

# Conimbla National Park

## Fire Management Strategy 2014

### Mapsheet 1 of 1

This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the development of incident action plans. These data are not guaranteed to be free from error or omission. The NSW National Parks and Wildlife and its employees disclaim liability for any act do no on the information in the data and any consequences. This document is copyright. Apart from any fair dealing for the purpose of study, research criticism or review, as permitted under the copyright Act, no part may be reproduced by any process without written permission. This strategy is a relevant Plan under Section 8 (4) and Section 44 (3) of Rural Fires Act 1997. The NSW National Parks and Wildlife Service is part of the Office of Environment and Heritage. Published by the Office of Environment and Heritage (NSW).

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**Map Details** **Related Documents**

**Datum:** Geocentric Datum of Australia (GDA) 1994 **1:50k Topographic Map:** Grenfell 8530-S, Gooloogong 8530-N **OEH Fire Management Manual 2013 - 2014.**

**Projection:** Map Grid of Australia (MGA) Zone 55 **1:100 Topographic Map:** Grenfell 8530

**Data:** ADS40 Satellite Imagery: 2007-2008. **Scale:** Noted scales are true when printed on A1 size paper

### Operational Guidelines

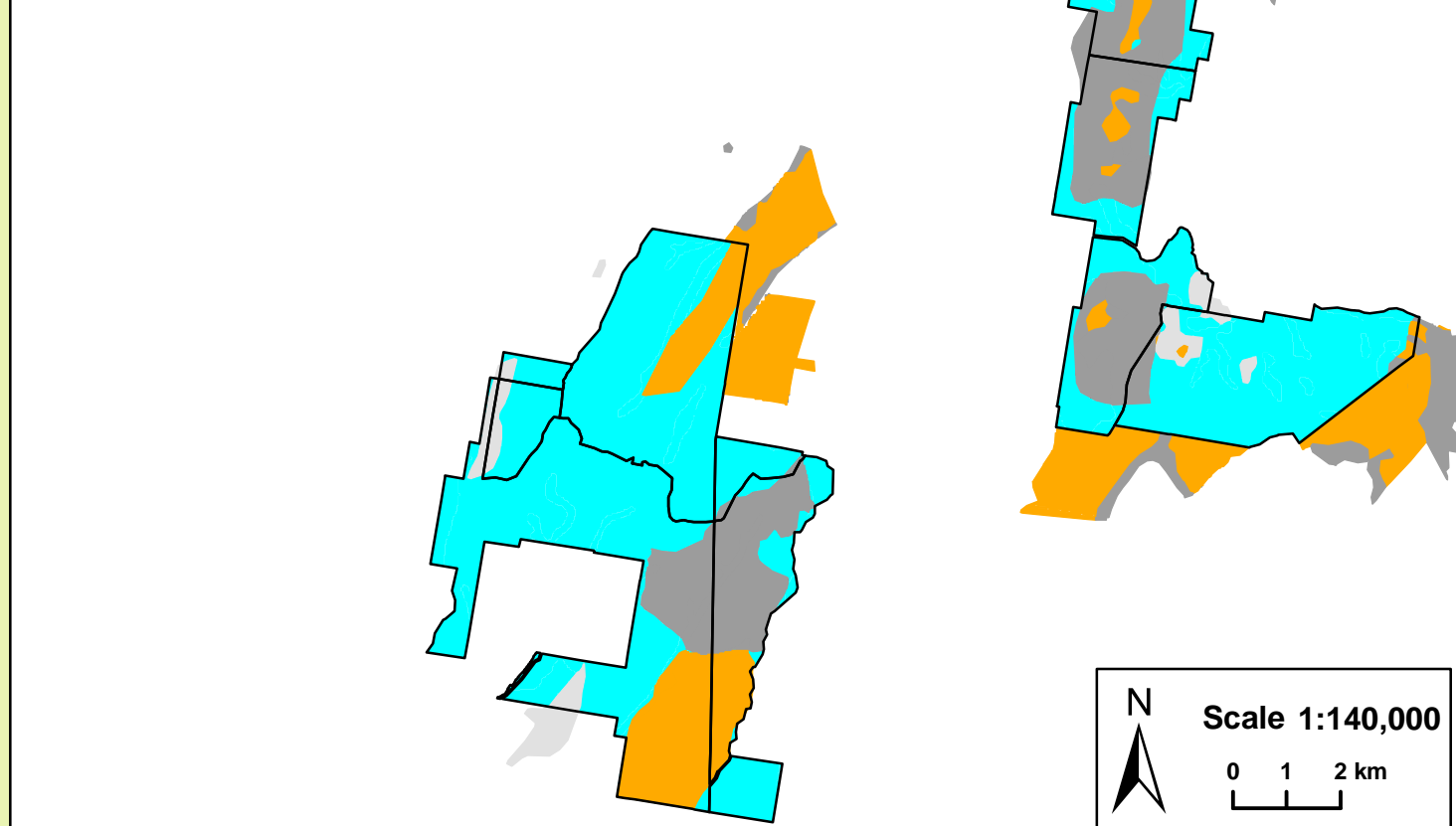
Brief all personnel involved in suppression operations on the following issues using the SMEACS format:

