



Plan of Management



Cumbey National Park

COLUMBEY NATIONAL PARK
PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

September 2011

This plan of management was adopted by the Minister for the Environment on 22nd September 2011.

Acknowledgments

The NSW National Parks and Wildlife Service (NPWS) acknowledges that this park is in the traditional country of the Worimi Aboriginal people.

This plan of management is based on a draft plan prepared by the staff of the Hunter Region of the NSW National Parks and Wildlife Service, part of the Office of Environment and Heritage, Department of Premier and Cabinet.

FRONT COVER: Spotted gum and Ironbark.
Photo: NPWS

For additional information or any inquiries about this park or this plan of management, contact the NPWS Barrington Tops Area Office, PO Box 236 Gloucester 2422 or by telephone on (02) 6538 5300.

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FOREWORD

Columbey National Park is located approximately 23 kilometres north-east of Maitland. It covers 868 hectares, the majority of which was reserved on 1st July 2007.

Columbey National Park was reserved due to its significant vegetation features, including twelve vegetation communities. Three of these communities are listed as endangered ecological communities. These are the Lower Hunter Spotted Gum – Ironbark Forest, Floodplain Redgum-Box Forest, and Hunter Lowlands Redgum Forest.

Recent fauna surveys recorded the vulnerable small marsupial brush-tailed phascogale in the park. The park provides suitable habitat for other threatened animal species which have been recorded nearby and may be present in the park.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park. A draft plan of management for Columbey National Park was placed on public exhibition from 11th June until 27th September 2010. The submissions received were carefully considered before adopting this plan.

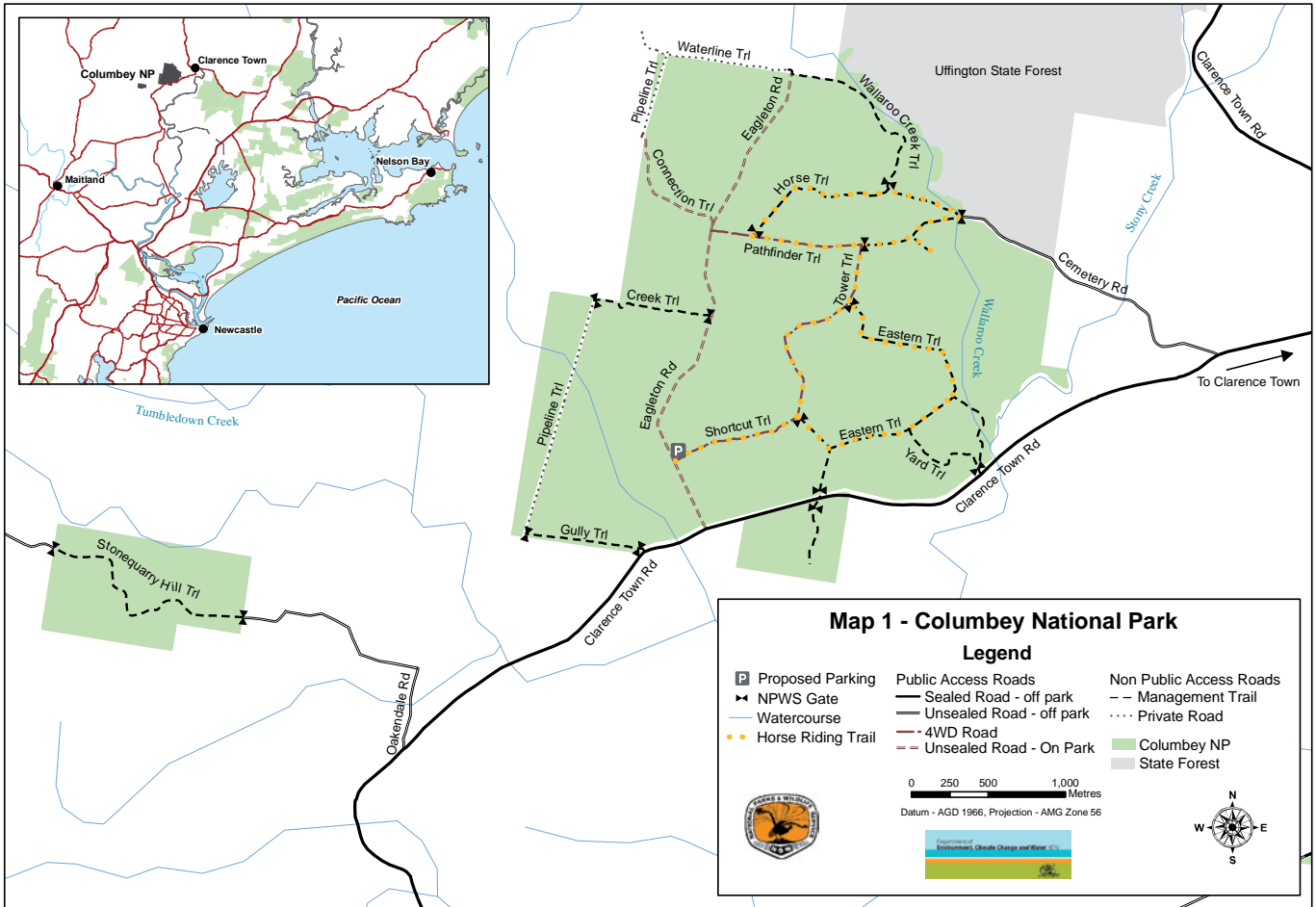
The plan contains a number of actions to achieve the State Plan priority to “Protect native vegetation, biodiversity, land, rivers and coastal waterways”, including monitoring vegetation recovery by mapping vegetation boundaries, assessment of extent of endangered and other ecological communities, control of weeds and pest animals, and fire management strategies. The plan also contains a number of actions to help achieve “More people using parks”, including providing a parking area and interpretive signage. Four wheel driving, horse riding, mountain bike riding and bushwalking will continue to be permitted within the park.

