Loughnan Nature Reserve
Fire Management Strategy 2014
Mapsheet 1 of 1

Office of Environment & Heritage
NSW National Parks & Wildlife Service

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Map Details

Datum: Geocentric Datum of Australia (GDA) 1994
Projection: Map Grid of Australia (MGA) Zone 55
Data: Spot Satellite Imagery: 2005.

1:50k Topographic Map: Monia Gap 8030-N (AGD-1966)
Scale: Noted scales are true when printed on A1 size paper

Related Documents

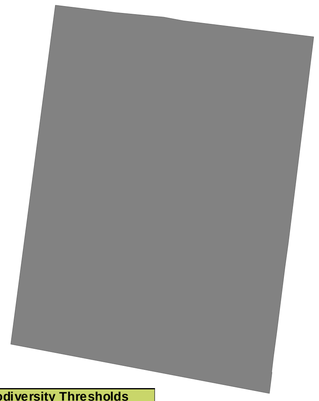
OEH Fire Management Manual 2013 – 2014

Operational Guidelines

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

General	Guidelines
Aerial Water Bombing	▪ The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spot-overs, ▪ The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances, ▪ Where practicable foam should be used to increase the effectiveness of the water, ▪ Ground crews must be alerted to water bombing operations.
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, ▪ All personnel must be fully briefed before back-burning operations begin.
Command & Control	▪ Standard Incident Management Systems are to be applied, ▪ 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 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 new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact, ▪ For new containment lines IMT to liaise with and receive consent from a Senior NPWS officer prior to construction, ▪ 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, ▪ Containment line construction using earthmoving equipment must be in accordance with the earthmoving guidelines contained within the RFMS.
Earthmoving Equipment	▪ 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, ▪ 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 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 during wildfire suppression operations must be mapped and where relevant added to the database.
Fire Suppression Chemicals	▪ Use of wetting and foaming agents (surfactants) is permitted on the reserve, ▪ 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, ▪ 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.
Rehabilitation	▪ 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 wildfire suppression and 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 prescribed burning or wildfire suppression operations.
WARNINGS	▪ LOOKOUT for unmapped overhead powerlines.
Water	▪ Lake Ballyrogan 10km to the North East – seasonal. ▪ Water cart may be brought from Hillston, 30km to the West.

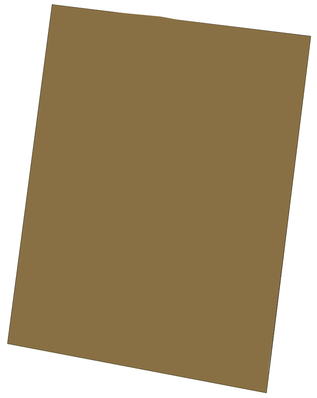
Status of Biodiversity Thresholds



Evaluation of Biodiversity Thresholds	
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	

N
Scale 1:20,000
0 0.2 0.4 km

Vegetation



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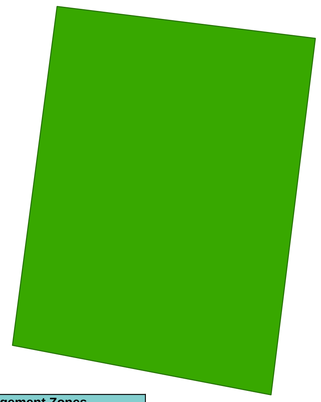
Vegetation Map Legend

