



Environment,
Climate Change & Water
National Parks & Wildlife Service



Scott Nature Reserve

Plan of Management



SCOTT NATURE RESERVE

PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

Part of the Department of Environment, Climate Change and Water

May 2010

This plan of management was adopted by the Minister for Climate Change and the Environment on 18th May 2010.

Acknowledgments

The NPWS acknowledges that this nature reserve is in the traditional country of the Walbanga people.

This plan of management is based on a draft plan prepared by staff of the South West Slopes Region of the NSW National Parks and Wildlife Service (NPWS), now part of the Department of Environment, Climate Change and Water.

Cover photograph by David Baxter, NPWS.

For additional information or any inquiries about this reserve or this plan of management, contact the NPWS Queanbeyan Area Office at 6 Rutledge St, Queanbeyan NSW 2620, or by telephone on 62992929.

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FOREWORD

Scott Nature Reserve is located in the southern tablelands of NSW, approximately halfway between Bungendore and Braidwood, and covers an area of 151 hectares.

Scott Nature Reserve was gazetted as a result of the Southern Regional Forest Agreement, to contribute to the protection of vegetation and habitat in the region. It contains a medium height forest of brittle gum, broad-leaved peppermint and black she-oak. Native animals recorded in the reserve include the eastern grey kangaroo, swamp wallaby, ring-tailed possum, eight species of bats, and abundant bird life. Threatened species recorded in the broader area that are likely to use the reserve include the koala, barking owl and powerful owl.

Four trees carrying scarring attributed to Aboriginal activity have been recorded within the reserve as well as remains from early gold mining activities.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each nature reserve. 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 Scott Nature Reserve was placed on public exhibition from 28th March until 30th June 2008. The submissions received were carefully considered before adopting this plan.

This plan contains a number of actions to achieve the State Plan priority to “Protect our native vegetation, biodiversity, land, rivers, and coastal waterways”, including the maintenance of appropriate fire regimes to retain food and nesting resources for threatened fauna, and the control of introduced plants and animals.

This plan of management establishes the scheme of operations for Scott Nature Reserve. In accordance with Section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

A handwritten signature in black ink, appearing to read 'Frank Sartor', with a long horizontal flourish extending to the right.

Frank Sartor MP
Minister for Climate Change and the Environment

1. SCOTT NATURE RESERVE

Scott Nature Reserve is located on the eastern fall of the Great Dividing Range in the southern tablelands of NSW. It is situated south of the Kings Highway, approximately halfway between Bungendore and Braidwood.

The nature reserve was gazetted from previous vacant crown land as part of the Southern Regional Forest Agreement in 2001, and comprises 151 hectares. The RFA provided for major additions to the reserve system, including the establishment of Scott Nature Reserve, following assessment of the natural, cultural, economic and social values of forests. The reserve was gazetted as part of this process to contribute to the protection of vegetation and habitat in the region.

The reserve was named in recognition of its highest point, Scott Trig, itself named after the family of William Scott who settled the adjoining land along Mulloon Creek in the 1830s. The reserve lies on a spur of timbered land, loosely connected to Tallaganda National Park, 8.5 kilometres to the south. The reserve lies within the Palerang Council, Batemans Bay Local Aboriginal Land Council and Southern Rivers Catchment Management Authority areas and adjoins pastoral and rural residential properties.

2. MANAGEMENT CONTEXT

2.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of nature reserves in NSW is in the context of a legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act) and Regulation, the *Threatened Species Conservation Act 1995* (TSC Act) and the policies of the National Parks and Wildlife Service (NPWS). Section 72AA of the NPW Act lists the matters to be considered in the preparation of a plan of management. The policies arise from the legislative background and internationally accepted principles of park management. They relate to nature conservation, Aboriginal and historic heritage conservation, recreation, commercial use, research and communication.

Other legislation, international agreements and charters may also apply to management of the area. In particular, the *Environmental Planning and Assessment Act 1979* 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 the plan, no operations may be undertaken within Scott Nature Reserve except in accordance with the plan. This plan will also apply to any future additions to Scott Nature Reserve. Should management strategies or works be proposed for the nature reserve or any additions that are not consistent with the plan, an amendment to the plan will be required.