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



Robyn Parker
Minister for the Environment

MAP 1. COLUMBEY NATIONAL PARK



1. LOCATION, GAZETTAL AND REGIONAL CONTEXT

Columbey National Park (referred to as 'the park' in this plan) is comprised of 868 hectares, the majority of which was reserved on 1st July 2007. The park was reserved due to significant vegetation features including three vegetation communities which are listed as endangered ecological communities. Prior to becoming a national park under the *National Park Estate (Lower Hunter Region Reservations) Act 2006* it was part of Uffington State Forest No. 178 (Uffington SF 178). Land reserved as Uffington SF 178 was dedicated in late 1914 (Forestry Commission NSW 1981). A smaller 80 hectare portion (referred to as the Stonequarry Hill portion) located to the west of the main park was added to Columbey National Park in 2008. Stonequarry Hill was a former quarry site that was worked from about the 1860s until the turn of the century. The park derives its name from the nearby geographical feature Columbey Sugarloaf.

The park is located approximately 23 kilometres north-east of Maitland. Nearby settlements include Clarence Town, Glen Oak, and Seaham. Maps 1 and 2 show the park location in a regional and state context.

Map 2. State Location Map



As well as the park, the area subject to this plan includes Eagleton Road which is vested in the Minister under Part 11 of the NPW Act, to ensure a continuation of access arrangements to neighbouring private land (refer to Map 1).

The southern boundary of the park is located predominately on the northern side of the Clarence Town Road, with a smaller 30 hectare portion located on the southern side of the road. The western boundary of the park runs north to south, to the west of the Newcastle/Chichester Dam water pipeline, whilst the eastern boundary is largely marked by Stoney Creek. The northern boundary is marked by the combination of the Cemetery Road, and Wallaroo Creek.

The Stonequarry Hill portion is bounded on all four sides by private property and access is restricted as the main unnamed access track to Stonequarry Hill passes through private property and is gated.

Surrounding land uses are predominantly agricultural and rural residential. Forests NSW retains the adjacent Uffington SF 178 for forestry purposes. Nearby parks and reserves are situated primarily to the south east. These include Wallaroo National Park, and Wallaroo State Forest. The remaining part of the original Uffington State Forest borders the park to the north.

The park falls within the Worimi Local Aboriginal Land Council's area of responsibility, and forms part of the Worimi Nation, of the Kattang language group. The park is located within Hunter Central Rivers Catchment Management Authority. The bulk of the park area is situated in the Dungog Local Government Area, with portions of the southern boundary bordering the Port Stephens Local Government Area. The Stonequarry Hill portion is within the Port Stephens Local Government Area.

2. MANAGEMENT CONTEXT

2.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of national parks in NSW is in the context of the legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act) the NPW Regulation 2002, the *Threatened Species Conservation Act 1995* (TSC Act), and the policies of the NPWS.

