

TUMBLONG STATE CONSERVATION AREA

PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

Part of the Department of Environment and Climate Change NSW

February 2008

This plan of management was adopted by the Minister for Climate Change and the Environment on 21st July 2008.

Acknowledgments

This plan of management was prepared by staff of South West Slopes Region of the National Parks and Wildlife Service (NPWS) which is now known as the Parks and Wildlife Division of the Department of Environment and Climate Change NSW. Cover photo by Jo Caldwell, NPWS.

NPWS acknowledges that the reserve is located within Wiradjuri Country and in the area of the Tumut-Brungle Local Aboriginal Land Council.

Inquiries about this draft plan of management should be directed to the ranger at the NPWS Riverina-Highlands Area Office, 7a Adelong Road, Tumut 2720 or by telephone on 69477000.

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FOREWORD

Tumblong State Conservation Area covers 746 hectares and lies 30 kilometres northwest of Tumut and 15 kilometres north of Adelong on the south west slopes of New South Wales.

Tumblong State Conservation Area protects areas of remnant native open forest in a highly cleared and fragmented landscape. It forms a small part of a larger north-south ridge that remains largely naturally vegetated. It is also part of a broader fragmented vegetated link between the extensive moist forests to the east and south, and the drier grassy woodlands of the Riverina plains.

Tumblong State Conservation Area is important because of its high diversity of native forest types. This diversity provides habitat for many native animal populations, including 14 mammal species and over 60 bird species. A number of significant fauna species are known to exist in and around the state conservation area, particularly threatened and declining woodland species such as gliders, parrots, owls and bats. The state conservation area also contains an important population of the brown tree creeper, a bird that is threatened by large-scale habitat loss.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each 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 Tumblong State Conservation Area was placed on public exhibition for three months from 28th April until 31st 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 rehabilitation of an erosion gully, control of introduced plants and animals, and implementation of actions for the recovery of threatened species.

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

Verity Firth
Minister for Climate Change and the Environment

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1. MANAGEMENT CONTEXT

1.1 LEGISLATIVE AND POLICY FRAMEWORK

The *National Parks and Wildlife Act 1974* (NPW Act) requires that a plan of management is prepared for each state conservation area (SCA). The plan is a legal document providing guidelines for sustainable use and protection of natural, cultural and recreational resources in the state conservation area and contains a written scheme of operations for managing such resources.

This plan of management outlines a strategic direction and management guidelines required to achieve the desired objectives for managing Tumblong State Conservation Area (referred to as “the SCA” in this plan). The plan has been developed consistent with NSW legislation, National Parks and Wildlife Service (NPWS) procedures and policies, and the resource attributes and current condition and the existing uses of the SCA.

Essentially, the plan of management will guide the NPWS and staff responsible for managing the SCA. It also informs the community about the management direction for the SCA and provides an opportunity for public comment of management proposals.

Once the plan of management has been adopted by the Minister, no operations may be undertaken within Tumblong SCA unless they are consistent with the plan.

This plan may be amended if management strategies or works are proposed for the SCA that are not consistent with the plan. The NPW Act requires that any amendments to the plan must follow the same process as for a draft plan and be placed on exhibition for public comment.

The NPW Act establishes the purpose for reservation and management principles for State Conservation Areas (section 30G of the Act).

1. The purpose of reserving land as a state conservation area is to identify, protect and conserve areas:

- (a) that contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance, and
- (b) that are capable of providing opportunities for sustainable visitor use and enjoyment, the sustainable use of buildings and structures or research, and
- (c) that are capable of providing opportunities for uses permitted under other provisions of this Act in such areas, including uses permitted under section 47J, so as to enable those areas to be managed in accordance with subsection (2).

2. A state conservation area is to be managed in accordance with the following principles:

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

The NPW Act also provides for a review of the classification of SCAs every 5 years to determine whether they should receive either a national park or nature reserve classification. The classification review for state conservation areas is outlined below (section 47M of the Act):

- (1) The Minister is to review, every 5 years after the commencement of this section, the status of land within state conservation areas.
- (2) The review is to give reasons why each area of land within a state conservation area should or should not be reserved as a national park or nature reserve under section 47MA.
- (3) The results of the review are to be made available for public inspection free of charge, during ordinary office hours, at the head office of the Service and are to be published on the Internet by means of the website of the Service.
- (4) The review is to be undertaken in consultation with the Minister administering the *Mining Act 1992*.