General	Guidelines
<b>Aerial Water Bombing</b>	<ul style="list-style-type: none"> <li>The use of bombing aircraft is designed to support suppression and containment operations and where necessary slow the progress of an advancing fire until ground crews arrive.</li> <li>Aircraft assist in aggressively attacking hotspots and spot-overs and their use without the support of ground based suppression crews generally has limited effectiveness.</li> <li>Where practicable foam should be used to increase the effectiveness of the water.</li> <li>Ground crews must be alerted to water bombing operations.</li> </ul>
<b>Aerial Ignition</b>	<ul style="list-style-type: none"> <li>Aerial ignition may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Senior Officer, Section 44 delegate or as prescribed in an operational burn plan.</li> <li>The use of aerial ignition as a fire suppression tool should be specified in the IAP or within the prescribed burn plan.</li> <li>Aerial ignition will only be undertaken by qualified and competent navigators and bombardiers.</li> <li>Utilise aerial ignition to rapidly burn out large areas and/or reduce spotting potential by preventing longer uphill fire runs.</li> <li>Aerial ignition can be utilised to rapidly progress back-burns down-slope where required.</li> </ul>
<b>Back-burning</b>	<ul style="list-style-type: none"> <li>Temperature and humidity trends must be monitored carefully to determine the safest times to implement back-burns. Generally, when the FDI is Very High or greater, back-burning should commence when the humidity begins to rise in the late afternoon or early evening, with a lower FDI back-burning may be safely undertaken during the day.</li> <li>Where practicable, clear a 1m radius around dead and hollow bearing trees adjacent to containment lines prior to back-burning, or wet down these trees as part of the back-burn ignition.</li> <li>Use parallel containment lines when applicable.</li> <li>All personnel must be fully briefed before back-burning operations begin.</li> <li><b>Caution: In areas dominated by Callitris sp. back-burning may be difficult or ineffective.</b></li> </ul>
<b>Command &amp; Control</b>	<ul style="list-style-type: none"> <li>Standard Incident Management Systems are to be applied.</li> <li>The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly.</li> <li>On the arrival of other combatant agencies, the Incident Controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations.</li> </ul>
<b>Containment Lines</b>	<ul style="list-style-type: none"> <li>Construction of new containment lines should be avoided, where practicable, except when they can be constructed with minimal environmental impact.</li> <li>New containment lines require the prior consent of a senior NPWS officer.</li> <li>When constructing containment lines, steep and rocky areas and locations adjacent to riparian (creeks or streams) or significant drainage lines should be avoided.</li> <li>All personnel involved in containment line construction should be briefed on the protection of the reserves natural and cultural assets.</li> <li>Containment line construction using earthmoving equipment must be conducted in accordance with this RFMS, the OEH FMM and sedimentation and erosion control measures must be implemented in accordance with both OEH and DLWC fire trail construction guidelines and standards and the PWS Roads Policy (Manual).</li> <li>Containment lines not required should be closed immediately at the cessation of the incident.</li> </ul>