2.2 MANAGEMENT PURPOSES AND PRINCIPLES

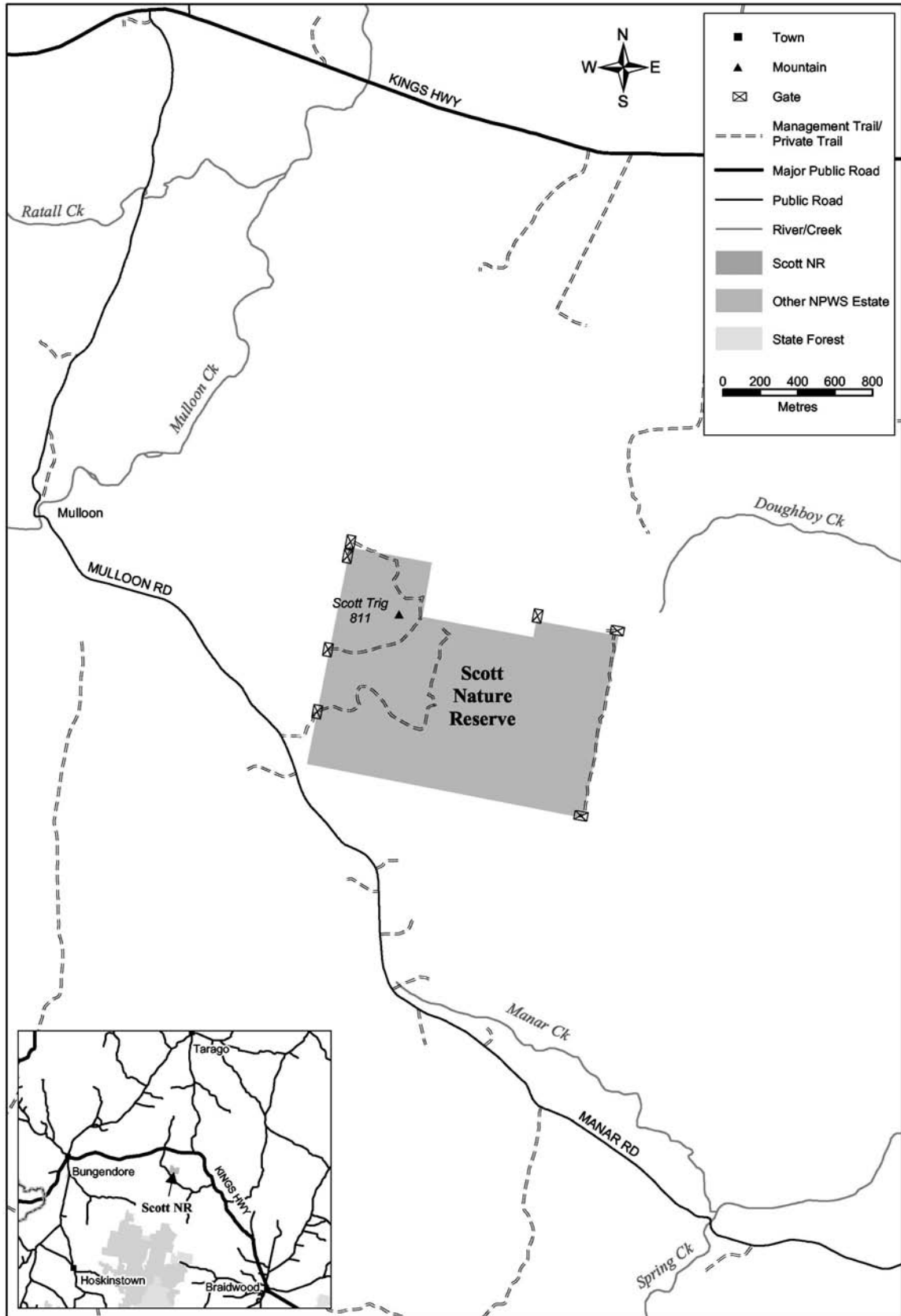
Nature reserves are reserved under the NPW Act to protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena.

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.

Reserve Map



3. VALUES OF THE RESERVE

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, natural heritage, cultural heritage, threats and on-going use are dealt with individually, but their inter-relationships are recognised.

