6.2.7 section Horse Riding). • Jordan's Camp Yards to be promoted as second designated horse camp for users of the BNT (refer 6.2.7 Horse Riding).	High Medium High Medium High Medium Medium Medium

	• If necessary for environmental protection or to maintain a remote area experience, places limits on the size of groups using the planning area.	High
	• Provide firewood at all camping areas to prevent collection of firewood from the surrounding forest.	High
	• Camping facilities will not be provided in Guy Fawkes River Nature Reserve or within Guy Fawkes Wilderness.	High
	• Camping will not be permitted in the day use areas including Ebor Falls or within the historic Dalmorton township.	High
	• Remove the garbage pit at Chaelundi Camping Area. No garbage collection facilities will be provided at Dalmorton Camping Area.	Medium
6.2.5 Bushwalking	• Maintain the existing walking tracks at Ebor Falls and Chaelundi Camping Area.	High
	• Maintain a system of walking tracks as described in refer Appendix 1.	Medium
	• Map, signpost and maintain walking tracks to acceptable NPWS standards.	High
	• Investigate other bushwalking opportunities of the ‘route standard’ on the western side of the planning area.	High
	• Encourage adherence to minimal impact bushwalking codes.	High
	• Continue to allow self-reliant bush walking throughout the planning area.	High
6.2.6 Cycling	• Permit cycling on BNT, park roads and the London Bridge and Glen Nevis management trails only. Cycling will not be permitted on walking tracks.	Medium
	• Close trails to cycling where there found to be an unacceptable environmental impact.	Medium

6.2.7 Horse Riding and the Bicentennial National Trail	• Recreational horse riding will only be permitted along the BNT.	High
	• Management and use of the BNT for horse riding will be in accordance with the draft MOU between NPWS and the Bicentennial National Trail Ltd.	High
	• Review the BNT through the planning area in consultation with the BNT Co-ordinator to avoid sensitive environments.	High
	• In order to maintain conservation values and visitor experience limit group size and horse numbers on the BNT.	High
	• Provide interpretation at entry points outlining the route of the BNT.	Medium
	• Allow overnight horse camping as part of and along the BNT at designated sites at Sawpit Hut and Jordan's Camp Yards only.	Medium
	• Formalise overnight holding yards at BNT camp locations at Sawpit Hut and Jordan's Camp Yards.	Medium
	• Construct 'horse sighter wire' at the designate horse camps and remove old fencing.	Medium
	• Establish joint management arrangements of Sawpit Hut and Jordan (Yards) camp with BNT (Ltd).	High
	• Establish and utilise permanent photo monitoring points at the designated campsites on the BNT to assess the impacts of their use	Medium
6.2.8 Fishing	• Fishing will not be promoted in the planning area.	High
	• Install signage a major entry points advising of restrictions and penalties for targeting and catching eastern freshwater cod.	High
	• Assist NSW Fisheries to monitor fishing in the planning area and work cooperatively in law enforcement.	High
	• Liaise with NSW Fisheries to seek the establishment of an eastern freshwater cod sanctuary in the waters of the planning area.	Medium
6.2.9 Other Recreational Activities	• Permit other recreation activities where such activities can be safely and sustainably undertaken.	High
	• Monitor other recreation activities to ensure the natural or cultural values of the planning area are not threatened.	Medium
	• Permit existing bolts to be maintained and replaced if necessary by the Mountaineering Club. No new routes are to be bolted.	High

	• Climbing/ abseiling activities must comply with the code of conduct, which will be promoted in on- site signage and in publications	High
	• Promote minimal impact use for other recreation activities.	High
	• Continue to liaise with rock climbing and adventure sport groups.	High
	• Require groups larger than 10 to seek consent before undertaking climbing, abseiling or other similar activities.	High
6.2.10 Commercial Operations	• Ensure all commercial activities are licensed in the planning area.	High
	• No commercial activities will be permitted in the Guy Fawkes Wilderness or Guy Fawkes River Nature Reserve.	Medium
	• Licenses and consent for special events, group activities and commercial tours will only be issued for activities that are safe, have minimal impact on the park's values and other park visitors, and enhance visitor understanding of the planning area.	Medium
	• Use of specific areas may be regulated to protect natural and cultural features, minimise park user conflicts, prevent over crowding or for public safety.	High
	• Specific facilities for commercial activities will not be provided.	High
	• Commercial operations will be encouraged to provide accurate and high quality interpretation leading to increased environmental understanding and support for conservation.	High
	• Licences and consents will prescribe the approved activities, location and frequency of activities, maximum group sizes and minimum guide ratios for each activity, guides standards, appropriate behaviour, fees and other special provisions.	High
	• Commercial recreation activities will not be granted any rights of access, which are exclusive of the public.	High
7. Research and Monitoring		
	• Use the principles of Ecologically Sustainable Forest Management to guide management operations.	High
	• Undertake and/or encourage research to provide information about the planning area's natural and cultural heritage.	High
	• Require any research structures and long term markers to	

