South West Woodlands Nature Reserve
Coradgery Precinct
Fire Management Strategy 2012
Mapsheet 1 of 1

Office of Environment & Heritage
NSW National Parks & Wildlife Service

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 done on the information in the data and any consequences of such acts or omissions. 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 38 (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), August 2012.

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Map Details		Related Documents
Datum: Geocentric Datum of Australia (GDA) 1994 **Projection:** Map Grid of Australia (MGA) Zone 55 **Data:** Spot Satellite Imagery: 2005.	**Topographic Maps** **1:50k** – Trundle 8432S (AGD 1966)	OEH Fire Management Manual 2011 - 2012.
Scale: Noted scales are true when printed on A1 size paper.		

Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer (8am-10pm)	**02** 6332 6350
	Forbes Area Office 1 Camp St	**02** 6851 4429
NSW Rural Fire Service Mid Lachlan Valley Team	Fire Control Centre 26 Union St Forbes	**02** 6851 1541
Forests NSW	Forbes Office	**02** 6850 2927
Emergency		**000**
Fire and Rescue NSW	Parkes Fire Station	**02** 6863 5951
Police - Local Area Command	Parkes	**02** 6862 9977
SES	State Lachlan	13 2500 **02** 6863 8100
Hospital	Parkes District	**02** 6862 1611
Council	Parkes Shire Council After Hours	**02** 6861 2333 1800 648 585

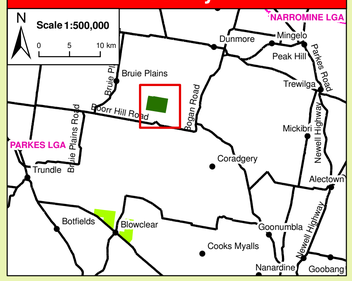
Communications Information

Service	Channel	Location and Comments
NPWS Forbes	23	▪ VHF Kadina
RFS Forbes	P032	▪ PMR Mt Gillenbine
Bruie Plains Brigade	10	▪ UHF Simplex
Mickibri Brigade	15	▪ UHF Simplex
Forests NSW	28	▪ VHF Boona Mountain

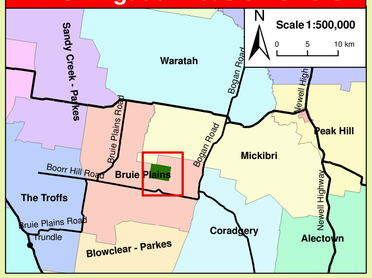
NPWS VHF coverage patchy, use mobile repeater for fire-ground, **VHF 13 (blue), 14 (orange) or 15 (green)**

Mobile phone coverage likely to be unreliable

Locality



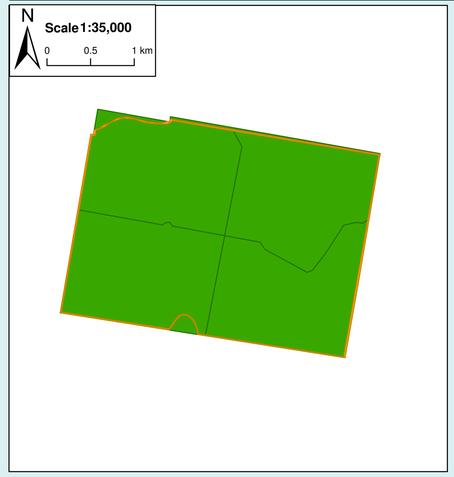
RFS Brigade Areas & Towers



Threatened Sites Guidelines

Site	Guidelines
Aboriginal Cultural Heritage Site Management	
No known sites contact Senior NPWS Officer or Cultural Heritage Officer before commencing works.	
Threatened Flora Management	
No species locations currently known.	
Threatened Fauna Management	
FA1	▪ Utilise mosaic burning and avoid disturbance at known sites, roosts or refuges and avoid frequent fire (<6 years).
FA3	▪ Utilise mosaic burning and protect hollow bearing trees.

