Mungo NP & SCA
Fire Management Strategy
2014

Office of Environment & Heritage

This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the development of incident action plans.

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 NSW Office of Environment and Heritage.

Published by the NSW Office of Environment and Heritage, February 2014.

Contact: Lars Kogge

PO Box 318 Buronga 2739 NSW. Ph 03 5021 8900

ISBN 978 1 74359 618 0 OEH 2014/0344

Date Approved: 2014

Related documents

- Office of Environment and Heritage (2013-14) *Fire Management Manual*

Additional notes

Communications Information

Service	Channel	Location and Comments
NPWS/Air band (Cross-band repeater)		Western Branch resource stored at Dubbo/transportable. Full range of both simplex and duplex NPWS VHF & RFS PMR channels
RFS PMR radio	59 or 18	59 (Pooncarie – north Mungo) 18 (Murragi - south Mungo)
Aircraft - VHF		Contact State Air Desk for frequency allocation
Mobile phone – Next G		Scattered reception with car kit
Satellite Phone		Yes, note Globalstar network has intermittent service
UHF - CB	3	Repeater at Garnpang Homestead

Contact Information

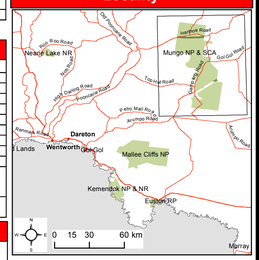
Agency	Position / Location	Phone
National Parks & Wildlife Service	Regional Duty Officer (24 hour)	(08) 8080 3222
	Area Office (bus. hours)	(03) 5021 8900
Lower Western Zone NSW Rural Fire Service	Zone Manager: Steve Walker	0428 598 376
	Operations Manager:	
	RFS Office Dareton	(03) 5027 4422
Emergency Services		000
Ambulance	Mildura & Wentworth enquiries only	(03) 5023 0011
	Call Centre	132500
SES	Wentworth Unit	(03) 5027 5100
Police	Dareton	(03) 5027 7599
	Buronga	(03) 5023 2262
	Euston	(03) 5026 3101
Council	Wentworth Shire Council	(03) 5027 5027
	Balranald Shire Council (bus hours)	(03) 5020 1300

Fire Season Information

Wildfires	The critical wildfire season occurs during November and February. This period may extend into the first half of March. Particular care is required during periods of negative Southern Oscillation Indices. The end of the critical fire season is often marked by wet storm activity.
Prescribed Burning	Prescribed burning should be undertaken before autumn rain occurs to maximise effectiveness. Burning may also be considered during late winter and early spring dependent on seasonal factors. Prescribed burning undertaken near the commencement of the statutory bushfire season should be fully contained.

In case of emergency call duty officer 08 8080 3222 (24 hours)

Locality

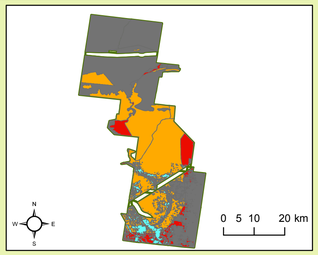


Map Details

Datum: Geocentric Datum of Australia (GDA) 1994 **Projection:** Map Grid of Australia (MGA) Zone 54	Data: Spot Satellite Imagery: 2005. 1:100k Topographic Maps Arumpo 7430, Pooncarie 7431, Turlee 7530, Mulurulu7531

Status of Biodiversity Thresholds

Too frequently burnt	Consecutive fire intervals are shorter than the recommended minimum interval.
Vulnerable to frequent fire	The current fire interval is shorter than the recommended minimum interval.
Within threshold	The time-since-fire is greater than the recommended minimum, and less than the recommended maximum.
Long unburnt	The current fire interval is longer than the suggested interval.