	be placed in locations that will minimise their visual impact.	Medium
	• Permit appropriate research by other organisations and individuals and promote research that is directly useful for management purposes (refer section 7 Research Monitoring).	High
	• Encourage bird watchers, remote area walkers or similar groups to pass on information gathered in the planning area.	High
	• Liaise with local universities to encourage research in priority projects in the planning area.	Medium
	• Incorporate the outcomes of research into NPWS databases.	Medium
	• Continue to monitor and research methods for the control, removal and impacts of wild horses within the planning area.	High
	• Establish and utilise permanent photo monitoring points at the designated campsites on the BNT to asses the impacts of their use.	Medium
8. Other Uses		
8.1 Bee Keeping	• Wherever possible, maintain access trails and sites by slashing to minimise disturbance.	Medium
	• Develop an agreement with the apiarist for management and maintenance of access trails to apiary sites.	Low
	• Relocate apiary sites away from high visitation areas or Guy Fawkes Wilderness areas to less sensitive sites.	High
8.2 Grazing	• Exclude stray livestock from the planning area.	High
	• Remove fences no longer required for management purposes.	High
	• Negotiate construction and/or maintenance of boundary fences with neighbours.	Medium
	• Consider removal and rehabilitation of dams not required for grazing or fire advantage.	Medium
	• Negotiate with RLPB regarding the future management of the TSRs along the Boyd River.	High
8.3 Non-NPWS Infrastructure	• In accordance with the agreement between the Crown Lands Office, Central Mapping Authority and NPWS, ensure that any access or vegetation management associated with trig stations in the planning area only occur following a full assessment of environmental impacts on wilderness values.	High Medium

	• Ensure that the management of powerlines in the planning area is in accordance with the Agreement between the NPWS and TransGrid. • Where infrastructure or easements within the planning area are no longer required, seek to have the land added to the planning area.	Low
8.4 Travelling Stock Routes (TSR)	• Undertake discussions with the Northern Tablelands and Grafton RLPB about gazettal of the TSRs into the planning area. • Undertake discussion with RLPBs regarding management of TSRs, including fencing and water quality issues for all TSRs not to be gazetted. • Develop a MOU with RLPB regarding use of TSRs that traverse the planning area in consultation with NPWS if a grazier wishes to obtain a permit for the TSR. • Negotiate with RLPBs regarding the future management of TSRs along the Boyd River.	High High Medium High
8.5 Mining and Mineral Exploration	• Applications for mining or mineral exploration in the SCAs will be subject to environmental assessment in accordance with the MoU between NPWS and DPI (Minerals). • Investigate public safety implications and responsibilities through liaison with DPI (Minerals) regarding former mining and exploration sites in the planning area. Prioritise and ensure appropriate remedial action is undertaken.	High Medium
9. Management Facilities and Operations		
	• Integrate management and promotion of the planning area as a single management unit. • Maintain close liaison between the Glen Innes and Dorrigo based managers of the planning area. • Maintain close liaison with the planning area's neighbours to deal with matters of mutual concern. • Maintain and where necessary, carry out improvements to Tallagandra Hut and Dalmorton buildings to provide depots for staff and researchers. • Maintain fire advantage points at London Bridge. Starlight and Glen Nevis. • Maintain identified helipads within the planning area. • Maintain and use management trails and facilities in a	High High High Medium High High Medium

	manner that minimises impact on the natural and cultural heritage.	
10. Plan Implementation		
	• Undertake an annual review of progress in implementing this plan of management. • Undertake an assessment after 5 years of the effectiveness of managing the planning area in accordance with this plan and the degree of success in achieving the plans objectives.	High High

Legend

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

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

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

REFERENCES AND BIBLIOGRAPHY

Ahoy. C. & Murphy.D. (1996). *A preliminary investigation of Aboriginal Values in the North-east Forest*. NPWS.

Anderoni, F. (1998) Evaluating environmental consequences of feral horses in Guy Fawkes River National Park. An unpublished report to NPWS. Department of Ecosystem Management, University of New England, Armidale, NSW.

Austeco Environmental Consultants. (1999) *Vegetation Report for Guy Fawkes River National Park for use in Fire and Resource management.* A consultancy report for NSW NPWS Dorrigo District. Austeco Environmental Consultants.

Britcliff.A., Brayshaw.H., & Proudfoot.H. (1998) *Thematic Forest History and Heritage Assessment (non-indigenous) UNE/LNE CRA Regions*. A report undertaken for the NSW CRA/RFA Steering Committee. NSW CRA/RFA Steering Committee.

Clancy, G. & Clancy, V. (2000) *Report on the fauna of Guy Fawkes River National Park (Glen Innes section)*. Clancy Environmental Consultants.

Colong Foundation for Wilderness Ltd (1999) *NSW Wilderness Red Index*. www.colongwilderness.org.au.

DEC (2005) *Draft Recovery Plan for the Brush- Tailed Rock- Wallaby* Petrogale penicillata. Department of Environment and Conservation (NSW) Sydney.

DEC (2004) *Approved Recovery Plan for the* Grevillea beadleana. NSW Department of Environment and Conservation, Hurstville.

Department of Planning & NPWS (1989). *Aboriginal Heritage of the North Coast - A discussion Paper*. Northern Region office NSW Department of Planning, Grafton.

Fahey, E. (1984) *The Settlement of Guy Fawkes and Dorrigo*, Bananacoast Printers, Coffs Harbour.

FCNSW (1992a) *Glen Innes Forest Management Area Environmental Impact Statement*. Prepared by Manidis Roberts Consultants for the Forestry Commission of NSW, Pennant Hills.