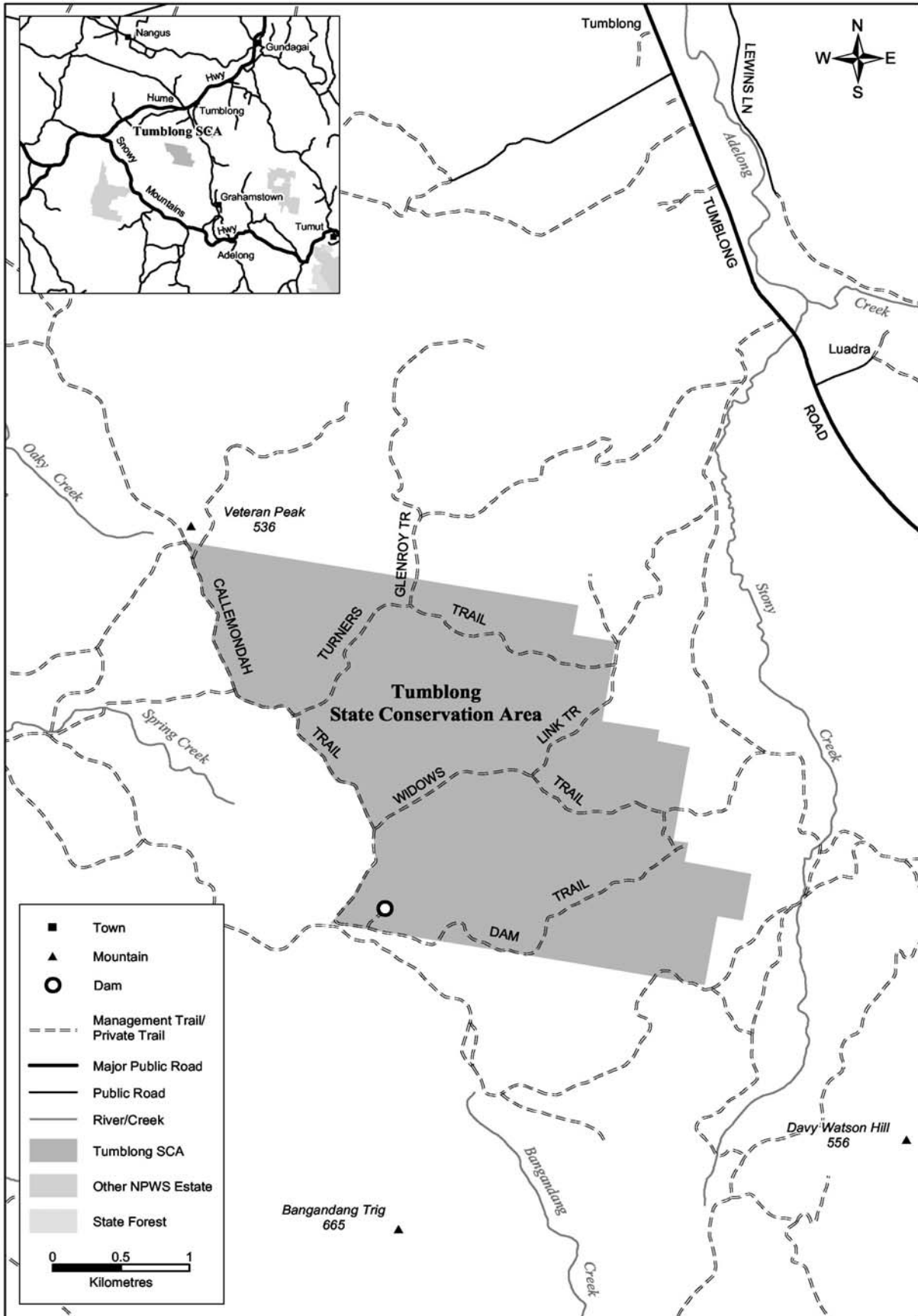
Tumblong SCA also permits existing interests (as defined in section 47H of the NPW Act) such as mining and mineral exploration. Existing mining leases are managed in accordance with regulations outlined in Section 47J of the NPW Act and the *Mining Act 1992*. Where not an existing interest, the written concurrence of the Minister for the Environment is required before a mining interest can be granted, or where there is a renewal of, or extension to, the term of a mining interest in a SCA (section 47J of the NPW Act).