Fire History and Neighbours

Prescribed burns that occurred within the last 5 years (2008/09 to 2012/13)

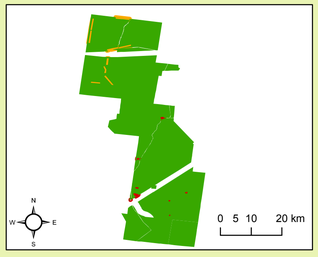
Wildfire that occurred within the last 5 years (2008/09 to 2012/13)

Neighbours details can be found within the 2013/14 Regional Incident Procedures (RIP) book

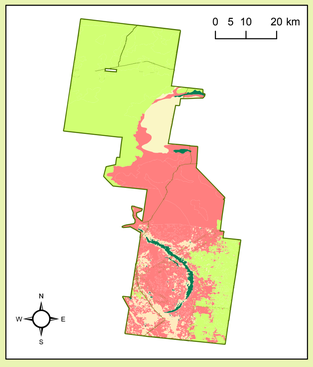
Bushfire Risk Management Strategies

Fire Management Zones

Asset Protection Zones	The objective of **APZ**s 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.
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.



Vegetation



Vegetation management

Vegetation Community	Vegetation management guidelines	Fire Behaviour
Grasslands	An interval between fire events less than 3 years and greater than 10 years should be avoided.	Localised areas of **High – Very High** OFH after periods of ephemeral growth.
Arid shrublands (Chenopod subformation)	Fire events (including prescribed burns) should always be avoided.	Potential rates of spread is low due to **Low - Moderate** OFH Potential rates of spread will be higher after periods of ephemeral growth.
Semi-arid woodlands (shrubby subformation)	An interval between fire events less than 15 years should be avoided.	Fire intensity in mallee communities ranges from moderate to extreme and is largely influenced by the presence of spinifex, ephemeral growth and/or weather conditions.
Other (no vegetation)	There is no requirement to perform prescribed burning.	Potential rates of spread is low due to **Low - Moderate** OFH Potential rates of spread will be higher after periods of ephemeral growth.

OFH – Overall fuel hazard - A rating system that includes leaf litter, grasses, shrubs, bark type and bark condition

Operational Guidelines

General	Guidelines
Aerial operations	• Aerial operations will be managed by trained and competent personnel. This includes directing aerial bombing and aerial ignition operations. • The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances. • All aerial ignition operations require the consent of the NPWS Regional Manager or the Section 44 Appointee.
Backburning	• All personnel must be fully briefed before back burning operations begin. • Backburning in areas of Low – Moderate OFH will require the use of slope or wind, or low humidity to maximise effectiveness. • Where practicable to mop-up efforts, clear a 1m radius around dead and fibrous barked trees adjacent to containment lines prior to backburning, or wet down these trees during the ignition.
Command & Control	• The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly. • 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.
Containment Lines	• Construction of control lines will not occur within the MACHINERY EXCLUSION ZONE unless there are no Aboriginal sites. • New containment lines require the prior consent of a senior NPWS officer. • Construction of new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact. • All personal involved in containment line construction should be briefed on, and must consider both natural and cultural heritage sites in the location.
Earthmoving Equipment	• Construction of control lines will not occur within the MACHINERY EXCLUSION ZONE unless there are no Aboriginal sites. • Earthmoving equipment may only be used with the prior consent of a senior NPWS Officer. • Earthmoving equipment must always be guided and supervised by an experienced officer, and accompanied by a support vehicle. When engaged in direct or parallel attack, this vehicle must be a fire fighting vehicle. • Earthmoving equipment will be excluded from: o Culturally significant sites – consult with local area staff for site locations. • Earthmoving equipment must be washed down, where practicable, prior to it entering NPWS estate and again on exiting NPWS estate.
Fire Suppression Chemicals	• The use of foam, gels and retardants will be permitted on the reserve. • Fire suppression chemicals are not to be applied within 50m of water courses and dams. • The use of retardants requires the approval of the Regional Manager or delegate.
Rehabilitation	• Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Watering points	• Consider deployment of a bulk water carrier to support fire operations.
Smoke Management	• Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations.
Visitor Management	• The reserve may be closed to the public during periods of extreme fire danger, and will be closed during fire operations.