FCNSW (1992b) *Proposed Forestry Operations- Dorrigo Management Area: Environmental Impact Statement*. Prepared by Sinclair Knight consulting engineers in association with EDAW (Aust) Pty Ltd for the Forestry Commission of NSW, Pennant Hills.

Floyd.A.G. (1990) *Evaluation of Dry Rainforest, Guy Fawkes River N.P. & adjoining S.E. Boundary*. Letter to the Superintendent, NPWS Dorrigo District.

Forestry Commission of NSW (1990) *Flora Reserve Working Plan London Bridge Flora Reserve No. London Bridge State Forest NO.309*.

Godwin, L. (1992) Inside information: Settlement and alliance in the late Holocene of Northeastern New South Wales. Ph. D. Thesis. University of New England, Australia.

Gorlee.I. (1998) *Reconstruction of fire histories from growth rings in grasstrees at Guy Fawkes River National Park*. Honours thesis, University of New England, Armidale.

Graham.M. (2001). *Water Habitats of the Clarence, Coffs Coastal and Bellinger Catchments*. Report prepared for the Upper North Coast Water Management Committee. NSW NPWS Northern Directorate.

Graham-Higgs. N., & Associates. (undated). *Draft Review of Environment Factors for Wild Dog 1080 Baiting in Guy Fawkes River National Park*.

Henderson. M., & Keith. D. (2000) *Correlation of burning and grazing indicators with the composition of the woody understorey flora of dells in a temperate eucalypt forest*. Unpublished report NPWS.

Hitchcock.D. (2002) Risk analysis Paddy Ross Trail. NPWS.

ICOMOS (1998) *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter).* Australia ICOMOS (International Council on Monuments and Sites.

IUCN (1994) *Guidelines for Protected Area Management*. International Union for the Conservation of Nature and Natural Resources.

Jarman. P., Gross. C., Vernes. K., & Ballard. G. (2003). *Research and Monitor the impact of feral horses in the Guy Fawkes River Park – an initial assessment and feasibility study*. Unpublished report.

Jelliffe Environmental Pty Ltd (2000). *Monitoring for indicators of water contamination Guy Fawkes River National Park*. Unpublished Report.

Jill Sheppard Heritage Consultants (2003). *Dalmorton Precinct Conservation Analysis: Final Report*. Unpublished Report.

Kitchin. M. B. *(*2001*). Fire ecology and fire management for the conservation of plant species and vegetation communities in a National Park in northern NSW, Australia.* PhD Thesis, University of New England.

Lea, D.A.M., Pigram, J.J.J. and Greenwood, L. (1977) *An Atlas of New England*. Department of Geography, University of New England, Armidale.

Lennon, J. & Associates PTY. LTD. (1999) *Guy Fawkes River National Park Glen Innes District Cultural Heritage Assessment*. Jane Lennon and Associates.

Manidis Roberts Consultants (1992). *Glen Innes Forest Management Area Environmental Impact Statement*. NSW Forestry Commission.

Manidis Roberts Consultants (1992). *Glen Innes Forest Management Area Environmental Impact Statement*. Supporting Papers. NSW Forestry Commission.

McDowall. R. (1980) *Freshwater fishes of south-eastern Australia*. Reed Pty Ltd.

Nesbitt.B., Wilton.A., & Jenkins.D. (undated). *Dingoes of the New England & Guy Fawkes River National Parks of North East NSW*. NPWS unpublished.

Newbury, G. (1986) Echoes on the wind: *The story of the squatterages and some pioneers in other fields of the Central New England*. Glen Innes and District Historical Society.

NPWS (2007) *Fire Management Strategy: Guy Fawkes River Reserves*. Department of Environment and Conservation, Sydney South.

NPWS (2006) *Guy Fawkes River National Park: Horse Management Plan.* NSW National Parks and Wildlife Service, part of the Department of Environment and Conservation NSW, Sydney South.

NPWS (2004a) *Grevillea beadleana* Recovery Plan. NPWS.

NPWS (2002) North Coast Region Pest Management Strategy. NPWS.

NPWS (2002). Memorandum of Understanding between the NSW NPWS and the Bicentennial National Trail Ltd. NPWS.

NPWS (2001) *Northern Wilderness Assessment Report-2001*. NSW National Parks and Wildlife Service (Northern Directorate), Coffs Harbour.

NPWS (2001b) *Predation by the Red Fox (Vulpes Vulpes). NSW Threat Abatement Plan. December 2001.* NSW National Parks and Wildlife Service, Hurstville.

NPWS (1999a) *Draft 4/99 Fire management Plan Guy Fawkes River National Park*. Pre-Exhibition Copy. NPWS.

NPWS (1999b) *Draft Environmental Impact Assessment (Fire management Plan) Guy Fawkes River National Park and Nature Reserve, Dorrigo District*. NPWS.

NPWS (1998a) *Blackberry Pest Management Plan*. NPWS Dorrigo District.

NPWS (1998b) *Dorrigo District Pest Management Plan*. NPWS Dorrigo District.

NPWS (1997). *Glen Innes District Pest Strategy*. NPWS.

NPWS (1992) *Assessment report on the Guy Fawkes River Wilderness Area*, The Wilderness Society (Armidale Branch).

NPWS (1992) *Huts Study*. NSW National Parks and Wildlife Service.

Reid.N., Gross.C., Jarman.P., & Van der Lee., G. (1996). *Fire management criteria and guidelines for conservation of the natural and cultural heritage of Guy Fawkes River National Park*. Department of Ecosystem management University of New England Armidale.