1.2 Regional Forest Agreements

Regional Forest Agreements (RFAs) are one of the principle means of implementing the National Forest Policy Statement of 1992. Under this Statement Commonwealth, State and Territory governments agree to work towards a shared vision for Australia's forests. This aims 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.

The Southern RFA covers the planning area. The process leading up to the RFA provided for major additions to the reserve system, including the establishment of Tumblong State Conservation Area.

RESERVE MAP



2. TUMBLONG STATE CONSERVATION AREA

2.1 LOCATION, GAZETTAL AND REGIONAL SETTING

Tumblong State Conservation Area (the SCA) is located 30 kilometres north-west of Tumut, and 15 kilometres north of Adelong on the south west slopes of NSW. Prior to 1 January 2001 the 746 hectare SCA was managed by the then State Forests of NSW as Tumblong State Forest. At this time it became the responsibility of the NPWS as part of the Southern Regional Forest Agreement (RFA). Initially the SCA was gazetted as Tumblong Crown Reserve until, on 1 April 2005, the reserve was re-gazetted as Tumblong State Conservation Area (see Section 1, page 1).

The name Tumblong refers to the locality north-east of the SCA. The SCA forms part of a broader fragmented vegetated link between the extensive moist forests to the east and south, and the drier grassy woodlands of the Riverina plains. To the west is Ellerslie Nature Reserve and to the east are Minjary National Park and Mudjarn Nature Reserve. The SCA forms a small part of a larger vegetated ridge stretching from the Hume Highway and beyond to the north and to Adelong and beyond in the south.

The main land use in the area is mixed farming, including grazing and small-scale cropping. The SCA was seasonally grazed under permit prior to the change in management in 2001. Small-scale logging and collection of timber for fencing materials and firewood occurred in the SCA prior to gazettal. These activities have influenced the vegetation structure and diversity that is seen today.

The SCA is within the area of the Murrumbidgee Catchment Management Authority, Gundagai Rural Lands Protection Board and Tumut Shire Council.

2.2 LANDSCAPE

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.

Tumblong SCA protects areas of remnant native open forest in a highly disturbed and fragmented landscape. A number of significant flora and fauna species are known to exist within and around the SCA.

The geology, landform, climate and plant and animal communities of the area, plus its location, have determined how it has been used by humans. Burning, clearing and grazing in the region has left only small remnants of native vegetation, leading to islands of habitat for the native wildlife that the vegetation communities support. 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, 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 and cultural heritage, non-human threats and on-going use are dealt with individually, but their inter-relationships are recognised.

2.3 NATURAL HERITAGE

2.3.1 Landform, Geology and Soils

The SCA is dominated by steep, incised slopes and has an altitudinal range of between 300 and 588 metres. The western boundary of the SCA forms the border between the Adelong Creek catchment to the east and Hillas Creek catchment to the west. Both of these creeks flow into the Murrumbidgee River. The SCA contains deeply incised, ephemeral drainage lines that contribute seasonal water to the broader catchment. Annual average rainfall in the area is 900 millimetres.

The geology of the area is dominated by mid-Silurian conglomerate and metasediments containing sandstone and siltstone with minor volcanics appearing sporadically at the soil surface. The soil surface is dominated by weathered rock and rock fragments with minimal soil profile development. The soils of the area are generally red and yellow earths with high clay content at lower elevations and in the valley floors, with skeletal lithosols occurring on the mid and upper slopes. Soils are highly erodible due to the steep topography and sparse nature of vegetation cover in the area.

2.3.2 Native Plants

The South West Slopes bio-region of New South Wales is one of the most highly disturbed and altered landscapes in NSW (Gibbons & Boak, 2002). Given the history of clearing, burning, cropping and grazing in the region, all remaining areas of intact remnant native vegetation are now considered significant when compared to pre-1750 vegetative coverage.