Bushfire Risk Management Strategies



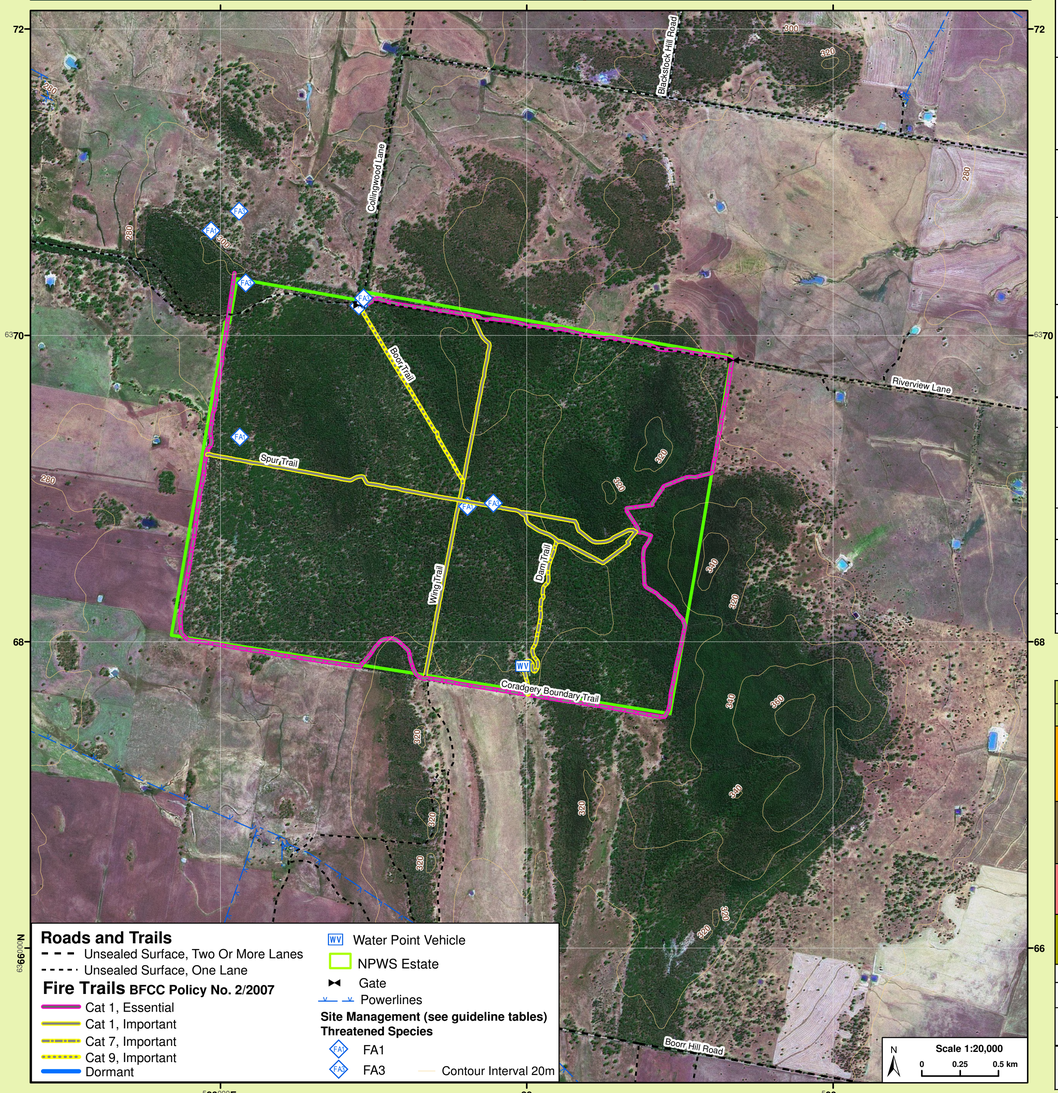
Suppression Strategies

Season	Typical Conditions	Indicative Suppression Strategies
Just prior to or during the critical fire season	▪ Current Fire Danger Rating (FDR) of **Very High or Greater,** ▪ Short and medium range forecasts suggest conditions typical to a FDR of **Very High** or **Greater,** ▪ A risk to life and/or property exists in the short – medium term, ▪ A broad area risk to biodiversity exists.	**Direct** Initial attacks should be to try to extinguish or to contain to the smallest possible area. **Indirect** 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.
Outside of the critical fire season	▪ FDR of **High or below,** ▪ Short – medium term forecast indicate a continuing FDR of **High or below** ▪ No risk to life or property exists in the short-medium term, ▪ Only small area risk to biodiversity exists.	**Direct** Evaluate the biodiversity thresholds and use direct attack methods to extinguish if required. **Indirect** Develop a fire suppression plan to the maximum allowable perimeter based on Biodiversity thresholds.