Robyn Crosslé - Armidale Family History Group (2002) James and Esther Turnbull. www.geocities.com/heartland/pointe/5525.

Schott.C. (2002). *Ecology of free-ranging horses in northern Guy Fawkes River National Park* – research progress report. Unpublished report.

State Forests NSW (1991) *Flora Reserve Working Plan. London Bridge Flora Reserve No. London Bridge State Forests No. 309*.

Taws.N. (1998) *Mapping of weeds in Guy Fawkes River, Bald Rock, Boonoo Boonoo and Kings Plains National Parks*.

Taylor, U. (1995) Seed dispersal from feral horse manure at Guy Fawkes River National Park. Department of Ecosystem Management, University of New England, Armidale, NSW.

Transgrid and NPWS (2002). *Agreement between the NSW NPWS and Transgrid for the inspection and maintenance of TransGrid infrastructure on NPWS areas*.

Tuck, D. (2007) Dalmorton Village Police Precinct (Guy Fawkes River State Conservation Area): Archaeological and interpretation management plan. Report prepared for NSW Department of Environment and Climate Change (Parks and Wildlife Division), Dorrigo Plateau Area.

Umwelt (2000). *Aboriginal archaeological survey of Guy Fawkes River National Park Northern Tablelands Region*. Umwelt (Australia) Pty Limited, Environmental and Catchment Management Consultants.

Watson, J., Hamilton-Smith, E., Gillieson, D. & Kiernan, K. (Eds) (1997) *Guidelines for Cave and Karst Protection*, IUCN.

Watson.G, Elks.G., & Smith.A. (2000) *Guy Fawkes River National Park Vegetation Communities*. AUSTECO Environmental Consultants.

1:25000 Topographic maps relevant to the plan

Chaelundi, number 9337- 1N

Dalmorton, number 9338-2N

Ebor, 9337-2S

Guy Fawkes River, number 9338-2S

Henry River, number 9338-3N

Hernani, number 9337-2N

Kookabookra, 9337- 4N

Lyndhurst, number 9337-3N

Maiden Creek, 9337-3S

Marengo, number 9337- 1S

Sara River, number 9338-3S

Wards Mistake, number 9337-4S

Appendix 1

Recreational Facilities and Opportunities within the Planning Area

Area	Description	Management of existing and proposed facilities
Chaelundi Camping Area	Chaelundi Camping Area is located beside Chaelundi Creek in a grassy setting of forest gums and stringybarks. The site provides a large area for picnicking and camping. The 8km long Escarpment Walking Track to Chaelundi Falls (0.5 km), via Lucifers Thumb to Chaelundi Bluff (2.4 km), or along the edge of the Guy Fawkes River Valley to Spring Gully picnic Area (8 km) begins at the Rest Area.	Maintain the existing facilities at Chaelundi Camping Area. This includes: 10 fireplaces; 10 picnic tables; a two-pedestal CM40 composting toilet; a four-sided interpretative display panel; 8km Escarpment Walking Track with track interpretation; a camping fee pay station and shelter. Disabled access is available. Car parking for 20 cars is provided. The day use area is the southern end of the rest area with the camping area the northern end. **Proposed works:** The garbage pit will be removed and visitors will be responsible for removing their own rubbish from the planning area. Camping fees apply.
Spring Gully Picnic Area	Spring Gully Picnic Area is a small area at the southern end of the Escarpment Walking Track beside Misty Creek Road. It provides a picnic spot for people walking the track or a place to leave a car for those wishing only to walk the Escarpment Track one way. It is (5 km) by Misty Creek Road or (8 km) by the Escarpment Walking Track back to Chaelundi Camping Area.	Maintain the existing Spring Gully Picnic Area, which has one fireplace, and one BBQ table. No additional facilities are proposed.

Area	Description	Management of existing and proposed facilities
Misty Creek Lookout	The Misty Creek Lookout is a natural lookout point adjacent to Misty Creek Road close to the boundary of the park. A short walking track leads to Granite Bluff and provides extensive views over Housewater Creek and southern Guy Fawkes River gorges.	Maintain existing facilities including a 200m loop walking track, track seat, bollards, car park for 5 vehicles, and panorama interpretative sign.
Ebor Falls Picnic Area	Ebor Falls Picnic Area is adjacent to the Waterfall Way at Ebor and provides two separate picnic areas. It is located at the very southern end of park where the Guy Fawkes River drops down to the gorge. There are two picnic areas located 700 metres apart at the upper and lower falls of the two-tier falls. A 700m walking track links the two picnic areas and follows the gorge. Lookouts provide spectacular views of the falls and the Guy Fawkes River Gorge. Disabled access is available to the Upper Ebor Falls Lookout platform and assisted disabled access to the other platforms and the walking track.	At the Upper Ebor Falls Picnic Area maintain the 3 fireplaces, 3 BBQ tables, 2 toilets and 1 viewing platform. At the Lower Ebor Falls Picnic Area maintain the existing 2 fireplaces, 3 BBQ tables, 1 four-sided interpretative shelter, 2 pit toilets and 2 viewing platforms. Maintain the track that follows the gorge rim and links both picnic areas. **Proposed Facilities:** Upgrade the interpretive panels. Extend the Ebor Falls Walking Track to the bridge on the Waterfall Way. Install water- tanks and taps for hand washing.