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

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

2.2 MANAGEMENT PURPOSES AND PRINCIPLES

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

Under the NPW Act (section 30E), National Parks are managed to:

- conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and maintain natural landscapes;
- conserve places, objects, features and landscapes of cultural value;
- protect the ecological integrity of one or more ecosystems for present and future generations;
- promote public appreciation and understanding of the park's natural and cultural values;

- provide for sustainable visitor use and enjoyment that is compatible with conservation of natural and cultural values;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of natural and cultural values; and
- provide for appropriate research and monitoring.

2.3 STATEMENT OF SIGNIFICANCE

Columbey National Park is considered to be of significance due to its biological values. Three vegetation communities, each of which Bell (2009) has described as an endangered ecological community (EEC) under the TSC Act, occur in the park. These are: 1) Lower Hunter Spotted Gum – Ironbark Forest, 2) Floodplain Redgum-Box Forest, and 3) Hunter Lowlands Redgum Forest.

2.4 SPECIFIC MANAGEMENT DIRECTIONS

Management of the park will focus on the protection of the three EECs. Major strategies to achieve this objective are to:

- Implement the Regional Pest Management Strategy and focus on the pest plant control program;
- Provide appropriate day use recreational opportunities which complement visitor facilities in the local community; and
- Implement the Reserve Fire Management Strategy to protect life and property and maintain appropriate burn frequencies within ecological thresholds.

3. VALUES

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

3.1 GEOLOGY, LANDSCAPE AND HYDROLOGY

The park forms part of the NSW North Coast Bioregion. It spans a gently undulating landscape. The highest feature, Tower Hill is approximately 100 metres above sea level (ASL). The park features numerous drainage lines, all of which generally run to the south-east into the Williams River.

The underlying geology of the majority of the park is derived from the Wallaringa Formation, described as pink to brown, thickly bedded, lithic sandstone, conglomerate and granitoids with minor sandstones. This is a Palaeozoic era formation, formed during the Carboniferous period (360-290 million years ago). The subsurface soils are primarily alluvium derived, and feature sand, silt, clays and minor gravels. These can be characterised as poorly fertile, well drained, and highly erosive soils.

The majority of the park is located within the Wallaroo Creek catchment, and drains into the lower arm of the Williams River. The smaller western Stonequarry Hill portion drains into the Tumbledown Creek catchment.

Acid sulphate soils are identified in the lower branches of the Tumbledown and Wallaroo creeks. These soils are considered to have a low risk of becoming acidic (DLWC 1997).

3.2 NATIVE PLANTS

The park features twelve vegetation communities which, for such a small park, represents significant diversity. These communities range from riparian rainforest on deep alluvial soils to drier open forests on hard setting clays (Bell 2009). Within the park, Bell identified 293 native plant species and three EECs which comprise 603 hectares of the total park area of 868 hectares. The three EECs are: Lower Hunter Spotted Gum – Ironbark Forest (475 hectares); Floodplain Redgum-Box Forest (124 hectares); and Hunter Lowlands Redgum Forest (3.68 hectares).

Lower Hunter Spotted Gum – Ironbark Forest is dominated by broad-leaved ironbark (*Eucalyptus fibrosa*), spotted gum (*Corymbia maculata*), broad-leaved white mahogany (*Eucalyptus umbra*) and in places grey box (*Eucalyptus moluccana*) can also be present. This community occupies the lower undulating slopes at low elevation, with typical understorey species including gorse bitter pea (*Daviesia ulicifolia* subsp. *ulicifolia*), native blackthorn (*Bursaria spinosa*), hairy bush-pea (*Pultenaea villosa*), wiry panic (*Entolasia stricta*), threeawn speargrass (*Aristida vagans*), *Macrozamia flexuosa*, and *Lomandra confertifolia* subsp. *pallida*. The co-dominance of *Corymbia maculata* and *Eucalyptus fibrosa*, often with *Eucalyptus umbra*, distinguish this community from all others (Bell 2009).

Floodplain Redgum – Box Forest is restricted to major creeklines and their associated flood-outs. It can be dominated by cabbage gum (*Eucalyptus amplifolia*), grey ironbark (*Eucalyptus siderophloia*), forest red gum (*Eucalyptus tereticornis*) or grey box (*Eucalyptus moluccana*). Examples dominated by each are present within the park. Rough-barked apple (*Angophora floribunda*) also occurs as a canopy dominant in limited areas. The often mono-specific stands of cabbage gum, grey box, rough-barked apple or grey ironbark characterise this community, and cannot be confused with any other vegetation type (Bell 2009).