3.1 Landform and Geology

The highest point in the reserve is Scott Trig at 811 metres above sea level, from which the land falls gently to about 750 metres above sea level on the boundaries. The reserve lies on Silurian and Devonian granitic deposits known as Boro Granite. The western edge of the reserve is underlain by Quaternary soils and clays associated with the Mulloon Creek drainage line.

3.2 Native Plants and animals

The reserve is vegetated with a medium height forest of brittle gum *E. mannifera*, broad-leaved peppermint *E. dives* and black she-oak *Allocasuarina littoralis*. Other trees recorded in the reserve include silvertop ash *E. sieberi*, candlebark *E. rubida*, scribbly gum *E. rossii*, narrow-leaved peppermint *E. radiata* and ribbon gum *E. viminalis*. The shrub layer is an open cover of a geebung *Persoonia mollis* subsp. *livens*, *Hakea dactyloides* and *Lomatia ilicifolia*, with a range of other shrubs. The ground layer consists of a sparse cover of tussock grasses including snow grass *Poa sieberiana*, with blue flax lily *Dianella revoluta* subsp. *revoluta*, *Patersonia sericea* and scattered herbs including *Goodenia hederacea* var *hederacea* and native St. John's wort *Hypericum gramineum*.

Native mammals recorded in the reserve include eastern grey kangaroo *Macropus giganteus*, swamp wallaby *Wallabia bicolor*, and ring-tailed possum *Pseudocheirus peregrinus*, as well as eight species of bat. A koala, *Phascolarctos cinereus*, listed as vulnerable under the Threatened Species Conservation Act, has been recorded within two kilometres of the reserve.

The locality has abundant birdlife, with twelve species being recorded in a preliminary survey of the reserve. Birds recorded included white-throated treecreeper *Cormobates leucophaea*, rufous whistler *Anthochaera carunculata*, spotted pardalote *Pardalotus punctatus* and striated pardalote *Pardalotus striatus*. The threatened glossy black cockatoo *Calyptorhynchus lathami* has also been recorded in the reserve. A number of other woodland birds are expected to utilise the reserve. Species recorded in the broader area that are likely to utilise the reserve include the barking owl *Ninox connivens* and powerful owl *Ninox strenua*, both listed as vulnerable under the TSC Act.

3.3 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.

Scott Nature Reserve is located in an area that was occupied by the Walbanga people. Neighbouring people included the Ngarigo, Ngunawal, Wandandian and Djiringanj (Tindale, 1974). Traditional use, such as hunting, gathering and ceremony, would have taken place over the entire landscape, of which the reserve is only a small part. The reserve is now within the area of the Batemans Bay Local Aboriginal Land Council.

Four trees carrying scarring attributed to Aboriginal activity have been located and recorded within the reserve.

3.4 Historic Heritage

The nature reserve was gazetted in 1899 as a reserve for mining, with a small trig reserve in the north-west of the reserve notified in 1893 (Dearling, 2003). Four gold mining leases were issued for the south-west corner of the reserve. Of these leases, three were granted in 1898, of which one was terminated in 1901 and two ran intermittently until 1918 and 1919. The fourth lease, generally encompassing the lands held under the previous three leases, ran intermittently between 1920 and 1938.

An inspection report of the mines in 1935 recorded a shaft 80 feet (24.4 metres) deep, with 21 feet (6.4 metres) of tunnels and an older shaft on the site. According to the report, high assays had been obtained from the mine in the past. The only remains from this activity are two shallow slumped holes and the remnants of tin sheds in the vicinity of the shafts.

In the early 1930s an annual lease for grazing was granted to an adjoining landholder. This lease was granted intermittently and was replaced by a permissive occupancy granting annual grazing rights in 1966.

3.5 Education, Recreation and Research Values

Due to its small size and location amongst rural holdings, the reserve is not generally used by members of the public. However, some use by bushwalkers and by bird watching groups occurs. The reserve contains floristic survey plots and monitoring transects.

4. THREATS TO RESERVE VALUES

4.1 Fire Management

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

In regard to Scott Nature Reserve, fire management strategies are included in this plan of management. The reserve forms part of a continuous band of timber along a low range. No wildfires have been recorded in the reserve in recent times; however, some old fire scarring on mature trees is visible. There are no assets vulnerable to fire within the reserve, but one house is located within approximately 100m of the southern boundary of the reserve. A number of vehicle routes occur in the reserve, but these have not been constructed as formed trails.

