

Kincheha National Park Fire Management Strategy 2014 – 2016

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.

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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, September 2014.

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ISBN 978 1 74359 723 1 OEH 2014 / 0570 Date Approved: 12 November 2014

Related documents

Office of Environment and Heritage (2014) Fire Management Manual

Additional notes

- File 10/14887 Doc14176551 & EF1429626 Doc14271461
- N:\REGIONS\SHARED\Incidents\Fire mgmt strategies\Completed
- Last updated: November 2014 by J. Doyle, Version 2.1

Communications Information		
Service	Channel	Location and Comments
NPWS/Air band (Cross-band repeater)		• Far West Portable repeater stored at Broken Hill depot.
Aircraft - VHF		• Contact State Air Desk for frequency allocation
Mobile phone - Next G		• Good reception with car kit
Satellite Phone		• Good Reception
UHF - CB	35	

Contact Information		
Agency	Position / Location	Phone
National Parks & Wildlife Service	Area Office (bus. hours)	(08) 8080 3200
	Regional Duty Officer (fire season)	(08) 8080 3222
	Zone Manager - Chris Faville	(02) 8534 1226
	Operations Manager - Robyn Faville	(02) 8534 1226
	Menindee Station, Captain: Gary Rolton	(08) 8091 4486
	Menindee Rural Brigade, captain: Craig Morton	
Emergency Services	000	
Ambulance	Bookings 13 12 33	
SES	Call Centre 13 25 00	
	Menindee Unit (08) 8091 4568	
Police	Menindee Station (08) 8091 4466	
Health Service	Menindee Health Service (08) 8091 4262	
Council	Central Darling Shire Council (Menindee office) (08) 8091 4440	

Fire Season Information	
Wildfires	The critical wildfire season occurs during November to 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 (Fire Season)

Locality

Broken Hill 110km
Menindee Rd (MR66)