Hunter Lowlands Redgum Forest occurs at a single location in a previously cleared and grazed landscape, where it is dominated by forest red gum (*Eucalyptus tereticornis*) over a grassy ground layer of kangaroo grass (*Themeda australis*), *Aristida warburgii*, threeawn speargrass (*Aristida vagans*), and *Ptilothrix deusta*. Shrubs such as *Acacia falcata*, green wattle (*Acacia irrorata*), hairy bush-pea (*Pultenaea villosa*) and native blackthorn (*Bursaria spinosa*) are also present (Bell 2009).

The remaining nine vegetation communities identified are gully rainforest, riparian rainforest, paperbark soak forest, Seaham mahogany forest, Seaham ironbark forest, Seaham spotted gum – ironbark forest, red ironbark scrub-forest, stringybark – apple forest, and plantation forest.

One threatened plant species was previously recorded in the location of the park. Slaty red gum (*Eucalyptus glaucina*), listed as vulnerable under the TSC Act, had been recorded to the north of the Clarence Town Road. The record dated from the 1890s and was not exact as to the specific location (Lower North East CRA Survey Dataset 1997). Rare or threatened Australian plant (ROTAP) species include a population of the terrestrial orchid *Pterostylis chaetophora*, and many of the rare cycad *Macrozamia flexuosa* (Bell 2009). The previously

undescribed Clarence Town donkey orchid (*Diuris sp aff alba* (Clarence Town)) is also likely to occur in the park.

3.3 NATIVE ANIMALS

Native mammal fauna observed in the park include the koala (*Phascolarctos cinereus*), swamp wallaby (*Wallabia bicolor*), eastern grey kangaroo (*Macropus giganteus*), red-necked wallaby (*Macropus rufogriseus*), and the eastern bent-wing bat (*Miniopterus schreibersii*). Amphibian fauna records for the park include Peron's tree frog (*Litoria peronii*), broad-palmed frog (*L. latopalmata*), eastern dwarf tree frog (*L. fallax*), Lesueur's frog (*L. lesueuri*), red-backed toadlet (*Pseudophryne coriacea*), common eastern froglet (*Crinia signifera*), and the ornate burrowing frog (*Limnodynastes ornatus*). Reptile fauna records include Jacky lizard (*Amphibolurus muricatus*), eastern water skink (*Eulamprus quoyii*), garden skink (*Lampropholis delicata*), and the three-toed skink (*Saiphos equalis*) (Lower North East CRA Survey Dataset 1997). Lace monitors (*Varanus varius*) have been observed in the park. Dingos (*Canis lupis dingo*) have also been observed. Of particular interest is the recording of the vulnerable brush-tailed phascogale (*Phascogale tapoatafa*) by NPWS staff during recent fauna surveys (Parkinson & Fawcett, 2010).

The park provides ideal habitat for the swift parrot (*Lathamus discolor*) and the regent honey eater (*Zanthomiza phrygia*), both of which are listed as endangered under the TSC Act. Other species of interest observed nearby, and which could potentially occur in the park include: the powerful owl (*Ninox strenua*), barking owl (*Ninox connivens*), grey-crowned babbler (*Pomatostomus temporalis*), gang-gang cockatoo (*Callocephalon fimbriatum*), glossy black cockatoo (*Calyptorhynchus lathamii*), spotted-tailed quoll (*Dasyurus maculatus*), green and golden bell frog (*Litoria aurea*), and the eastern free-tail bat (*Mormopterus norfolkensis*).

3.4 ABORIGINAL HERITAGE

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

The park is situated within the boundaries of the Worimi Local Aboriginal Land Council. The park is within an area that was part of the Worimi Nation, of the Kattang language Group (Brereton and Paulson 1998). Documentation of early local Aboriginal use and occupation of the local area is scant. There are no sites recorded within the park boundary, although formal investigation has yet to be undertaken. It is recognised that whilst there may be a paucity of physical sites, this does not suggest the area was not utilised by, or is not of interest to Aboriginal peoples.

3.5 HISTORIC HERITAGE

The past history of the park is closely associated with the founding and development of Clarence Town, located two kilometres to the east. The township was once a thriving centre for shipping and industry in the Hunter region. The township was established as a processing and distribution point for fine cabinet and shipbuilding timbers, such as red cedar and white beech. Coupled with its location on a wide navigable section of the Williams River, it developed into a township by the 1820s. As a major shipping node and head of the river,

Clarence Town became an important centre for local industry (ship building, timber distribution, pubs, and factories). All goods destined for towns and districts as far north as Gloucester were transported from the township and carted (initially by bullock, and later horse and wagon) overland from there. The town's importance gradually declined with the advent of rail transport by the late 1800's (CTPS 1946).