The SCA consists of up to 6 distinct forest ecosystems containing dry open sclerophyll forest dominated by mixed box (red box *Eucalyptus polyanthemos*, white box *E. albens*, Norton's box *E. nortonii* and apple box *E. bridgesiana*), red gum *E. blakelyi* and red stringybark *E. macrorhyncha*, with a very sparse understorey of mixed wattle, grass and forb species. The vegetation in the SCA appears to respond to subtle gradients in soil types and exposure (aspect) (EcoGIS, 2003). Generally, the diversity of mid and understorey species is low. The lands surrounding the SCA have been extensively cleared for agriculture, although areas of reasonably intact remnant native vegetation persist on private properties adjoining the SCA.

Tumblong SCA is important due to its high diversity of native forest types and low infestations of exotic species, despite past grazing. Photo monitoring points have been established at a number of sites within the SCA to record changes in species diversity and structure over time.

Table 1 shows the major vegetation types and their environmental niches within the SCA.

Description	Lithology and Soils	Environmental Niches
Apple Box moist sedge-grass-herb forest	Deep colluvial soils derived from hillwash	Major creeks on western flanks of ranges outside of Tumblong SCA
Norton's Box-Red Box grassy forest	Shallow-moderate clay loams	On sheltered slopes of the SCA
Red Box-Long Leaved Box-Red Ironbark Dry Grass-forb forest	Shallow soils derived from Ordovician metasediments	On western facing slopes on intermediate aspects.
White Box grassy woodland	Shallow to moderately deep soils on Ordovician metasediments	On exposed slopes at low elevations below 400 metres on slopes between 5 and 20 degrees
Red Box-Long-Leaved Box grassy forest	On moderately deep soils derived from Ordovician metasediments	On sheltered southern and south-eastern aspects
Scribbly Gum-Norton's Box Tussock Grass-dry forb woodland	On shallow soils derived from Ordovician metasediments	On exposed slopes in western part of SCA

Table 1: Forest Ecosystems found in Tumblong SCA (EcoGIS, 2003)

Of particular interest is the existence of grassy white box woodlands both within the SCA and on surrounding private lands. These are regarded as a component of the White Box-Yellow Box-Blakely's Red Gum Woodland that is listed as an *Endangered Ecological Community* under the TSC Act. Recovery actions for threatened species and communities listed under the Act are included in the Priorities Action Statement and in recovery plans. These will be used to guide management of threatened species or communities in the area. Less than 4% of Box-Gum woodlands remain on the south west slopes of NSW when compared to pre-European settlement coverage (NPWS, 2003). Box-Gum woodlands are very important for providing habitat for a variety of native fauna, particularly threatened, rare or declining woodland species such as gliders, parrots, owls and bats.

2.3.3 Native Animals

The diversity of native plant species in the SCA, relative to surrounding lands, provides habitat for a number of native animal populations.

Bird surveys undertaken by NPWS (2002) revealed 42 species of birds including a number of species listed on the TSC Act. These include the brown tree creeper *Climacteris picumnus victoriae*, diamond firetail *Stagonopleura guttata* and turquoise parrot *Neophema pulchella*.

Fauna surveys in early 2004 identified 14 mammal species (including 5 bat species), 3 frogs, 5 reptiles and a further 25 species of birds. Of these the eastern bent-wing bat *Miniopterus schreibersii*, barking owl *Ninox connivens*, speckled warbler *Pyrholaemus*

saggitata, hooded robin *Melanodryas cucullata cucullata*, and black-chinned honeyeater *Melithreptus gularis gularis* are listed as vulnerable on the TSC Act. The threatened superb parrot *Polytelis swainsonii*, which is listed as vulnerable under the Commonwealth's *Environmental Protection and Biodiversity Conservation Act 1999* as well as under the TSC Act, has also been reported within the SCA and on surrounding lands.

Schulz (2004) states that the SCA supports an important population of the brown treecreeper. Up to 40 individuals were sighted in a single day of survey. Although the brown treecreeper is a woodland species, it is recognised that due to large-scale habitat loss in surrounding areas, the fringes of the SCA provide shelter and forage whilst nearby agricultural land also provides marginal habitat for the same purposes. Schulz also states that the SCA provides potential habitat for squirrel glider *Petaurus norfolcensis*, brush-tailed phascogale *Phascogale tapoatafa* and nectivorous bird species associated with box-ironbark communities such as regent honeyeater *Xanthomyza phrygia*, painted honeyeater *Grantiella picta* and swift parrot *Lathamus discolor*.