Wilcannia 153km
West side MR68

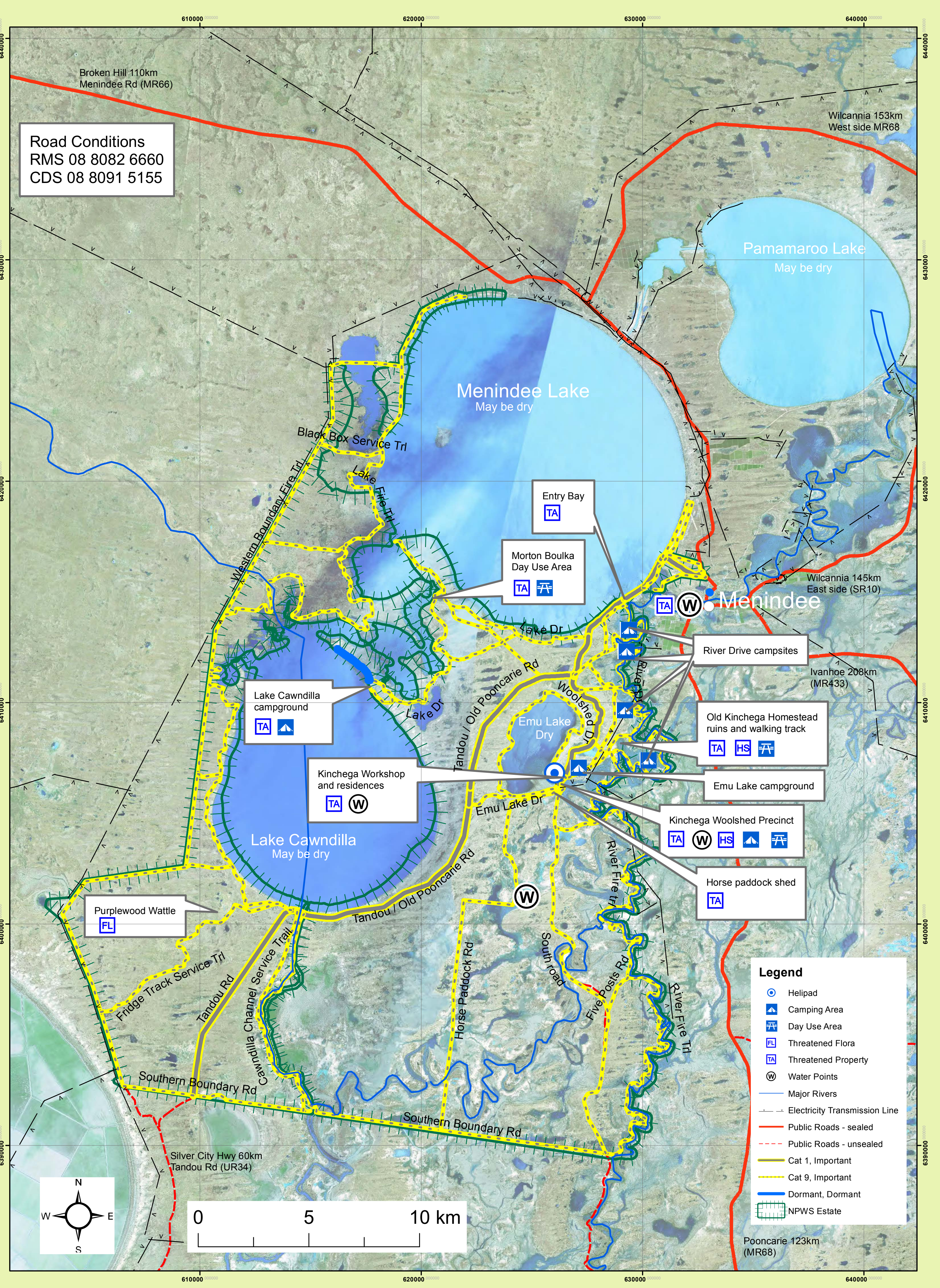
Wilcannia 145km
East side (SR10)

Ivanhoe 208km
(MR433)

Pooncarie 123km
(MR68)

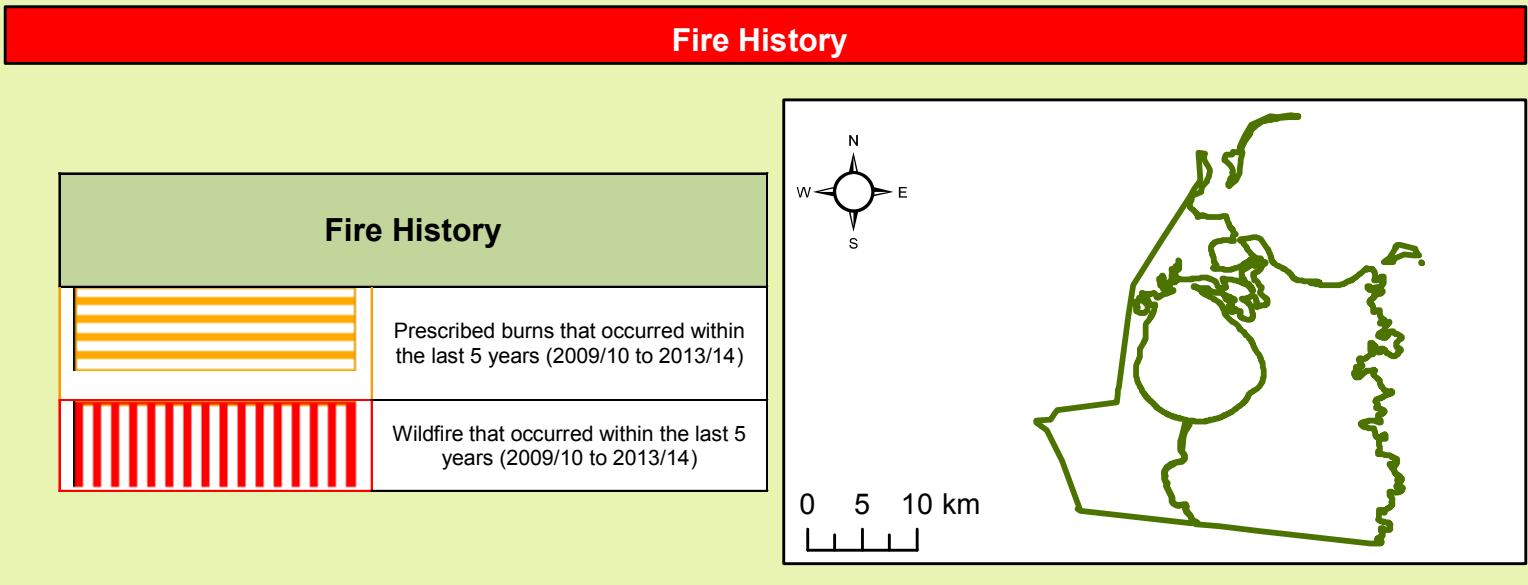
Silver City Hwy 60km
Tandou Rd (UR34)