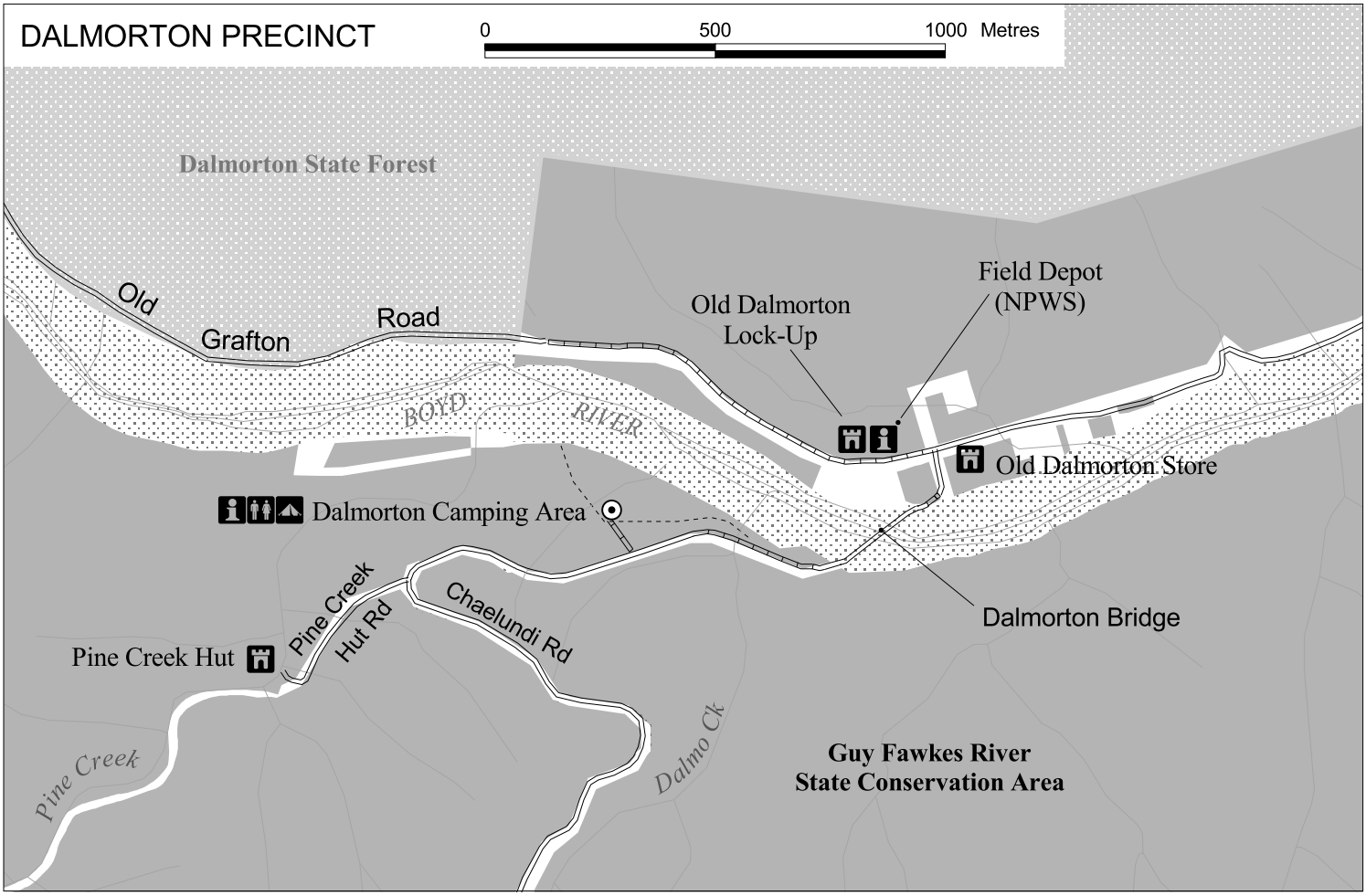
Area	Description	Management of existing and proposed facilities
Dalmorton Camping Area and historic township	The Dalmorton camping area is located on the southern side of the Boyd River of Dalmorton Road. The camping area is located 400 metres before the Dalmorton Bridge off the Chaelundi Forest Road. The campground is sited within an old holding paddock for cattle adjacent to the Boyd River and the Dalmorton Travelling Stock Reserve (which takes in the stream corridor). A loop road links through the site giving access for camper trailers, group and tent sites. A small day use area is also located adjacent to the toilets in the centre of the campground. The campground is fenced out from the travelling Stock Reserve and stile placed in the fence for access to the river.	**Camping Facilities**: Maintain the camping area which includes 18 camping sites (with provision for group camping, campervans and trailers), 12 fireplaces for each campsite as well as two pedestal disabled toilets. No rubbish bins will be provided and visitors will be required to take their rubbish with them. Maintain the vehicle access trail to the camping area and gravel parking pads provided for all the camping sites. Regularly mow the walking track that links the camping area and the township. The riverbank fencing will be maintained to prevent vehicle access to and along the river, as well as to prevent stock access from the adjacent stock reserve. Camping fees will be charged at the camping area by way of a self-registration station. **Proposed day use facilities:** A day use area is proposed to be incorporated within the camping ground precinct, providing parking for 5 vehicles, 2 picnic tables and directional signage from the day use area to toilets at the camping area. Interpretive structures are proposed at both the township and the camping area.