Operational Guidelines - Heritage

Resource	Guidelines
Aboriginal Cultural Heritage Site Management	*Modified trees (AS1), including scarred trees* • Protect the site from fire, clear base of litter and shrubs, exclude tree from fire if possible. • Foam may be used to protect the tree, or to extinguish fire. • Do not cut trees. *Ground based sites (AS2), including artefacts and occupational sites* • Protect site from any ground disturbance, including the use of earth-moving equipment, vehicles and water bombing. • Apply a machinery exclusion area where there is a high concentration of known sites. • Area may be burnt. *Burial sites (AS3)* • Protect sites from any disturbance by excluding operations by at least 25 metres. • Area may be burnt.
Historic Heritage Site Management	*Heritage Sites* • Protect the site from fire. • Exclude site from fire where possible, including the construction of a control line around the perimeter. • Foam may be used to protect the site, or to extinguish fire. *Wooden cattle grids, coupe trees and survey trees* • Protect the site from fire, clear base of litter and shrubs, exclude tree from fire if possible. • Foam may be used to protect the tree, or to extinguish. • Do not cut trees.
Threatened Species Management	*Threatened plant species – Synostemon trachyspermus* • Machinery will be excluded from known habitat areas. • Apply minimum interval of 10 years between fire events. • Monitoring to record fire response must be initiated after a fire event. • Maintain fire trails and turning bays to avoid any widening during incidents.

Suppression Strategies

Conditions	Guidelines
	Mallee-spinifex
Fire danger rating LOW - HIGH	• Where possible and without excessively increasing fire size allow wildfires to be contained by previously burnt areas and natural low fuel areas. Consider broad containment strategies using existing roads and areas with Low OFH, adhering to long-term management requirements for biodiversity. • Direct and parallel attack may be applied with earthmoving machinery and fire units, only on dead edges or in vegetation with Low OFH.
Fire danger rating VERY HIGH - EXTREME	• Fallback to existing trails and roads, recently burnt areas or vegetation with Low OFH. • Do not attempt back-burning in the predicted path of running fire in this vegetation. • Back-burning effectiveness will drop significantly when humidity starts to rise and wind drops in the early evening. • Parallel attack may be applied with earthmoving machinery and fire units, only on dead edges or in vegetation with Low OFH.
	Mallee shrublands
Fire danger rating LOW - HIGH	• Where possible and without excessively increasing fire size allow wildfires to be contained by previously burnt areas and natural low fuel areas. Consider broad containment strategies using existing roads and areas with Low OFH, adhering to long-term management requirements for biodiversity. • Direct and parallel attack may be applied with earthmoving machinery and fire units, only on dead edges or in vegetation with Low OFH.
Fire danger rating VERY HIGH - EXTREME	• Fallback to existing trails and roads, recently burnt areas or vegetation with Low OFH. • Do not attempt back-burning in the predicted path of running fire in this vegetation. • Back-burning effectiveness will drop significantly when humidity starts to rise and wind drops in the early evening. • Parallel attack may be applied with earthmoving machinery and fire units, only on dead edges or in vegetation with Low OFH.
	Belah woodland, Mixed open shrubland/woodland & Open herbland/grasslands
Fire danger rating LOW - HIGH	• Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. • Direct and parallel attack may be applied with earthmoving machinery and fire units only on dead edges, or in vegetation with Low OFH.
Fire danger rating VERY HIGH - EXTREME	• Fallback to existing trails and roads, recently burnt areas or vegetation with Low OFH. • Back-burning effectiveness will drop significantly when humidity starts to rise, and wind drops, in the early evening. • Parallel attack may be applied with earthmoving machinery and fire units only on dead edges, or in vegetation with Low OFH.