<b>Earthmoving Equipment</b>	<ul style="list-style-type: none"> <li>Earthmoving equipment may only be used with the prior consent of a senior NPWS officer, and then only if the probability of its success is high.</li> <li>Earthmoving equipment must always be guided and supervised by an appropriately experienced person, who can assist with survey (route selection) and the identification and protection of threatened species and/or historic and Aboriginal sites (known or unknown) along the proposed containment line.</li> <li>To assist with the protection of natural and cultural assets and drainage features earth moving operators need to be briefed and observe the Threatened Sites Guidelines contained in this RFMS.</li> <li>Earthmoving equipment must always be accompanied by a support vehicle and when engaged in direct or parallel attack this vehicle must be a fire fighting vehicle.</li> <li>Earthmoving equipment must be washed down (where practicable) prior to entering NPWS estate and again on exiting NPWS estate.</li> <li>Where multiple items of earthmoving equipment are being used, the IMT should consider the appointment of a Plant Operations Manager.</li> </ul>
<b>Fire Advantage Recording</b>	<ul style="list-style-type: none"> <li>All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.</li> </ul>
<b>Fire Suppression Chemicals</b>	<ul style="list-style-type: none"> <li>The use of foams and gels (surfactants) is permitted on the reserve.</li> <li>The use of fire retardants are only permitted with the prior consent of the senior NPWS officer and should be avoided where reasonable alternatives are available.</li> <li>Exclude the use of surfactants and retardants within 50m of watercourses, dams and swamps.</li> <li>The aerial application use foam, gels and retardants requires the approval of a NPWS Senior Officer.</li> <li>Areas where fire suppression chemicals are used must be mapped and the used product's name recorded.</li> <li>The Threatened Sites Guidelines contained within this RFMS are to be observed.</li> </ul>
<b>Rehabilitation</b>	<ul style="list-style-type: none"> <li>Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.</li> </ul>
<b>Smoke Management</b>	<ul style="list-style-type: none"> <li>The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations.</li> <li>If smoke becomes a hazard on local roads or highways, the police and relevant media must be notified.</li> <li>Smoke management must be in accordance with relevant RTA traffic management guidelines.</li> </ul>
<b>Structural Fire Fighting</b>	<ul style="list-style-type: none"> <li>OEH personnel are not trained in structural fire fighting and must not enter a structure in order to undertake structural fire fighting.</li> <li>Fire suppression activities may be undertaken from outside a structure in accordance with the policies in the NPWS FMM, in order to protect a built asset.</li> </ul>
<b>Visitor Management</b>	<ul style="list-style-type: none"> <li>The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.</li> <li>Areas of the reserve may be closed for prescribed burning operations.</li> </ul>
<b>WARNINGS</b>	<ul style="list-style-type: none"> <li>Beware of overhead powerlines</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>Creeks may be low or dry depending on the season.</li> <li>Consider bringing a water cart from Grenfell (~30km W) or Cowra (~30km E) or village of Gooloogong (17km N) in dry seasons if available.</li> </ul>