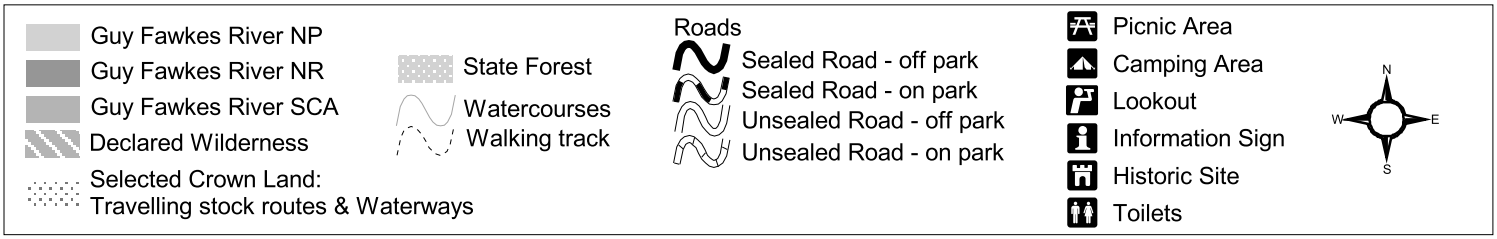
Area	Description	Management of existing and proposed facilities
Ballard's Flat	Ballard's Flat is a large cleared area adjacent to the Sara River just above the Bob's Creek Junction. Access is via Paddy Ross Ridge Fire Trail but is currently closed to public vehicles. With the agreement of the RLPB, and if Guyra Shire Council agrees to take responsibility for maintaining Paddys Land Road, develop a campground at Ballards Flat and manage access along Paddy Ross Ridge Fire Trail using a permit system with number restrictions (refer section 6.2.2 Vehicle access).	There are currently no visitor facilities provided at Ballard's Flat. **Proposed Camping Facilities:** Manage Ballard's Flat as a low-key camping area. Proposed facilities will be limited to: 1 toilet, 4 to 5 fire rings/fireplaces. Access permit will require payment of fee.
Sawpit Creek Hut and Holding Yards (BNT camping area)	Sawpit Creek Hut and cattle yards are located close to the junction of Sawpit Creek and Boyd River. The yards and hut are well located for horse riders using the BNT.	**Proposed works:** It is proposed to maintain the existing hut and yards as a designated campsite for users of the BNT and to replace the barbed wire with 'horsesighter wire' and steel strainers with insulators (refer to Section 9. Management Operations). This would allow the holding area to be partitioned with electric tape to avoid overgrazing by horses.
Jordan's Camp and Holding Yards (BNT camping area)	Old cattle yards and a camp located at the bottom of the Jordans Management Trail adjacent to the Guy Fawkes River provides a holding area for horse riders and campers using the BNT.	**Proposed works:** It is proposed to maintain the existing yards as a designated campsite for users of the BNT and to replace the barbed wire with 'horsesighter wire' and steel strainers with insulators. This would allow the holding area to be partitioned with electric tape to avoid overgrazing by horses.