Broad Vegetation Class	Vegetation Types	Biodiversity Thresholds	Fire Behaviour
Semi-arid Woodlands (Shrubby sub-formation)	**Sand Plain Mallee Woodland** of red mallee *Eucalyptus dumosa* - white mallee *E. socialis* - yorrell *E.gracilis* association. **Semi-arid Sand Plain Woodland** of white cypress pine *Callitris glaucophylla* - red box *Eucalyptus intertexta*.	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.	These vegetation communities generally have a moderate fire potential. Fire intensities range from moderate to high and is largely influenced by ephemeral growth. Low ground fuels in normal years will only allow for patchy fires unless weather conditions are extreme. Back-burning may be difficult in years with low ephemeral fuels. Crown fires are likely in high to very high and above fire danger periods in the mallee areas.
Fire History	There has been no recorded fire over the reserve area.		
Ephemeral Conditions	Ephemeral fuel conditions occur after consecutive years of effective rainfall. This in turn leads to the growth and build up of fine surface fuels such as grasses and her bs, which can create a continuous fuel load across t he above vegetation community. As such expect higher fire intensity.		
Drought Conditions	During drought conditions and when vegetation communities are visibly stressed it will be very difficult to underta ke prescribed burning across many communities as the surface fuels will be very low. Wildfire areas will be minimised.		
IF AT ALL POSSIBLE AVOID BURNING THE ENTIRE RESERVE IN THE ONE FIRE EVENT			

Bushfire Risk Management Strategies



Fire Management Zones	
Land Management Zones	The objective of **LMZs** is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.

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Scale 1:20,000
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Suppression Strategies	
Typical Conditions	**Indicative Suppression Strategies**
▪ 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.
▪ 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 Season Information

Wildfires	▪ The critical wildfire season generally occurs from October/November to March/April. ▪ 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 be undertaken during Autumn. ▪ Care should be taken to ensure a moderate intensity burn over most of the area treated.

Communications Information

Service	Channel	Location and Comments
NPWS	11 10	▪VHF Fire Ground 1 ▪UHF
RFS Brigades UHF	19 20	▪ Bunda North ▪ All other brigades
RFS Carathool	P041 P028 P011	▪Conapaira Trig ▪Mount Bingar ▪Mt Bootheragandra
RFS Digital PMR	S060 S005	▪Scenic Hill ▪MIA Vote Group
Mobile phone coverage likely to be unreliable.		

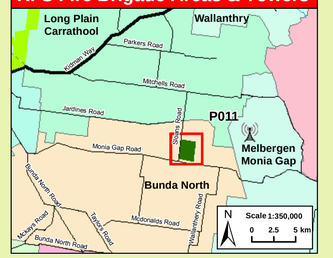
Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer	**02** 6332 6350
	Mid West Area & Regional Office – 200 Yambil St Griffith	**02** 6966 8100
NSW Rural Fire Service MIA District	Fire Control Centre	**02** 6966 7800
	Duty Officer	**02** 6966 7887
Fire and Rescue NSW	Griffith Fire Station	**02** 6964 4152
Emergency Services		000
SES		13 2500
Police Station (not open 24 hrs)	Hillston	**02** 6967 2544
Police - Local Area Command	Griffith	**02** 6969 4310
Hospital	Griffith Base	**02** 6969 5555
Council	Griffith City Council Carathool Shire Council	**02** 6962 8100 **02** 6965 1900
Local Aboriginal Land Council	Griffith	**02** 6962 6711

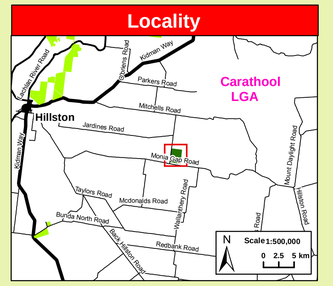
Threatened Sites Guidelines

Site	Guidelines
Aboriginal Cultural Heritage Site Management	
Note	An Aboriginal sites survey is yet to be conducted for this reserve (as of January 2014). Therefore Aboriginal sites may be present and consideration in engagin g a Senior NPWS Officer or Aboriginal Sites Officer prior to hazard reduction and wildfire suppression activities is required.
Threatened Fauna Management	
Threatened species although not present on the incident map have been sighted throughout the reserve including Mallefowl, Major Mitchells , Shy Heathwren's, Chestnut Quail Thrush, Grey Crowned Babbler and Hooded Robins	

RFS Fire Brigade Areas & Towers



Locality



Incident Map