In spite of that decline, timber remained important to the local economy. By the 1930s locally sourced timber was used for the production of Masonite. The demand for timber for the production of Masonite resulted in widespread harvesting of timber. The mining industry also demanded considerable quantities of smaller timber, principally for pit props to the Hunter Valley coal mines (Forestry Commission NSW 1981). This created the current situation whereby the park is characterised by immature regrowth with limited evidence of a more mature structure.

The Stonequarry Hill portion features a former quarry site that was one of the earliest industrial sites of the area. It is understood that the quarry was worked from about the 1860s to the early 1900s. Some material may also have been removed during the 1980s by the then Forestry Commission. A form of porphyritic sandstone quarried from the site was referred to as 'Clarence Town Stone' and was used in building works throughout the region, including the Clarence Town Police Station (1870), Seaham Church, Fort Scratchley (1885), local hotels (1880s), and for curbing and guttering in Newcastle during the 1880s (Hunter, 2010). Quarried material was extracted by the Forestry Commission up until the 1980s.

3.6 RECREATION, EDUCATION AND ACCESS

The park provides an important recreational destination for the residents of Clarence Town, and other nearby urban areas. The park is popular for four wheel driving, horse riding, cycling and bushwalking. There is a history of trail bike riding, dating well back to when it was a State Forest. The labyrinthine network of trails throughout the park associated with its logging history is not sustainable in this small national park.

Clarence Town Road is the main access road to the park. The park includes an extensive unsealed road network. The public access road network facilitates recreational opportunities and provides some park neighbours with access to their properties. Eagleton Road is a public access road managed by NPWS that provides access for a number of landowners to properties adjacent to the park's north-western boundary. The park also includes a network of management trails that are primarily used for fire and other management purposes.

Map 1 shows the public access road network, and recreational opportunities available in the park. Driving is permitted along Eagleton Road and Connection Trail (2WD standard) and the 4WD roads. Trail bike riding is permitted along public access roads, and by registered trail bikes only. Horse riding is permitted along the horse riding trails shown on Map 1. Bushwalking and cycling opportunities are permitted on the public access roads and management trails.

The park is primarily a day use destination only and no recreational facilities are provided in the park. Recreational facilities will continue to be kept to a minimum with the provision of basic fixtures only (e.g. interpretative signage). Clarence Town is located in close proximity to the park and provides a range of accommodation opportunities. Given the parks proximity to Clarence Town, the day use nature of traditional park visitation and lack of suitable camp sites, camping opportunities will not be provided.

4. ISSUES

4.1 PEST SPECIES

A preliminary roadside weed assessment was undertaken in 2007. A small number of introduced (exotic or non-endemic) plant species have been recorded as occurring throughout the park. Lantana (*Lantana camara*), listed as noxious, occurs in patches, mainly along some of the internal tracks and trails. Minor infestations occur on Tower Hill, and the tracks leading to that feature.

In an open flat area in the north-eastern part of the park (known as 'The Paddock'), at least two introduced species occur. A small number of monterey pine (*Pinus radiata*) were recorded. There was also a small patch of the succulent *Aloe vera* on the north western edge of the cleared area near Wallaroo Creek. Prickly pear (*Opuntia stricta*) has been recorded in the park. A plantation of black cyprus pine (*Callitrus endlicheri*) of approximately half a hectare occurs on previously cleared land near Yard Trail. This species does not occur naturally in this area, and is believed to have been planted as a trial plantation. Similarly, a small population of bunya pine (*Araucaria bidwillii*) has been recorded west of Eagleton Road.

Control measures are best focused on controlling the lantana, as there is potential for complete removal from the park given the low density of infestation. Other introduced plant species will be prioritised for control subject to: the likelihood of control success; noxious plant classification; and ease of control.

Opportunistic observations of vertebrate pests suggest only a limited number of pest animals exist in the park. Wild dogs (*Canis lupis familiaris*) have been reported anecdotally by neighbours, and tracks have been observed in the park. Domestic fowl (*Gallus domesticus*) have also been observed. Proximity to local urban areas suggests other vertebrate pests such as cats (*Felis catus*) are likely.