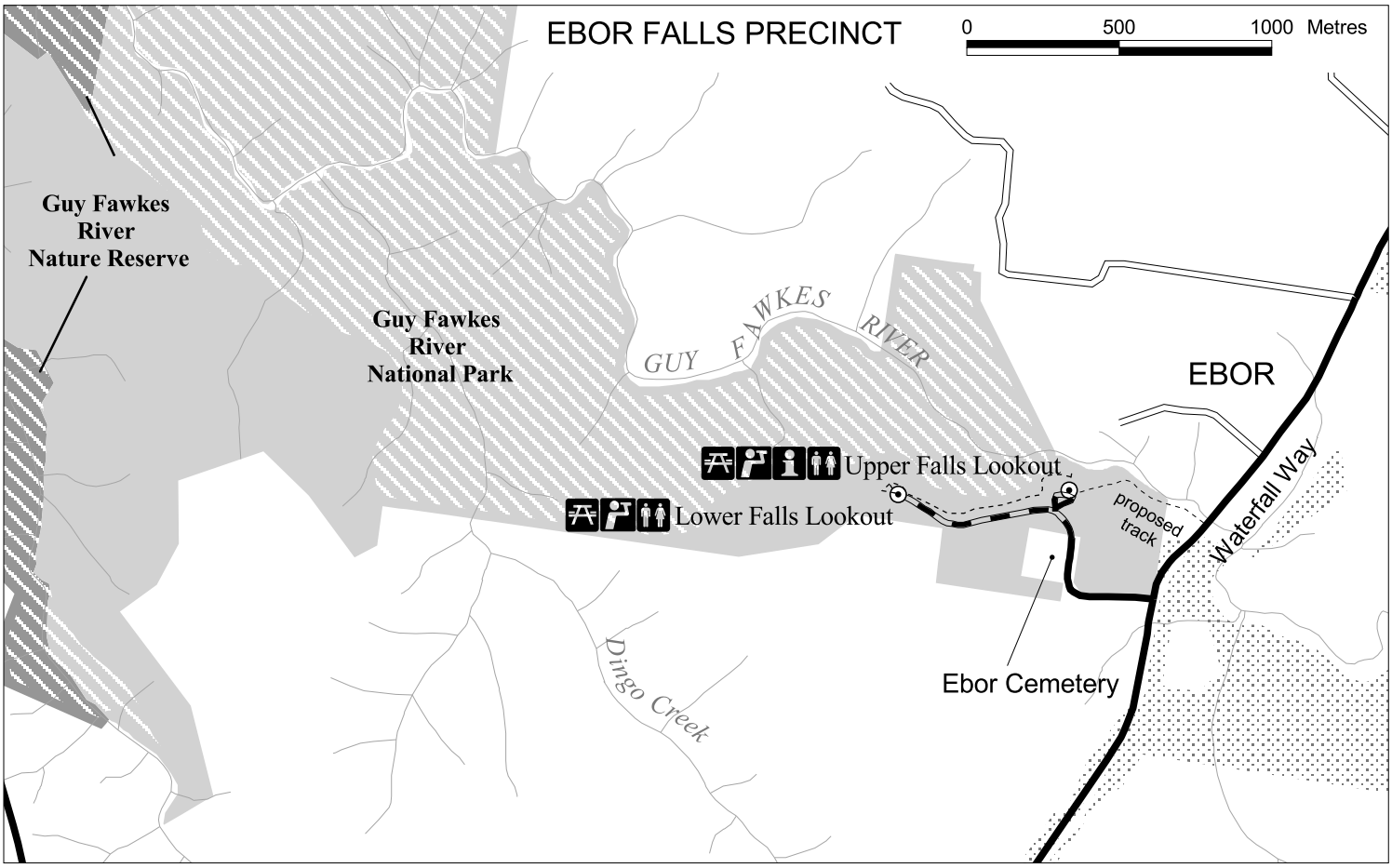
Map 2. The Planning Area

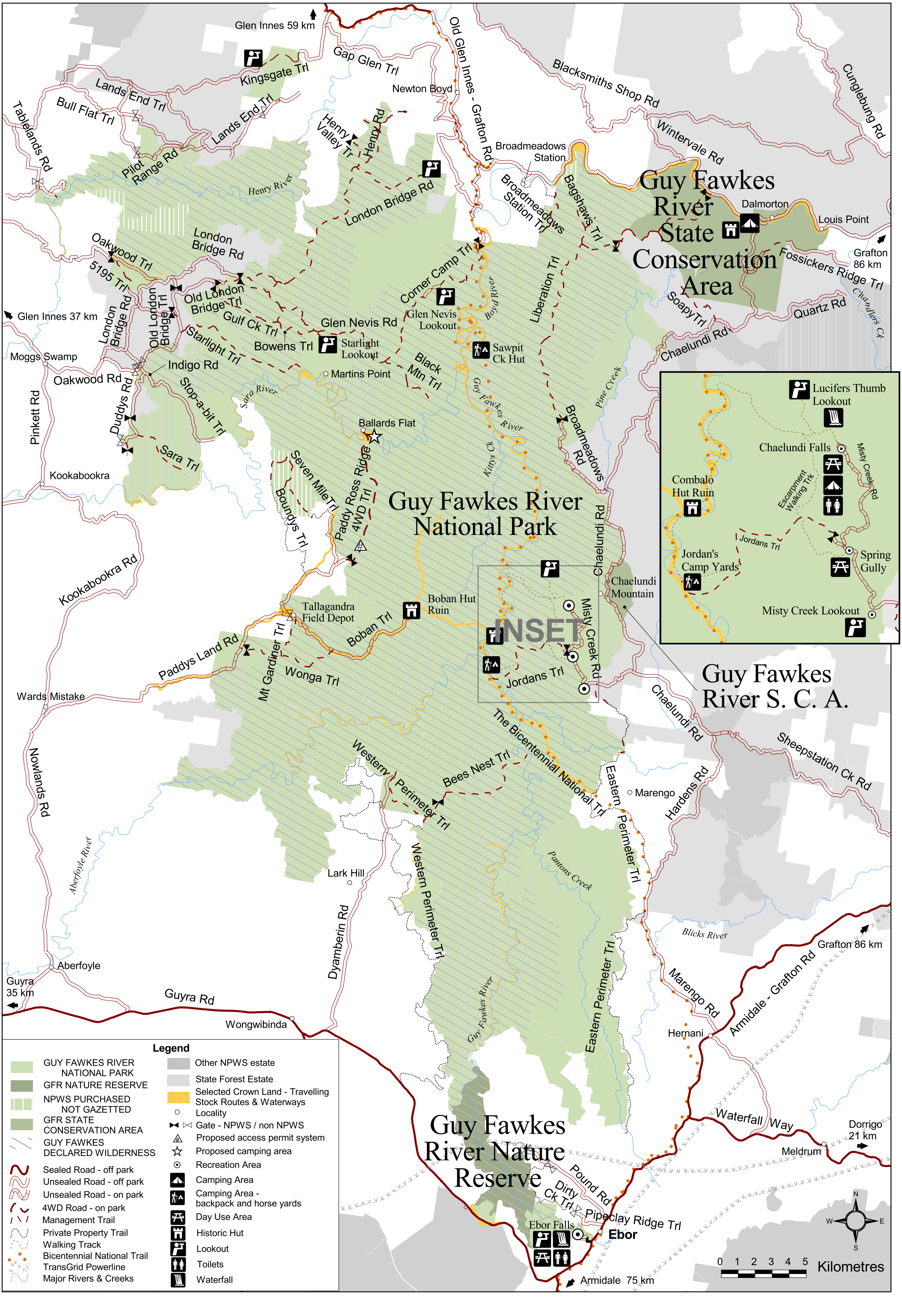
Guy Fawkes River National Park, State Conservation Area and Nature Reserve Plan Of Management