The primary fire management objectives of the NPWS are to protect life and property and community assets from the adverse impacts of fire, whilst managing fire regimes to maintain and protect biodiversity and cultural heritage (NPWS, 2005). The NPWS uses a zoning system for bushfire management that is compatible with the zoning used by the Lake George Bush Fire Management Committee (BFMC) in its bushfire risk management plan.

The reserve is zoned as a Land Management Zone (LMZ). Apart from the over-riding legislative objective of protecting life and property, the primary fire management objectives for a LMZ are to conserve biodiversity and protect cultural heritage. This zone has been applied because the reserve does not have a recent history of bushfire ignitions and, with the small size of the reserve, a precautionary approach to burning is proposed.

The adaptability of plant species to fire can be grouped on the basis of vegetation communities, and thresholds for fire frequency established as a guide to maintaining species diversity. It has been estimated that the brittle gum – broad-leaved peppermint community represented in the reserve should not generally be burnt more frequently than 20 years, or less frequently than every 150 years. However, these thresholds are based on life cycles of a limited number of species, and given the lack of knowledge on ecosystem functioning without fire, the upper limits are untested.

4.2 Isolation and fragmentation

The reserve is located within a matrix of cleared, timbered and regenerating lands. It thus has some connectivity to the larger timbered mass of Tallaganda National Park about eight kilometres to the south. Maintaining the integrity of the remaining habitat within the reserve and, where possible, linking this to adjacent areas of bushland to facilitate wildlife corridors is important in ensuring long term viability of the reserve's biological values.

5. References

Dearling, Charles. 2003. *Preliminary European Cultural Heritage (Desktop) Study – Selected National Parks and Nature Reserves*. Report to NPWS, South West Slopes Region.

NPWS. 2005. *NPWS Fire Management Manual*. Hurstville.

Tindale, NB. 1974. *Aboriginal Tribes of Australia*. ANU Press, Canberra.