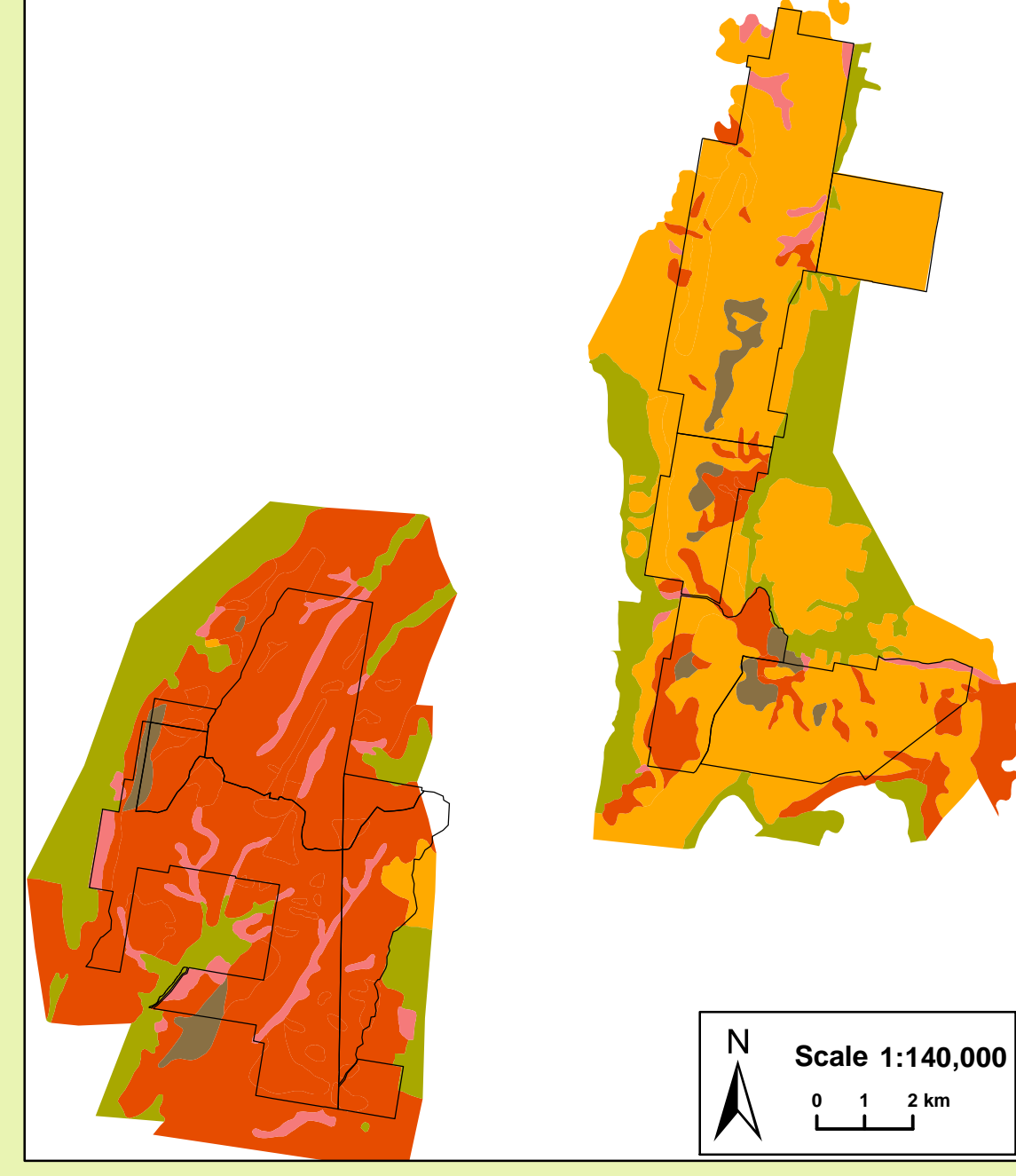
### Status of Biodiversity Thresholds

Evaluation of Biodiversity Thresholds	
<b>Vulnerable to Frequent Fire</b>	The area will be too frequently burnt if it burns this year <ul style="list-style-type: none"> <li>Protect from fire as far as possible.</li> </ul>
<b>Within Threshold</b>	Within the threshold for vegetation in this area. Species have had sufficient time to mature and reproduce, and for habitats to develop. <ul style="list-style-type: none"> <li>A fire event is neither required nor should one necessarily be avoided.</li> </ul>
<b>Long Unburnt</b>	Underburnt, excessive time since last fire, species may become extinct. <ul style="list-style-type: none"> <li>A fire event may be ecologically advantageous. Consider allowing unplanned fires to burn</li> </ul>