Map 3. Dalmorton and Ebor Falls Precincts


DALMORTON PRECINCT
0
500
1000 Metres
Dalmorton State Forest
Old Grafton Road
BOYD RIVER
Old Dalmorton Lock-Up
Field Depot (NPWS)
Old Dalmorton Store
Dalmorton Camping Area
Dalmorton Bridge
Pine Creek Hut Rd
Chaelundi Rd
Pine Creek Hut
Pine Creek
Dalmo Ck
Guy Fawkes River State Conservation Area


Guy Fawkes River NP
Guy Fawkes River NR
Guy Fawkes River SCA
Declared Wilderness
Selected Crown Land: Travelling stock routes & Waterways
State Forest
Watercourses
Walking track
Roads
Sealed Road - off park
Sealed Road - on park
Unsealed Road - off park
Unsealed Road - on park
Picnic Area
Camping Area
Lookout
Information Sign
Historic Site
Toilets
N
W
E
S


EBOR FALLS PRECINCT
0
500
1000 Metres
Guy Fawkes River Nature Reserve
Guy Fawkes River National Park
GUY FAWKES RIVER
EBOR
Upper Falls Lookout
Lower Falls Lookout
proposed track
Waterfall Way
Ebor Cemetery
Pingo Creek


Glen Innes 59 km
Kingsgate Trl
Gap Glen Trl
Old Glen Innes - Grafton Rd
Blacksmiths Shop Rd
Cunglebung Rd
Newton Boyd
Lands End Trl
Bull Flat Trl
Tablelands Rd
Pilot Range Rd
Henry Valley Tr
Henry Rd
Henry River
London Bridge Rd
Broadmeadows Station
Broadmeadows Station Trl
Bagshaws Trl
Wintervale Rd
Guy Fawkes River State Conservation Area
Dalmorton
Louis Point
Grafton 86 km
Fossickers Ridge Trl
Chandlers Ck
Quartz Rd
Soapy Trl
Chaelundi Rd
Oakwood Trl
5195 Trl
London Bridge Rd
Old London Bridge Trl
Old London Bridge Rd
Old London Bridge Trl
Gulf Ck Trl
Corner Camp Trl
Glen Nevis Lookout
Boyd River
Liberation Trl
Glen Nevis Rd
Starlight Lookout
Bowens Trl
Starlight Trl
Sawpit Ck Hut
Glen Innes 37 km
Moggs Swamp
Indigo Rd
Oakwood Rd
Black Mtn Trl
Martins Point
Guy Fawkes River
Pine Creek
Broadmeadows Rd
Pinkett Rd
Duddys Rd
Stop-a-bit Trl
Sara River
Ballards Flat
Sara Trl
Kookabookra
Seven Mile Trl
Boundys Trl
Paddy Ross Ridge 4WD Trl
Kitys Ck
Guy Fawkes River National Park
Chaelundi Rd
Chaelundi Mountain
Kookabookra Rd
Tallagandra Field Depot
Boban Hut Ruin
Boban Trl
Misty Creek Rd
INSET
Paddys Land Rd
Mt Gardiner Trl
Wonga Trl
Jordans Trl
Wards Mistake
Guy Fawkes River S. C. A.
The Bicentennial National Trl
Chaelundi Rd
Sheepstation Ck Rd
Nowlands Rd
Western Perimeter Trl
Bees Nest Trl
Eastern Perimeter Trl
Hardens Rd
Marengo
Aberfoyle River
Lark Hill
Pantons Creek
Blicks River
Grafton 86 km
Aberfoyle
Guyra
35 km
Guyra Rd
Dyamberin Rd
Guy Fawkes River
Eastern Perimeter Trl
Marengo Rd
Armidale - Grafton Rd
Hernani
Wongwibinda
Waterfall Way
Dorrigo
21 km
Meldrum
Guy Fawkes River Nature Reserve
Dirty Ck Trl
Pound Rd
Pipeclay Ridge Trl
Ebor Falls
Ebor
Armidale 75 km
Lucifers Thumb Lookout
Chaelundi Falls
Misty Creek Rd
Combalo Hut Ruin
Escarpment Walking Trk
Jordans Trl
Jordan's Camp Yards
Spring Gully
Misty Creek Lookout
Legend
GUY FAWKES RIVER NATIONAL PARK
GFR NATURE RESERVE
NPWS PURCHASED NOT GAZETTED
GFR STATE CONSERVATION AREA
GUY FAWKES DECLARED WILDERNESS
Sealed Road - off park
Unsealed Road - off park
Unsealed Road - on park
4WD Road - on park
Management Trail
Private Property Trail
Walking Track
Bicentennial National Trail
TransGrid Powerline
Major Rivers & Creeks
Other NPWS estate
State Forest Estate
Selected Crown Land - Travelling Stock Routes & Waterways
Locality
Gate - NPWS / non NPWS
Proposed access permit system
Proposed camping area
Recreation Area
Camping Area
Camping Area - backpack and horse yards
Day Use Area
Historic Hut
Lookout
Toilets
Waterfall
N
W
E
S
0 1 2 3 4 5
Kilometres