2.4 CULTURAL HERITAGE

2.4.1 Aboriginal Heritage

Aboriginal communities have an association and connection to the land. Biodiversity values 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 and strengthening of social bonds. Aboriginal heritage and nature are inseparable from each other and need to be managed in an integrated manner across the landscape.

The SCA is within the area of the Tumut-Brungle Local Aboriginal Land Council and Wiradjuri Country.

NPWS carried out preliminary surveys for Aboriginal sites along the roads in the SCA during 2003. These surveys revealed a number of stone artefacts at an open campsite. The site was located in a gully that receives seasonal water and is thought to have been used periodically by Aboriginal people as a campsite. Further survey work is likely to reveal more sites within the SCA.

2.4.2 Non-Aboriginal Heritage

The SCA is located within the Parish Euadera, County Wynyard. It has been used in the past by a number of leaseholders for grazing under permit. A number of old post and rail fence lines exist within the SCA delineating the boundary between the old state forest (now SCA) and adjoining private properties. The condition of these fences is generally poor. No formal surveys for non-Aboriginal heritage items have been undertaken in the SCA. The potential for sites of historical significance within the SCA is considered to be low.

2.5 PUBLIC USE

There are no public facilities in the SCA. Access is restricted as there are no public access trails or easements across private land that provide access to the SCA boundary. There are a number of trails within the SCA and these provide adequate access for management operations.

Past use of the SCA for recreation has been limited, due to public access constraints and no provision of facilities. Horse riding, trail bike riding and four wheel driving have occurred and still occur on a limited basis in the SCA. Some evidence of firewood collection and timber removal for fencing materials exists in the SCA. Sheep and cattle grazing occurred in the SCA prior to gazettal, under permit, and sheep are still entering the SCA due to a lack of adequate boundary fencing.

2.6 THREATS TO RESERVE VALUES

2.6.1 Introduced Plants

An introduced plant species is defined in this plan as any plant species not endemic to the SCA. Introduced species within the SCA and on adjoining land are of concern because they have the potential to have detrimental effects on ecological values and can spread to and from neighbouring land. 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. The NPWS also has a priority to control environmental weeds (not necessarily declared noxious) which threaten natural habitats.

The NPWS South West Slopes Region Pest Management Strategy (2004) identifies priority pest species and programs for action through set criteria. By following a similar process the prioritisation of SCA pest species programs may be established and directly linked into the regional strategies (refer to the South West Slopes Region Pest Management Strategy). This risk analysis will consider such issues as (yet not limited by) the control of weeds in endangered ecological communities, significant remnant vegetation associations, threatened/endangered species habitat and areas of community/neighbour concern. The risk of new weed incursions will also be considered.

Introduced plant species recorded in the SCA include tree of heaven *Ailanthus altissima*, sweet briar *Rosa rubiginosa*, St. John's wort *Hypericum perforatum*, Paterson's curse *Echium plantagineum*, capeweed *Arctotheca calendula*, great mullein *Verbascum thapsus* and several thistle species. Most of these species have only established where prior disturbance has occurred, such as on roadsides and sheep camps throughout the SCA.

Since gazettal, annual weed control programs have focussed on the local eradication of tree of heaven and control of the above listed species within the SCA.

2.6.2 Introduced Animals

An introduced animal species is defined in this plan as any animal species not native to the SCA. Introduced animals may impact upon native fauna populations through predation or competition for food or shelter. Introduced animals in the SCA include foxes, rabbits, cats, pigs and deer. In addition, sheep from neighbouring properties continue to enter and graze the SCA. Sheep lead to a marked decrease in biomass, a decrease in diversity of plant species and nitrification of soils where they gather overnight. All introduced species are managed in accordance with the actions listed in the Regional Pest Management Strategy.

2.6.3 Fire

Fire is a natural feature of many environments and is essential to the survival of some plant communities. Inappropriate fire regimes, however, can lead to loss of particular plant and animal species and communities. Fire can also damage cultural heritage, recreation and management facilities and can threaten visitors and neighbouring land.

There have been two recorded wildfires within the SCA since 1975. Prior to this, the SCA's fire history is unknown. In January 1975 a motor vehicle caused a fire that burnt 3900 hectares including the northern third of the SCA. In February 1979 a motor vehicle caused a fire that burnt almost 20,000 hectares including all of the SCA. Lightning strikes in the reserve are common. In January 2001 and February 2003 lightning caused fires that were contained by local crews to one hectare and 49 hectares respectively.