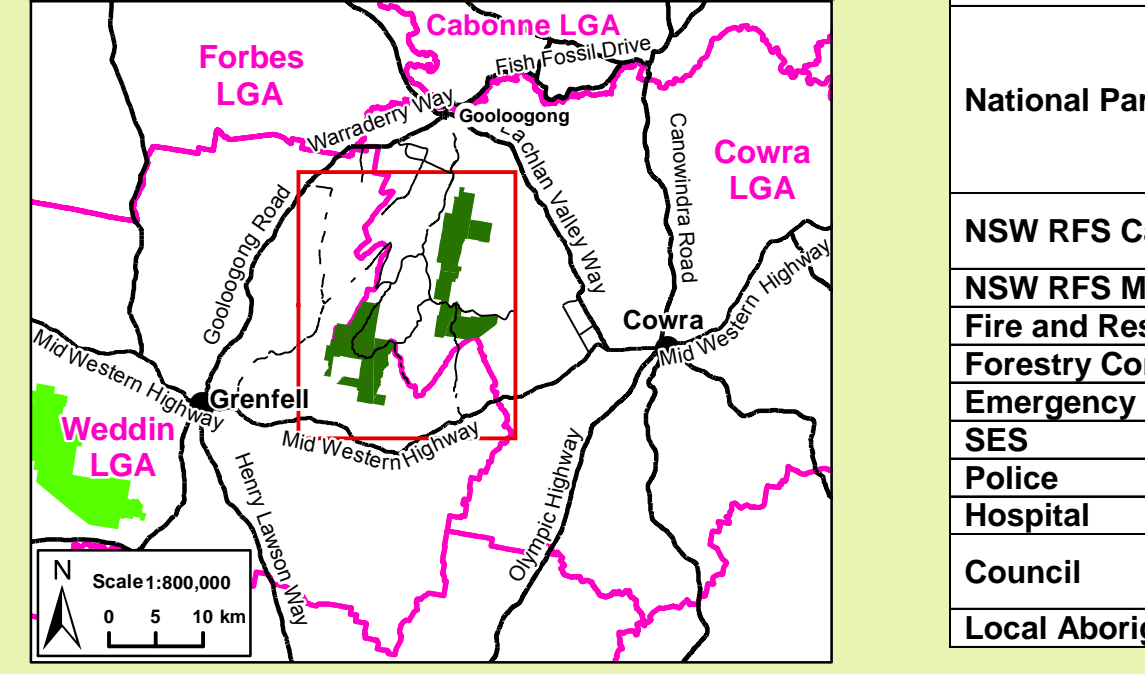
NB. Fire thresholds are defined for vegetation communities to conserve biodiversity



### Vegetation



### Locality



### Bushfire Risk Management Strategies

Fire Management Zones	
<b>Asset Protection Zones</b>	The objective of APZs is the protection of human life and property. This will have precedence over guidelines for the management of biodiversity. Maintain Overall Fuel Hazard at Moderate or below.
<b>Strategic Fire Advantage Zones</b>	The objective of SFZAs is to reduce fire intensity across larger areas. Maintain Overall Fuel Hazard at High or below, however adherence to guidelines for biodiversity will take precedence where practical.
<b>Land Management Zones</b>	The objective of LMZs is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.



### Suppression Strategies

Typical Conditions	Indicative Suppression Strategies
<ul style="list-style-type: none"> <li>Current Fire Danger Rating (FDR) of Very High or Greater,</li> <li>Short and medium range forecasts suggest conditions typical to a FDR of Very High or Greater,</li> <li>A risk to life and/or property exists in the short - medium term,</li> <li>A broad area risk to biodiversity exists.</li> </ul>	<p><b>Direct</b> Initial attacks should be to try to extinguish or to contain to the smallest possible area.</p> <p><b>Indirect</b> Develop a suppression plan using existing and/or potential containment lines. If possible take into account biodiversity requirements but never to the detriment of life and property.</p>
<ul style="list-style-type: none"> <li>FDR of High or below,</li> <li>Short - medium term forecast indicate a continuing FDR of High or below</li> <li>No risk to life or property exists in the short-medium term,</li> <li>Only small area risk to biodiversity exists.</li> </ul>	<p><b>Direct</b> Evaluate the biodiversity thresholds and use direct attack methods to extinguish if required.</p> <p><b>Indirect</b> Develop a fire suppression plan to the maximum allowable perimeter based on Biodiversity thresholds.</p>