6. MANAGEMENT ISSUES AND STRATEGIES

Current Situation	Desired Outcomes	Management Strategies / Actions	Priority
<p>6.1 Soil and water conservation</p> <p>The reserve is well covered with vegetation. Any works have the potential to cause erosion.</p>	<p>Soil erosion is minimised.</p> <p>Water quality is not compromised.</p>	<p>6.1.1 Undertake all works in a manner that minimises erosion and water pollution.</p> <p>6.1.2 Any earthworks carried out during a bushfire will be rehabilitated as soon as possible.</p>	<p>High</p> <p>High</p>
<p>6.2 Native plant and animal conservation</p> <p>The vegetation of the reserve consists of a dry shrub and grass forest dominated by brittle gum, broad-leaved peppermint and black she-oak.</p> <p>Impacts from previous use include a previously cleared easement running north south through the reserve, grazing in the northwest of the reserve and signs of limited firewood gathering.</p> <p>The reserve provides valuable habitat for fauna occurring in the area, including the threatened glossy-black cockatoo, powerful owl and barking owl.</p>	<p>All native plant and animal species and communities are conserved.</p>	<p>6.2.1 Encourage surveys for predicted threatened fauna species.</p> <p>6.2.2 Maintain appropriate fire regimes to retain food and nesting resources for the threatened fauna.</p> <p>6.2.3 Liaise with neighbours to encourage the retention and appropriate management of key habitat and corridors adjacent to the park.</p>	<p>High</p> <p>High</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>6.3 Cultural heritage</p> <p>Four scarred trees, attributed to Aboriginal activity, have been recorded within the reserve.</p> <p>The reserve contains diggings and dwelling remains from previous mining activities.</p>	<p>Cultural features are conserved and managed in accordance with their significance.</p>	<p>6.3.1 Precede all ground disturbance work by a check for cultural features.</p> <p>6.3.2 Any works undertaken will incorporate appropriate conservation measures to mitigate impacts on cultural heritage.</p> <p>6.3.3 Consult and involve the Bateman's Bay Local Aboriginal Land Council and other Aboriginal stakeholders in all aspects of management of Aboriginal sites, places and values.</p> <p>6.3.4 Continue to build on existing relationships with local Aboriginal community to enhance exchange of information about park values.</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>
<p>6.4 Introduced species</p> <p>The reserve is weed free, with the exception of a few naturalised herbs and a small infestation of serrated tussock in the northwestern corner. Other environmental weeds occurring in the locality with the potential to invade the reserve include St John's wort and African love grass.</p> <p>Foxes and cats probably utilise the reserve as part of the broader landscape.</p>	<p>The impact of introduced species on native species and neighbouring lands is minimised.</p>	<p>6.4.1 Control introduced plant and animal species. Priority will be given to the control of serrated tussock.</p> <p>6.4.2 Monitor noxious and invasive environmental weeds such as African love grass. Treat any outbreaks.</p> <p>6.4.3 Undertake fox baiting within the reserve if required for the protection of specific fauna species recorded in the reserve.</p> <p>6.4.4 Participate in cooperative fox control programs outside the reserve where these meet the objectives of the broader community and are demonstrated to have low impacts on native fauna.</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>6.5 Fire management</p> <p>The reserve forms part of a continuous band of timber along a low range. No wildfires have been recorded in the reserve in recent times; however, some old fire scarring on mature trees is visible. A number of vehicle routes occur in the reserve, but these have not been constructed as formed trails.</p> <p>A dwelling is located within approximately 100m of the southern boundary of the reserve.</p> <p>It has been estimated that fires should not occur at less than 20 year, or more than 150 year, intervals in this vegetation community, to maintain floral species diversity, soil nutrients and habitat diversity for fauna. Thus, given the small size of the reserve, no prescribed burning for the purposes of biodiversity management will be undertaken within the life of this plan.</p> <p>Widespread, high intensity fires have the potential to destroy food, perching and nesting resources in the reserve.</p> <p>Full floristic plots and monitoring transects, installed in spring 2004, enable changes in floristic diversity to be monitored to inform fire management planning.</p>	<p>Persons and property are protected from bushfire.</p> <p>Cultural features are protected from damage by fire.</p> <p>Fire regimes are appropriate for conservation of plant and animal communities.</p>	<p>6.5.1 Participate in the Lake George Bush Fire Management Committee. Maintain coordination and cooperation with Rural Fire Service, brigades and neighbours with regard to fuel management and fire suppression.</p> <p>6.5.2 Undertake any fuel management activities identified for property protection in conjunction with the Bush Fire Management Committee.</p> <p>6.5.3 Dormant trails may be enhanced, through earthworks, if deemed strategically necessary during a bushfire. Otherwise trails will be left in a dormant state.</p> <p>6.5.4 Maintain the cleared strip along the eastern boundary of the reserve as a fire advantage.</p> <p>6.5.5 Implement the following fire management guidelines for maintaining the biodiversity and cultural values of the reserve:</p> <ul style="list-style-type: none"> • Contain fires to as small an area as possible, and mitigate fire intensity where possible. • Maintain as much of the reserve as possible in as old a fire age class as possible. • Protect the recorded scarred trees from fire if practicable. • Monitor biodiversity in the reserve and adapt fire management accordingly. 	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>6.6 Visitor use</p> <p>Due to its small size and location amongst rural holdings, the reserve is not generally used by members of the public. The reserve is used occasionally by bushwalkers and by bird watching groups.</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>6.6.1 Exclude public vehicular access. Prohibit camping, trail bike riding and horse riding.</p> <p>6.6.2 Permit day bushwalks, informal picnics and educational visits, subject to limits on numbers and other conditions if necessary to minimise impacts. No facilities will be provided and no fires will be permitted in the reserve.</p> <p>6.6.3 Monitor levels and impacts of use.</p> <p>6.6.4 Organise media releases, educational material and contact with neighbours and community organisations as needed.</p>	<p>High</p> <p>Medium</p> <p>High</p> <p>Low</p>
<p>6.7 Management operations</p> <p>The reserve is serviced by a number of dormant vehicle routes (see reserve map).</p>	<p>Management facilities adequately serve management needs and have acceptable impact.</p>	<p>6.7.1 Management vehicles to stay on identified vehicle routes in the reserve for periodic inspections.</p> <p>6.7.2 Maintain vehicle routes for management purposes.</p>	<p>Medium</p> <p>Medium</p>

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

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

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