Fire Management Zones

Strategic Fire Advantage Zones	The objective of **SFAZ**s 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.
Land Management Zones	The objective of **LMZ**s is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.

Incident Map



Operational Guidelines

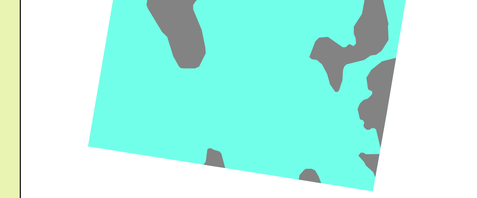
Brief all personnel involved in suppression operations on the following issues:

General	Guidelines
Aerial Water Bombing	▪ Very effective first attack where fire is still small and crews are some distance away. ▪ Should support containment operations by aggressively attacking hotspots and spot-overs, ▪ Without the support of ground based suppression crews should be limited to very specific circumstances, ▪ Where practicable foams or gels should be considered to increase the effectiveness of water, ▪ Ground crews must be alerted to water bombing operations.
Aerial Ignition	▪ Aerial ignition may be used where practicable, with the prior consent of NPWS Regional Manager, OEH Section 44 delegate or as prescribed in an operational burn plan, ▪ Aerial ignition will only be undertaken by accredited bombardiers, ▪ The pattern for aerial ignition will be specified in the IAP during fire suppression, ▪ Utilise incendiaries to rapidly burn out large areas where required.
Back-burning	▪ 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, ▪ 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, ▪ Use parallel containment lines when applicable, ▪ **CAUTION**: in areas dominated by *Cypress* back-burning may be very difficult or ineffective under normal back-burning conditions.
Command & Control	▪ Standard Incident Management Systems are to be applied, ▪ On the arrival of other combatant agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations, ▪ **Where OEH is not the first responding fire authority to arrive at a fire on OEH-managed lands, a competent officer of the first arriving fire authority will direct fire management activities until a competent OEH officer assumes control (unless prior agreements have been made).**
Containment Lines	▪ Construction of new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact, ▪ New containment lines require the prior consent of a OEH Section 44 delegate or NPWS Area Manager or Regional Manager, ▪ Use parallel containment lines when applicable, ▪ All containment lines not required for other purposes should be closed at the cessation of the incident, ▪ All personal involved in containment line construction should be briefed on both natural and cultural heritage sites in the location refer to incident map, ▪ Containment line construction using earthmoving equipment must be in accordance with the earthmoving guidelines contained within the RFMS.
Earthmoving Equipment	▪ Earthmoving equipment must always be guided and supervised by an appropriately experienced person, and accompanied by a support vehicle. When engaged in direct or parallel attack this vehicle must be a fire fighting vehicle, ▪ Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species and Cultural Heritage Operational Guidelines, and be surveyed, where possible, to identify unknown cultural heritage sites, ▪ Earthmoving equipment must not leave tracks or create new tracks in Machinery Exclusion areas as marked on the Incident Map of a RFMS, ▪ Earthmoving equipment must be washed down, where practicable, prior to it entering NPWS estate and again on exiting NPWS estate, ▪ Where multiple items of earthmoving equipment are being used, the IMT should consider the establishment of a Plant Operations Manager.
Fire Advantage Recording	▪ All fire advantages used or created during wildfire suppression operations must be mapped and where relevant added to the database.
Fire Suppression Chemicals	▪ Use of gels and foaming agents (surfactants) is permitted on the reserve, ▪ The use of fire retardants are only permitted with the prior consent of the OEH Section 44 delegate or NPWS Area Manager or Regional Manager and should be avoided where reasonable alternatives are available, ▪ Exclude the use of surfactants and retardants within 50m of watercourses, dams and swamps, ▪ Areas where fire suppression chemicals are used must be mapped and the used product's name recorded, ▪ The Threatened Species Operational Guidelines are to be observed. Refer to incident map for locations.
Rehabilitation and Stabilisation	▪ Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Smoke Management	▪ The potential impacts of smoke and possible mitigation tactics must be considered when planning for prescribed burning operations, ▪ If smoke becomes a hazard on local roads or highways, the police and relevant media must be notified, ▪ Smoke management must be in accordance with relevant RTA traffic management guidelines.
Visitor Management	▪ The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations. ▪ Areas of a reserve may be closed for prescribed burning operations.
WARNINGS	▪ Beware of overhead powerlines, and fences crossed by powerlines.