### Vegetation Map Legend

Broad Vegetation Class	Vegetation Type	Biodiversity Thresholds	Fire Behaviour
Semi-woodlands (Shrubby sub-formation)	Casuarina Woodlands	An interval between fire events less than 15 years should be avoided. There is no maximum interval between fire events specified for this vegetation type as there was insufficient data to give definite intervals.	Backburning may be difficult in years with low ephemeral fuels.
Dry Sclerophyll Forest (Shrub/grass formation)	Tumbledown Red Gum - Black Cypress Pine - Red Box low woodland on hills Stringybark - Box - Gum Woodland	An interval between fire events less than 10 years and above 30 years should be avoided.	Generally low-intensity fires, intensity increasing with amount of ephemeral fuels.
Dry Sclerophyll Forest (Shrub formation)	Scribbly Gum Woodland Conimbla Exposed Dry Woodland Dry open-forest on ranges of the lower slopes (Hervey Ranges) Mugga Ironbark Woodland on hills	An interval between fire events less than 10 years and above 30 years should be avoided.	Generally low-intensity fires, intensity increasing with amount of ephemeral fuels. In long unburnt areas, very high to extreme potential for spotting due to bark fuels. Isolated areas with heavy ground fuel may have the potential for very high fire behaviour.
Grassy Woodlands	Blakely's Red Gum - Yellow Box open-woodland of the tablelands	An interval between fire events less than 8 years and greater than 40 years should be avoided.	High intensity fast moving fire once grasses have cured. Fire behaviour is dominated by winds, both speed and direction. Even in very low fuel, grass fires can be erratic and fast moving. In ephemeral years fire intensity will be higher and in drought years minimal growth will result in moderate fire behaviour but potentially still fast moving depending on weather conditions at the time. Potential spotting from trees.
Grasslands	Grasslands (Various Communities)	An interval between fire events less than 3 years and greater than 10 years should be avoided. Where there is a high percentage of native grasses, the area should be managed for the likely previous formation, for example Grassy Woodlands (8 - 40 years).	

**Fire History**  
In the last 10 years 28% of the park has been prescribed burn activity with 4 burns being conducted, 184Ha in 2008, 1740Ha in 2003 and 650Ha in 2002. Other Burns have occurred surrounding the reserve but these have stopped at the border with the exception of 1 on the most Eastern point which may have just entered the reserve. No wildfires have been recorded. The region surrounding this reserve is prone to summer lightning events and a large proportion of fires are historically related to dry lightning events with no associated rainfall.

**Ephemeral Conditions**  
Ephemeral fuel conditions occur after consecutive years of effective rainfall and significant flooding events. This in turn leads to the growth and build up of fine surface fuels such as grasses and herbs, which can create a continuous fuel load across all of the above vegetation communities. As a result expect higher fire intensity.

**Drought Conditions**  
During drought conditions and when vegetation communities are visibly stressed it will be very difficult to undertake prescribed burning across many communities as the surface fuels will be very low. Wildfires are likely to be difficult to control due to extreme conditions during the day and areas of low fuel that are difficult to back-burn in under night-conditions.

**Mosaic Burning**  
This reserve may not have experienced fire over an extended period of time, therefore a mosaic approach to fire management with post fire recovery and response assessments should be undertaken. Apply fire in a pattern across the reserve that allows gaps in both time and space, small versus large areas, scattered and variable times between fires in any location. If possible leave some areas of each vegetation community unburnt, as an end stage and reference site.