4.2 FIRE

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

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

There has been one significant wildfire event recorded in the park. This occurred in December 1979 (Dungog Chronicle, 1979). The fire originated in the Mount Sugarloaf/Glen Oak area to the north-west of the park. The fire threatened Clarence Town and burnt out approximately 5,000 hectares of surrounding land. Backburn operations were conducted in the then Uffington State Forest by Forestry fire crews.

There are a number of assets which border, or are close to the park, with the main ones being the Hunter Water pipeline beside Pipeline Trail and the township of Clarence Town with associated facilities.

The NPWS uses a zoning system for bushfire management in NPWS reserves. NPWS zones are compatible with the system adopted by the Bushfire Coordinating Committee for use in District Bushfire Management Committee (DBFMC) bushfire risk management plans. Trails shown on Map 1 have been assessed as necessary for fire management purposes. The majority of other tracks and trails not shown on Map 1 need to be assessed for their strategic value, and will either remain dormant (for possible activation for future fire fighting purposes) or will be closed and rehabilitated.

A Reserve Fire Management Strategy has been prepared for the park (DECC 2009). The primary fire management objectives for the park are to protect life and property and prevent inappropriate fire regimes that may threaten the EECs, and any Slaty red gums present within the park.

Portions of the park north of Clarence Town Road and west of Eagleton Road will be subject to prescriptive burns for the purpose of hazard reduction. Priority will be given to protecting adjacent properties from fire coming from the park. The portion of park south of the Clarence Town Road will not be subject to frequent burning. This portion will be used as a reference site to assess the impacts of reduced fire events on the white box/broad-leaved ironbark community. This portion has limited public access, is surrounded by grazing land, and poses a lesser fire risk than the primary portion. The Stonequarry Hill portion will also be subject to an infrequent burn regime, primarily due to the difficulty of access and the lack of natural or man made features with which to compartmentalise prescription burns.

NPWS maintains cooperative arrangements with surrounding landowners and Rural Fire Service (RFS) brigades and is actively involved in the Lower Hunter Bush Fire Management Committee. Cooperative arrangements include approaches to fuel management, support for neighbours' fire management efforts and information sharing.

4.3 ISOLATION AND FRAGMENTATION

The surrounding Lower Hunter area has been extensively cleared, which has resulted in a high loss of biodiversity and fragmentation of habitat in the region. Long term conservation of biodiversity depends upon the protection, enhancement and connection of remaining habitat across the landscape, incorporating vegetation remnants on both public and private lands. Nearby vegetated areas contribute to the habitat values of the park and provide ecological corridors to other vegetated areas. Maintaining the integrity of the remaining habitat within the park and, where possible, linking this to adjacent areas of vegetation to facilitate wildlife corridors is important in ensuring long term viability of the park's biological values.

4.4 INAPPROPRIATE ACTIVITIES

Illegal dumping of household and commercial waste is a significant management issue threatening the values of the park. Material that has been dumped includes car bodies, garden waste, building materials, and general household garbage. Whilst the visual and scenic impacts of dumping are immediately obvious, other undesirable impacts are also associated with this activity. One example is the introduction of plant species from garden waste. It is believed the occurrence of the *Aloe vera* in the park originated from garden waste. Vehicle dumping is occasionally associated with the deliberate burning out of the vehicle. This creates a significant fire risk particularly in the warmer, drier months. The dumping is focused at park entrances and in the paddock area near Wallaroo Creek.

Unrestricted vehicle access onto the various tracks and trails throughout the park has resulted in significant undesirable impacts to the trail network. These impacts include

providing ready access for dumping activities, damage to tracks and trails, soil erosion and compaction, and conflicting trail uses amongst visitor groups. Damage to tracks and trails from off road vehicles, such as trail bikes is readily observable at creek crossings and on a number of trails. Soil erosion occurs due to a combination of the thin highly erodible solodic soil type, and the interception of overland flow and subsequent channelling of run off down single wheel ruts, principally from trail bikes.

There is evidence of off-road trail bike riding in the park. Off-road trail bike riding can cause loss of vegetation cover, soil compaction, erosion, and damage to park infrastructure.