Map Details:
Datum: Geocentric Datum of Australia (GDA) 1994
Projection: Map Grid of Australia (MGA) Zone 54
Data: Spot Satellite Imagery, 2005.
Scale: 1:100k Topographic Map: Menindee 7333



Status of Biodiversity Thresholds

Biodiversity Thresholds	Description
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.
No fire regime	The vegetation has no fire requirement.
Unknown	It is unknown if these communities are within their suggested interval.



Bushfire Risk Management Strategies

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

Woolshed APZ	Size: 2,465m ² Treatment: slashing AMS number: 1320605 Location: E 626 218 / N 6406 180
Horsepaddock shed APZ	Size: 680m ² Treatment: slashing AMS number: 1320606 Location: E 625 951 / N 6405 946

Vegetation

Vegetation Community	Vegetation management guidelines	Fire Behaviour
Arid shrublands (Chenopod subformation)	• Fire events (including prescribed burns) should always be avoided.	• Potential rates of spread is low due to Low - Moderate OFH. • Localised areas of High OFH may produce restricted areas of higher fire intensity.
Arid shrublands (Acacia subformation)	• An interval between fire events less than 6 years should be avoided.	• Potential rates of spread is low due to Low - Moderate OFH. • Localised areas of High OFH may produce restricted areas of higher fire intensity.
Semi-arid woodlands (shrubby subformation)	• An interval between fire events less than 15 years should be avoided. • Burning in the Endangered Purple Wood Wattle on the south of Cawndilla Lake to be avoided.	• Potential rates of spread is low due to Low - Moderate OFH. • Localised areas of High OFH may produce restricted areas of higher fire intensity.
Semi-arid woodlands (grassy subformation)	• An interval between fire events less than 15 years should be avoided.	• Potential rates of spread is low due to Low - Moderate OFH. • Localised areas of High OFH may produce restricted areas of higher fire intensity.
Freshwater wetlands	• An interval of fire events less than 6 years and greater than 35 years should be avoided.	• Localised areas of Moderate - High OFH.
Forested wetlands	• An interval between fire events less than 7 years and greater than 35 years should be avoided.	• Localised areas of Moderate to Very High OFH.
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 may produce areas of extreme fire intensity and fire runs should be anticipated.
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	<ul style="list-style-type: none"> 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. 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.
Backburning	<ul style="list-style-type: none"> The time-since-fire is greater than the recommended minimum, and less than the recommended maximum. 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 BFM Plan of Operations. 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 cultural and environmental impact. Containment lines running along valley areas should be constructed at 20 - 50 metres from the gullyline to avoid severe erosion. All personnel involved in containment line construction should be briefed on, and must consider both natural and cultural heritage sites in the location. 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: <ul style="list-style-type: none"> The banks of the Darling River. Culturally significant sites - consult with local area staff for site locations. Earthmoving equipment must be washed down, where practicable, prior to entering NPWS estate and again on exiting NPWS estate.
Command & Control	<ul style="list-style-type: none"> 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.
Containment Lines	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.
Earthmoving Equipment	<ul style="list-style-type: none"> Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations. During fire operations, signage may be required on Menindee Road MR66. The reserve may be closed to the public during periods of extreme fire danger or during fire operations.
Fire Suppression Chemicals	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.
Rehabilitation	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.
Watering points	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.
Smoke Management	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.
Visitor Management	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. Consider deployment of a bulk water carrier to support fire operations. A 10,000L buoy wall is stored at Broken Hill depot.