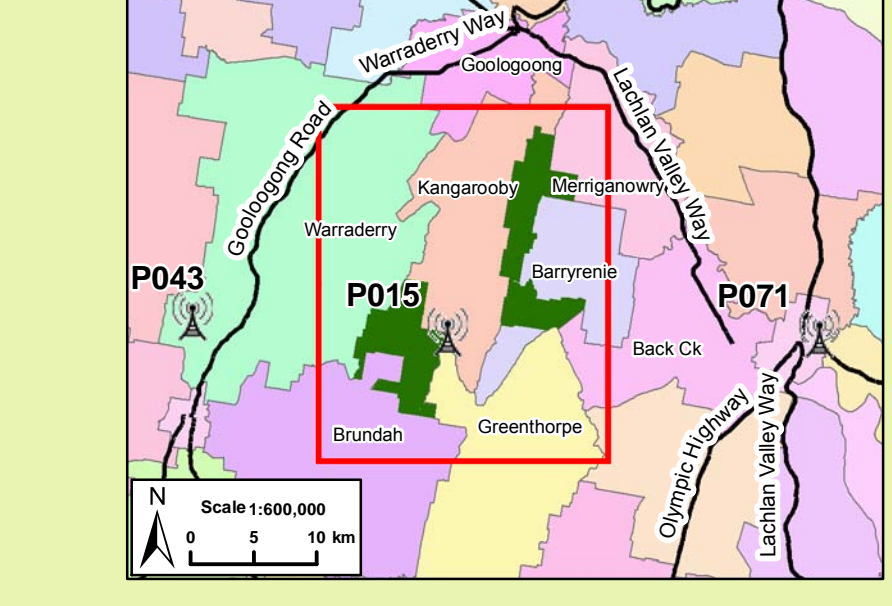
### Threatened Sites Guidelines

Aboriginal Cultural Heritage Site Management	
IS1	Do not cut down trees. As far as possible protect the site from fire. Use of foams, wetting agents & retardant is acceptable.
IS2	Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites. Sites may be burnt by bushfire, backburn or prescribed burn without damage.

**Threatened Fauna Management**

Although not indicated on the Incident Map, several bird species listed as Vulnerable have been recorded within this reserve. Undertake appropriate environmental assessment activities prior to scheduled HR burns. Utilise mosaic burning, protect hollow bearing trees, avoid disturbance at known sightings, roostings or refuges, avoid frequent fire (< 6-10 years) and exclude chemical use.