Fire Season Information

Wildfires	▪ The critical wildfire season generally occurs from November through to February. ▪ 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. ▪ Particular care is required following periods of winter rain and after periods of negative Southern Oscillation Indices.
Prescribed Burning	▪ Prescribed burning should generally be undertaken during Autumn, Winter or early Spring ▪ Care should be taken to ensure sufficient fuel is available to allow a low to moderate burn over most of the area identified.

Status of Biodiversity Thresholds



Evaluation of Biodiversity Thresholds

Long Unburnt	Underburnt, excessive time since last fire, species may become extinct. ▪ *A fire event may be ecologically advantageous. Consider allowing unplanned fires to burn*
Within Threshold	Within the threshold for vegetation in this area. Species have had sufficient time to mature and reproduce, and for habitats to develop. ▪ *A fire event is neither required nor should one necessarily be avoided.*
NB. Fire thresholds are defined for vegetation communities to conserve biodiversity	

Vegetation Map Legend

Broad Vegetation Class	Vegetation Type	Biodiversity Thresholds	Fire Behaviour
Dry sclerophyll forests (Shrub sub-formation)	Mugga Ironbark and Grey Box tall woodlands of hillslopes on rises and low hills. Grey Box, Belah and White Cypress Pine tall woodlands of flats and gravelly rises on plains, low rises	An interval between fire events **less than 10 years** (7 years in SFAZ) and g**reater than 30 years** should be avoided. These communities typically consist of many obligate seeders.	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.
Semi-arid woodlands (Shrubby sub-formation)	Dwyers Red Gum, E. vicina, Currawang and White Cypress Pine mid-high woodlands of hillslopes and crests	An interval between fire events **less than 15 years** should be avoided. **No maximum** interval set at this time for this vegetation type, as there was insufficient data. Fire may be considered a useful tool to stimulate understory species that are responsive to fire.	In long unburnt areas, very high to extreme potential for spotting due to bark fuels. Isolated areas of brush may have the potential for extreme fire behaviour; however this is likely to be limited in the landscape. Open areas fire behaviour likely to be wind driven.
Grassy Woodlands	Poplar Box, White Cypress Pine and Grey Box tall woodlands on gentle hillslopes on plains, peneplain and low rises	An interval between fire events **less than 8 years** and **greater than 40 years** should be avoided.	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 intensity will be higher while in years affected by drought minimal growth will result in moderate fire behaviour but potentially still fast moving depending on weather conditions at the time. In wooded areas higher potential for spotting.
Grassland	Mid-high closed Tussock Grassland on plains, peneplain rises and low hills previously cropped	An interval between fire events **less than 3 years** and **greater than 10 years** should be avoided. Caution should be used in extended periods of drought, as this will mimic the type of disturbance provide by fires.	
Fire History	No recorded fire history exists for this location.		
Ephemeral Conditions	Occur after consecutive years of effective rainfall events. This in turn leads to the growth and build up of fine surface fuels such as grasses and herbs, which can create continuous fuel loads in communities that would not usually have much ground fuel. 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	As this reserve has not experienced fire over an extended timeframe, a mosaic approach with post fire recovery and response assessments should be taken. Mosaic burning has two parts, spatial and temporal. Apply fire in a pattern across the reserve that allows gaps in time and space, small areas vs. larger areas, scattered, variable times between fires in any location. If possible leave some areas of each vegetation community unburnt, as an end stage and reference site.		

Vegetation