Operational Guidelines - Heritage

Resource	Guidelines
Modified trees (AS1), including scarred trees:	<ul style="list-style-type: none"> 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, middens and hearth sites:	<ul style="list-style-type: none"> 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):	<ul style="list-style-type: none"> Protect sites from any disturbance by excluding operations by at least 25 metres. Area may be burnt.
Heritage Sites:	<ul style="list-style-type: none"> 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. Maintain APZ.
Threatened Species Management	<ul style="list-style-type: none"> Threatened plant species - <i>Acacia carneorum</i> (Purplewood Wattle): <ul style="list-style-type: none"> Machinery will be excluded from known habitat areas. Exclude from fire where possible. 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
Flood plain - Black Box and River Red Gum communities (Semi-arid woodlands - Grassy sub formation & Forested wetlands)	<ul style="list-style-type: none"> Where possible and without excessively increasing fire size allow wild fires 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 fire units, only on dead edges or in vegetation with Low OFH. Do not use earth moving machinery near creek lines or the river edge to avoid increased erosion risks. Avoid back burning in River Red gum communities to avoid prolonging the fire and increasing fire size.
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> Close parallel attack. Distance between the flank, fire units and machinery should be kept to a minimum.
Fire danger rating VERY HIGH - EXTREME	<ul style="list-style-type: none"> Close parallel attack. Distance between the flank, fire units and machinery should be kept to a minimum.
Sand plain - Blue bush communities (Arid shrublands - Chenopod sub formation)	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. Direct and parallel attack may be applied with earth moving machinery and fire units only on dead edges, or in vegetation with Low OFH.
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> Fall back 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 earth moving machinery and fire units only on dead edges, or in vegetation with Low OFH.
Fire danger rating VERY HIGH - EXTREME	<ul style="list-style-type: none"> Fall back 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 earth moving machinery and fire units only on dead edges, or in vegetation with Low OFH.
Sand dune - Acacia, Balah & Rosewood communities (Arid shrublands - Acacia subformation & Semi-arid woodlands - Shrubby subformation)	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. Do not use earth moving machinery in sand dunes due to high archaeological deposits. Fall back 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.
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> 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. Do not use earth moving machinery near creek lines in the lake bed or on the lake edge due to increased erosion risks and high deposits of archaeological materials.
Fire danger rating VERY HIGH - EXTREME	<ul style="list-style-type: none"> 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. Do not use earth moving machinery near creek lines in the lake bed or on the lake edge due to increased erosion risks and high deposits of archaeological materials.
Dry Lake Beds	<ul style="list-style-type: none"> 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. Do not use earth moving machinery near creek lines in the lake bed or on the lake edge due to increased erosion risks and high deposits of archaeological materials.
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> 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. Do not use earth moving machinery near creek lines in the lake bed or on the lake edge due to increased erosion risks and high deposits of archaeological materials.
Fire danger rating VERY HIGH - EXTREME	<ul style="list-style-type: none"> 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. Do not use earth moving machinery near creek lines in the lake bed or on the lake edge due to increased erosion risks and high deposits of archaeological materials.