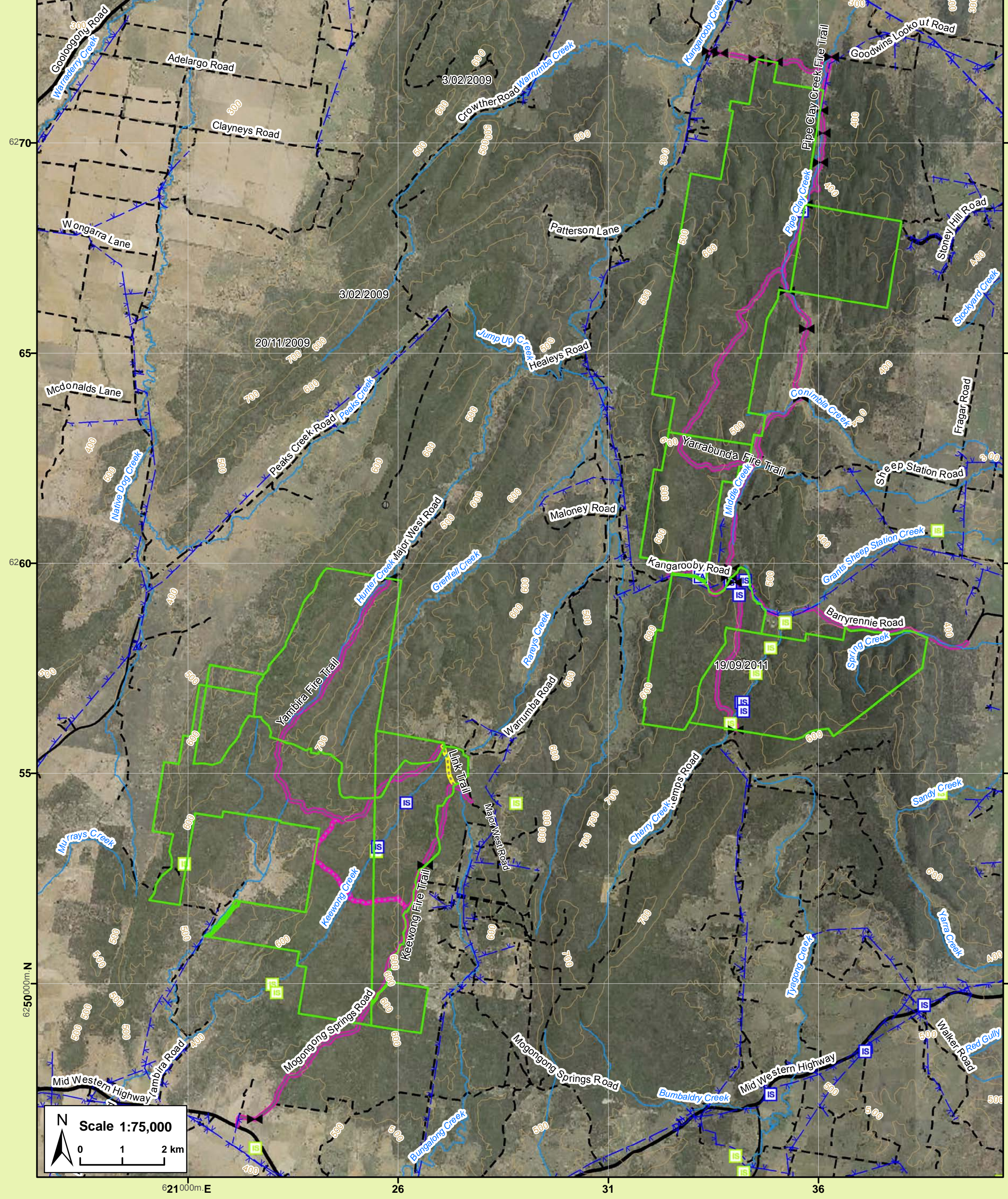
### RFS Fire Brigade Areas & Towers



### Communications Information

Service	Channel	Location and Comments
NPWS VHF	293	Warraderry
	292	Canobolas
	290	Vote Group WRR
RFS Brigades UHF	11	All brigades on fireground
RFS Cowra VHF Repeater	P015	Conimbla Range
State Forests VHF Repeater	3 or 144	Mt Canobolas

### Incident Map



### Fire Season Information

<b>Wildfires</b>	<ul style="list-style-type: none"> <li>The critical wildfire season generally occurs from October/November to March/April.</li> <li>Dry lightning storms frequently occur and typical fire weather conditions are winds from the west to the north, high day time temperatures and low humidity</li> <li>Particular care is required following periods of Winter rain and after periods of negative Southern Oscillation Indices.</li> </ul>
<b>Prescribed Burning</b>	<ul style="list-style-type: none"> <li>Prescribed burning should generally be undertaken during Autumn, Winter or early Spring</li> <li>Care should be taken to ensure a low intensity burn over most of the area treated.</li> </ul>

### Incident Map Legend

	NPWS Estate
	Creek
	Powerlines
	Wildfire Area
	Gate
	Contour-100m
	Fire Trails BFCC Policy No. 2/2007
	Cat 1 - Essential
	Cat 9 - Essential
	Cat 9 - Important
<b>Roads and Trails</b>	
	Sealed Road - Two Lanes
	Unsealed Road - Two Lanes
	Unsealed Road - One Lane
<b>Site Management (see guidelines)</b>	
	Indigenous Site - IS1
	Indigenous Site - IS2