No hazard reduction or ecological burning has been undertaken in the SCA since gazettal.

There are a number of assets which border the SCA, with the main ones being private agricultural land and associated facilities such as sheds, homesteads, fences and stockyards.

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.

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

A map-based Fire Management Strategy has been prepared for the SCA. This plan outlines life, property and natural and cultural resource protection strategies specific to the SCA. A separate Fire Operations Map has also been produced that details important information relating to the SCA to be used by all agencies in the event of bush fire in or near the SCA.

2.7 References

EcoGIS. 2003. *Mapping of Vegetation Ecosystems in New and Existing Conservation Reserves, NPWS, SWS Region*. Unpublished report to NPWS.

Gibbons, P. & Boak, M. 2002. *The value of paddock trees for regional conservation in an agricultural landscape*. Ecological Management and Restoration *in press*.

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Personal Communications

Schulz, Martin. Fauna Ecologist

3. MANAGEMENT ISSUES AND STRATEGIES

Current Situation	Desired Outcomes	Strategies	Priority
<p>Soil and water conservation</p> <p>The soils of the park are skeletal and are prone to erosion when disturbed. Inadequate vegetation cover can exacerbate this problem. One site on Stony Creek requires rehabilitation work due to active erosion within it.</p> <p>There is no naturally occurring permanent water in the SCA, however ephemeral creeks contribute seasonal water to the broader catchment. One dam exists in the SCA and was used for watering grazing stock.</p>	<p>Soil disturbance is minimised.</p> <p>Water quality is maintained.</p>	<p>Undertake all trail maintenance works in a manner that minimises erosion and water pollution.</p> <p>Undertake rehabilitation works on the erosion gully at Stony Creek to minimise ongoing impacts.</p> <p>Monitor erosion of creek lines within the SCA and undertake rehabilitation works where necessary.</p> <p>Retain the dam in the south west of the SCA for use in fire fighting operations.</p>	<p>High</p> <p>High</p> <p>Ongoing</p> <p>High</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Native plant and animal conservation</p> <p>The SCA contains grassy white box woodland remnants, which are listed as an endangered community under the TSC Act.</p> <p>The SCA was used for grazing of sheep under a permit from State Forests until gazettal in 2001.</p> <p>Fauna surveys undertaken by NPWS in 2002 and 2004 revealed a diverse range of fauna species, 8 of which are listed as vulnerable under the TSC Act as well as potential habitat for other threatened species.</p> <p>Surrounding lands provide similar habitat for a number of native species. Protection of habitat values of this land is important in conserving species.</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 disturbance.</p>	<p>Monitor vegetation recovery following the removal of grazing within the SCA. Continue photo-point monitoring at 2 yearly intervals.</p> <p>Encourage further survey work for threatened plant and animal species.</p> <p>Implement measures included in the Priorities Action Statement and in recovery plans for threatened species.</p> <p>Work with neighbours and catchment management committees to encourage conservation of remnant native vegetation in the vicinity of the SCA, particularly the conservation of the grassy white box woodland remnants.</p>	<p>High</p> <p>Medium</p> <p>High</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Introduced species</p> <p>Generally, the reserve has relatively few weed infestations, although weeds known to occur in the SCA include tree of heaven, Paterson's curse, St John's wort, great mullein, capeweed and various thistle species.</p> <p>There is the possibility of the spread of other serious weeds (which are not yet identified in the SCA) from surrounding lands into the SCA.</p> <p>The fox, rabbit, cat, pig and deer are pest animals of a serious nature identified in the SCA, although population densities are relatively low.</p> <p>Sheep are entering the SCA through inadequate, broken and, in some cases, a lack of fencing.</p> <p>Pest animals have a negative impact on habitats of native animals. Due to the small size of the SCA, any control programs would be futile unless carried out over a larger area with the cooperation of all neighbouring landholders.</p>	<p>The impact of introduced species on native species and neighbouring lands is minimised.</p>	<p>Work with neighbours to erect, repair and, if necessary, replace boundary fences to exclude domestic stock from the SCA.</p> <p>Control, and where possible eradicate, introduced plant species. Priority will be given to the local eradication of tree of heaven and control of St John's wort and Paterson's curse, particularly on roadsides and at sheep camps throughout the SCA.