5. REFERENCES

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6. IMPLEMENTATION

Current Situation	Desired Outcomes	Management Response	Priority*
<p>6.1 On-Park Ecological Conservation</p> <p>The conservation and protection of the three TSC Act listed vegetation communities (EECs) is the primary management objective for the park.</p> <p>The Priorities Action Statement and recovery plans contain strategies to promote the recovery of threatened species, populations and ecological communities.</p> <p>Soil erosion occurs principally along some of the tracks and trails used extensively by trail bikes. Crossing points at Wallaroo Creek, and the trails running down from Tower Hill are particularly affected.</p>	<p>All native plant and animal species and communities are conserved.</p> <p>Structural diversity and habitat values are restored in areas subject to past logging.</p> <p>Soil erosion is minimised.</p> <p>Water quality and health of the park's streams is improved.</p>	<p>6.1.1 Monitor vegetation recovery by mapping vegetation boundaries, and assess extent of endangered and other ecological communities.</p> <p>6.1.2 Implement relevant strategies in the Priorities Action Statement and recovery plans for threatened species, populations and ecological communities.</p> <p>6.1.3 Work with neighbours, vegetation management committees and local Councils to encourage conservation of remnant native vegetation in the vicinity of the park.</p> <p>6.1.4 Undertake road works in a manner that minimises erosion and water pollution, and construct rollovers where practical.</p> <p>6.1.5 Close all non essential tracks and informal trails and rehabilitate as required.</p> <p>6.1.6 Undertake and encourage research to improve knowledge and management of natural heritage.</p>	<p>High</p> <p>Ongoing</p> <p>Ongoing</p> <p>High</p> <p>Medium</p> <p>Medium</p>

Current Situation	Desired Outcomes	Management Response	Priority*
<p>6.3 Visitor Use and Services</p> <p>Use of the park must be carefully managed since it is relatively small and includes a significant area of remnant vegetation, containing endangered ecological communities, threatened plant species, as well as other important vegetation.</p> <p>Access to the park is important to the local community and will continue to be encouraged as a day-use destination.</p> <p>Visitor facilities will be minimal with essential infrastructure only. The provision of basic visitor parking facilities and interpretive signage at a suitable and readily accessible location (eg. along Eagleton Road) will be investigated.</p> <p>The park is popular for four wheel driving, horse riding, mountain bike riding, and bushwalking.</p> <p>The combination of trail biking, cycling, horse riding, and bushwalking in a small park has the capacity to create significant user conflict. Trail biking generally is a frequent source of conflict between diverse user groups. Issues such as noise, trail erosion, unauthorised use of unregistered vehicles, and trail safety issues are of particular concern.</p> <p>The labyrinthine network of trails throughout the park associated with its history of use is not sustainable.</p>	<p>The local community is aware of the significance of the area and of management programs.</p> <p>Visitor use is ecologically sustainable.</p> <p>Visitor facilities will be established to the minimum level necessary.</p> <p>All trail bike riding outside public access roads ceases.</p> <p>All dumping activity ceases.</p>	<p>6.3.1 Allow public vehicle access on public access roads shown on Map 1. Allow cycling on the public access roads and management trails shown on Map 1.</p> <p>6.3.2 Liaise with the relevant authority in relation to establishing a vehicle speed limit for public access roads shown on Map 1.</p> <p>6.3.3 Allow horse riding on roads and management trails, shown as horse riding trails on Map 1.</p> <p>6.3.4 Provide a parking area with minimal visitor facilities (including interpretive signage) at the junction of Eagleton Road and Shortcut Trail (refer Map 1), or other suitable location.</p> <p>6.3.5 Prohibit camping.</p> <p>6.3.6 Monitor levels and impacts of visitor use.</p> <p>6.3.7 Close all informal access points to vehicles.</p> <p>6.3.8 Gate/signpost management trails to restrict unauthorised access.</p> <p>6.3.9 Allow registered trail bike access on public access roads shown on Map 1. Implement strategies to prevent trail bike riding elsewhere.</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>High</p> <p>Ongoing</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p>

Current Situation	Desired Outcomes	Management Response	Priority*
<p>Stonequarry Hill is surrounded by private property which limits access to the public. There is one management trail in this section of the park.</p> <p>Illegal dumping occurs at a number of access points.</p>			
<p>6.4 Weeds and Pest Animals</p> <p>A preliminary weed assessment was undertaken in 2007. This provided an overview of weed species present on the park, level of density, and location of infestations.</p> <p>Opportunistic observations indicate that wild dogs are present however the numbers are unknown. The proximity to local urban areas suggests other introduced vertebrate pests such as cats are likely.</p> <p>A small plantation of native pine (<i>Callitris endlicheri</i>) occurs within the park.</p> <p>Lantana Biodiversity Monitoring Sites have been established by the NPWS.</p>	<p>The impact of introduced species on native species and neighbouring lands is minimised.</p> <p>The impact of introduced species on the park as a whole is minimised.</p> <p>The plantation species are removed and the site allowed to rehabilitate.</p>	<p>6.4.1 Manage introduced species in accordance with the Regional Pest Management Strategy. Priority will be given to the control of <i>Lantana camara</i> in the park.</p> <p>6.4.2 Monitor noxious and significant environmental weeds. Treat any new outbreaks where possible.</p> <p>6.4.3 Undertake on-going control programs for <i>Aloe vera</i>, <i>Callitris endlicheri</i>, <i>Pinus radiata</i>, and <i>Opuntia stricta</i> (prickly pear).</p> <p>6.4.4 Protect Lantana Biodiversity Monitoring Sites from fire that may conflict with research objectives.</p> <p>6.4.5 Identify locations of Lantana Biodiversity Monitoring sites so as to ensure local control programs do not interfere with the monitoring of these sites.</p>	<p>High</p> <p>High</p> <p>Low</p> <p>High</p> <p>High</p>