</p> <p>Monitor the SCA for significant noxious and environmental weeds. Treat any new outbreaks.</p> <p>Implement fox/dog control programs, but only in cooperation with, or when coordinated by, adjacent landholders and/or the Gundagai Rural Lands Protection Board. Programs will only be implemented when they meet the objectives of the SCA and broader community and are demonstrated to have low impacts on native wildlife.</p> <p>Implement a pig and deer control program with the aim of eradicating these species from the SCA.</p>	<p>High</p> <p>High</p> <p>Medium</p> <p>High</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Fire management</p> <p>Fire is a natural feature of the environment of the SCA and is essential to the survival of some plant communities. Frequent or regular fire, however, can cause loss of particular plant and animal species and communities. Fire could also damage cultural features and fences and threaten neighbouring land.</p> <p>The fire history of the SCA prior to 1975 is not clear. It is well documented after this date.</p>	<p>Life, property and natural and cultural values are protected from bushfire.</p> <p>Fire regimes are appropriate for conservation of plant and animal communities.</p> <p>Cultural features are protected from damage by fire.</p>	<p>Continue to participate in Riverina Highlands Zone Bush Fire Management Committee. Maintain coordination and cooperation with Rural Fire Service brigades, Council fire control officers and neighbours with regard to fuel management and fire suppression.</p> <p>Suppress all unplanned fires in the SCA as soon as possible during high fire danger periods to minimise impacts on surrounding lands.</p> <p>Implement the fire management strategies and fire operations map for the SCA that details life, property and natural and cultural resource protection strategies.</p> <p>Encourage further research into the ecological effects of fire in the SCA.</p>	<p>High</p> <p>High</p> <p>High</p> <p>Low</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Cultural heritage</p> <p>A number of Aboriginal artefacts have been recorded within the SCA. It is thought that the SCA was used periodically as a campsite by Aboriginal people moving through the area.</p> <p>Threats to these artefacts include disturbance from fire and road maintenance activities.</p> <p>No significant non-Aboriginal sites or features have been recorded within the SCA, although no survey has been undertaken.</p>	<p>Aboriginal and historic features and values are identified and protected.</p> <p>Aboriginal people are involved in management of the Aboriginal cultural values in the park.</p> <p>Understanding of the cultural significance of the park is improved.</p>	<p>Precede all new ground disturbance work by an assessment for cultural features.</p> <p>Consult and involve the Tumut-Brungle Local Aboriginal Land Council, the Snowy Mountains Elders Group and other relevant community organisations in the management of Aboriginal sites, places and values, including interpretation of places or values.</p> <p>Undertake further survey in the SCA for items of Aboriginal and non-Aboriginal heritage significance. This will include research into the values of the SCA at a landscape scale and may include oral history collection from people with specific links to the area in and around the reserve.</p>	<p>High</p> <p>Med</p> <p>Low</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Visitor use/Education</p> <p>Public use of the SCA is restricted due to lack of public access.</p> <p>There are no visitor facilities provided within the SCA.</p>	<p>The local community is aware of the significance of the area and of management programs.</p> <p>Public use is consistent with the objectives for state conservation areas.</p> <p>Visitor use is ecologically sustainable.</p>	<p>Prohibit public vehicular access (including 4WDs and trail bikes), camping, horse riding and solid fuel (wood) fires.</p> <p>Use of the SCA by the public will not be promoted, as there is no public access to the SCA. No visitor facilities will be provided.</p> <p>Advise prospective visitors that the SCA may be used for day walking and nature appreciation but that access is via private land and permission from landholders is required (which can be refused).</p>	<p>Medium</p> <p>Medium</p> <p>High</p>

Current Situation	Desired Outcomes	Strategies	Priority
<p>Management operations</p> <p>The SCA contains an adequate network of trails for management operations such as weed and feral animal control, fire suppression and access for research and survey purposes.</p>	<p>Management facilities adequately serve management needs and have acceptable impact.</p>	<p>Maintain trails shown on the Reserve Map (page 4) for management purposes. If any trails are not required for management purposes, the trail will be closed and allowed to revegetate.</p>	<p>High</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.