<p>6.5 Fire Management</p> <p>Fire is a natural feature of many environments but inappropriate fire regimes can lead to loss of particular plant and animal communities. High frequency fires have been listed as a key threatening process under the TSC Act.</p> <p>A Reserve Fire Management Strategy has been prepared for the park.</p> <p>The portion of the park situated on the southern side of the Clarence Town Road will be used as a fire management reference site, and will not be subject to frequent burning.</p> <p>Eagleton Road forms an important and strategic fire management access trail into the park. Eagleton Road and Connecting Trail serve as primary access routes for house and property protection to adjacent properties located on the north-western boundary.</p> <p>Stonequarry Hill is surrounded by private property and has no practical boundary containment options.</p>	<p>Life, property and natural and cultural values are protected from fire.</p> <p>Fire regimes are appropriate for conservation of native plant and animal communities.</p> <p>Negative impacts of fire on natural and cultural heritage values are stable or diminishing.</p>	<p>6.5.1 Implement the Reserve Fire Management Strategy for the park.</p> <p>6.5.2 Participate in the Lower Hunter BFMC. Maintain cooperative arrangements with local RFS brigades and fire control officers, Forests NSW, Hunter Water Corporation and surrounding landowners in regard to fuel management and fire suppression.</p> <p>6.5.3 Suppress all unplanned fires in the park as quickly as possible.</p> <p>6.5.4 Manage the park to protect biodiversity in accordance with the identified fire regimes/thresholds in the Reserve Fire Management Strategy.</p> <p>6.5.5 The use of heavy machinery off tracks, chemicals, etc will be avoided.</p> <p>6.5.6 Assess the strategic value of dormant trails not shown in Map 1 and activate those trails with strategic value for fire fighting purposes as required.</p> <p>6.5.7 Undertake and/or establish strategic fire management works, such as trittering and fire breaks, along common boundaries as necessary to protect life, property and the environment where appropriate.</p>	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Medium</p> <p>Medium</p> <p>High</p>
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<p>6.6 Infrastructure and Maintenance</p> <p>Management trails to be retained and other management facilities are minimal.</p> <p>The park boundary is fenced to a stock-proof standard.</p> <p>Hunter Water pipelines are located on the western and northern boundaries of the park. The location of the underground pipeline on the northern boundary requires identification.</p> <p>The park contains two quarries, one in the Stonequarry Hill portion, the second near the junction of Tower Hill Trail and Clarence Town Road. The Tower Hill Trail quarry can provide useful material for road maintenance, whilst the Stonequarry Hill quarry could supply rock for infrastructure works.</p>	<p>Management facilities and operations adequately serve management needs and have minimal impact.</p> <p>Infrastructure and assets are routinely maintained.</p> <p>Existing non-park infrastructure is managed to minimise impacts on natural and cultural values.</p>	<p>6.6.1 Maintain the roads and management trails shown on Map 1.</p> <p>6.6.2 Gate/signpost management trails to restrict unauthorised access.</p> <p>6.6.3 Maintain boundary fences to exclude stock from the park. Fencing assistance may be provided in accordance with NPWS policy.</p> <p>6.6.4 Investigate the tenure of all non-NPWS uses and ensure that licenses or easements are granted as appropriate under the NPW Act.</p> <p>6.6.5 Investigate the development of a quarry management plan and, subject to appropriate approvals, use one or both quarries to supply material for essential park infrastructure maintenance, such as road gravel.</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>
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* **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.

Ongoing is for activities that are undertaken on an annual basis or statements of management intent that will direct the management response if an issue that arises.

