

Arakoola Nature Reserve

Fire Management Strategy (Type 2)

2020 - 2025

This strategy should be used in conjunction with aerial photography and field reconnaissance.

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This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of the Rural Fires Act 1997.

Locality Map

Map details

Datum: GDA, 1994_MGA_Zone_56 Geographic Coordinate System: GCS_GDA_1994

Local Government Area: Gwydir / Inverell Topographic Map: Graman 90368

Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Area Manager - Martin Linahan	0400 531 889
	Duty Officer (24 hour)	8275 1742
NSW Rural Fire Service	Barwon Area Office (Bus. hours)	8792 7300
	NT Zone Manager - Chris Walbridge	8278 657 647
Northern Tablelands	NT Duty Officer	8739 6911
	NT Zone Office	8739 6900
Forest Corporation of NSW	Terraced Office	8726 4150
	Coffs Harbour	8652 0111
Emergency Services	Police, Ambulance, Fire & Rescue NSW	000
	SES	132 400
Police	Inverell	8722 0599
Council	Inverell	8728 8289
Local Aboriginal Land Council	Toomelah LALC	87 4678 2348

Communications

Service	Channel	Location and Comments
NPWS Repeaters	335	• Hallama Hill
UHF - CB	635	• North Vale Group
UHF - CB	635	• Fire ground
UHF - CB	N011	• Northern Tablelands Digital Wating
UHF - CB	N011	• Small fire channel TD, large fires determined by IMT
Aviation - CTAF	134.70	• NB frequency unless another frequency is allocated on an incident
Cellphone		• Telstra Next G 3G coverage is generally unavailable for most of the reserve

Fire Season Information

Wildfires	Prescribed Burning
The critical wildfire season occurs during September to November. This period may extend into February if the normally reliable summer does not eventuate. 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.	Fuel accumulation rates are generally high, and fire can carry through forest but only several years previously. Prescribed burning is most effective in late winter and early spring, where the combination of low rainfall and cured fuels from frosts maximise available fuel loads. Autumn burns are possible, but rainfall events in this period can mean fuel moisture contents remain too high for effective hazard reduction burning.

Operational Guidelines

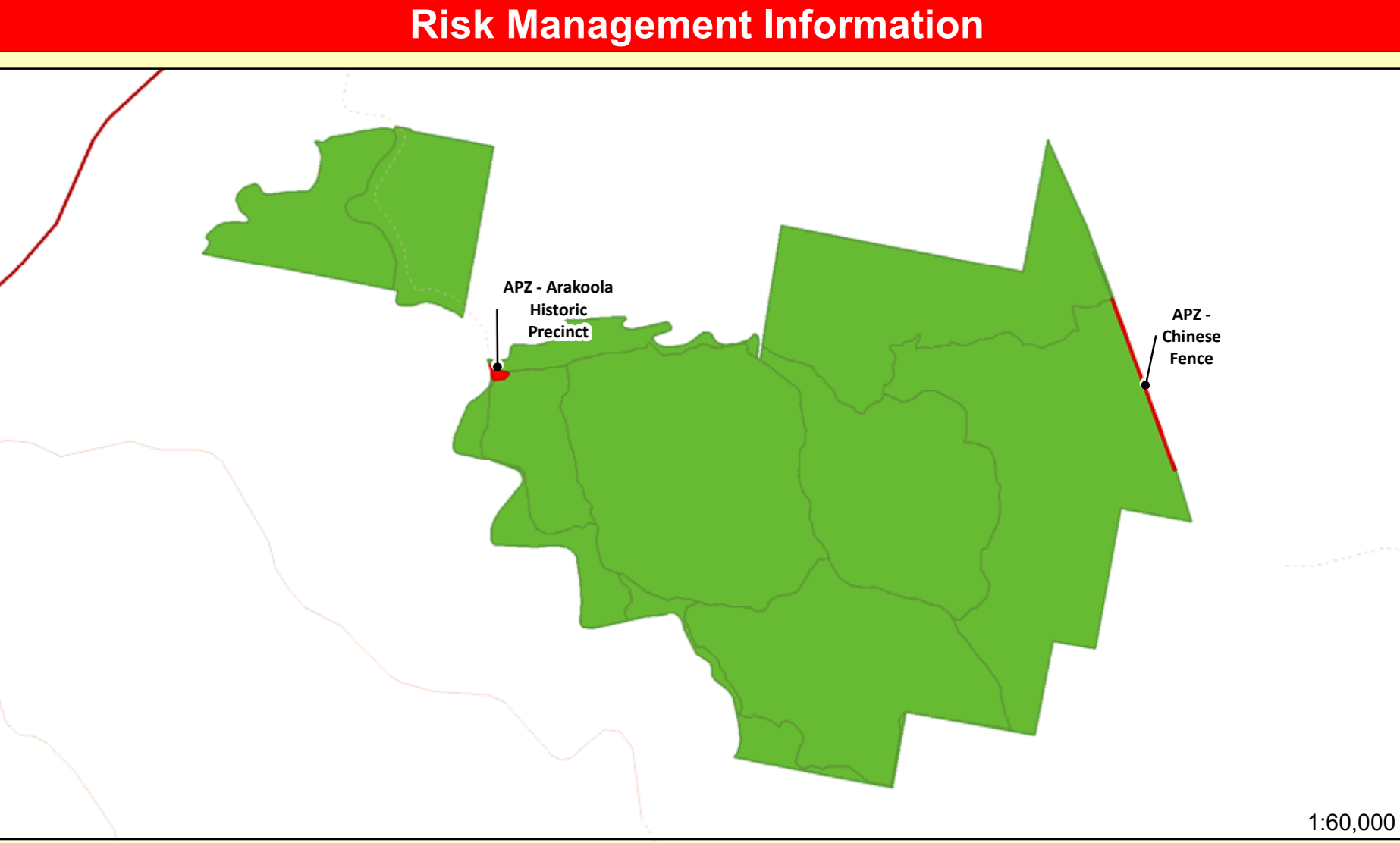
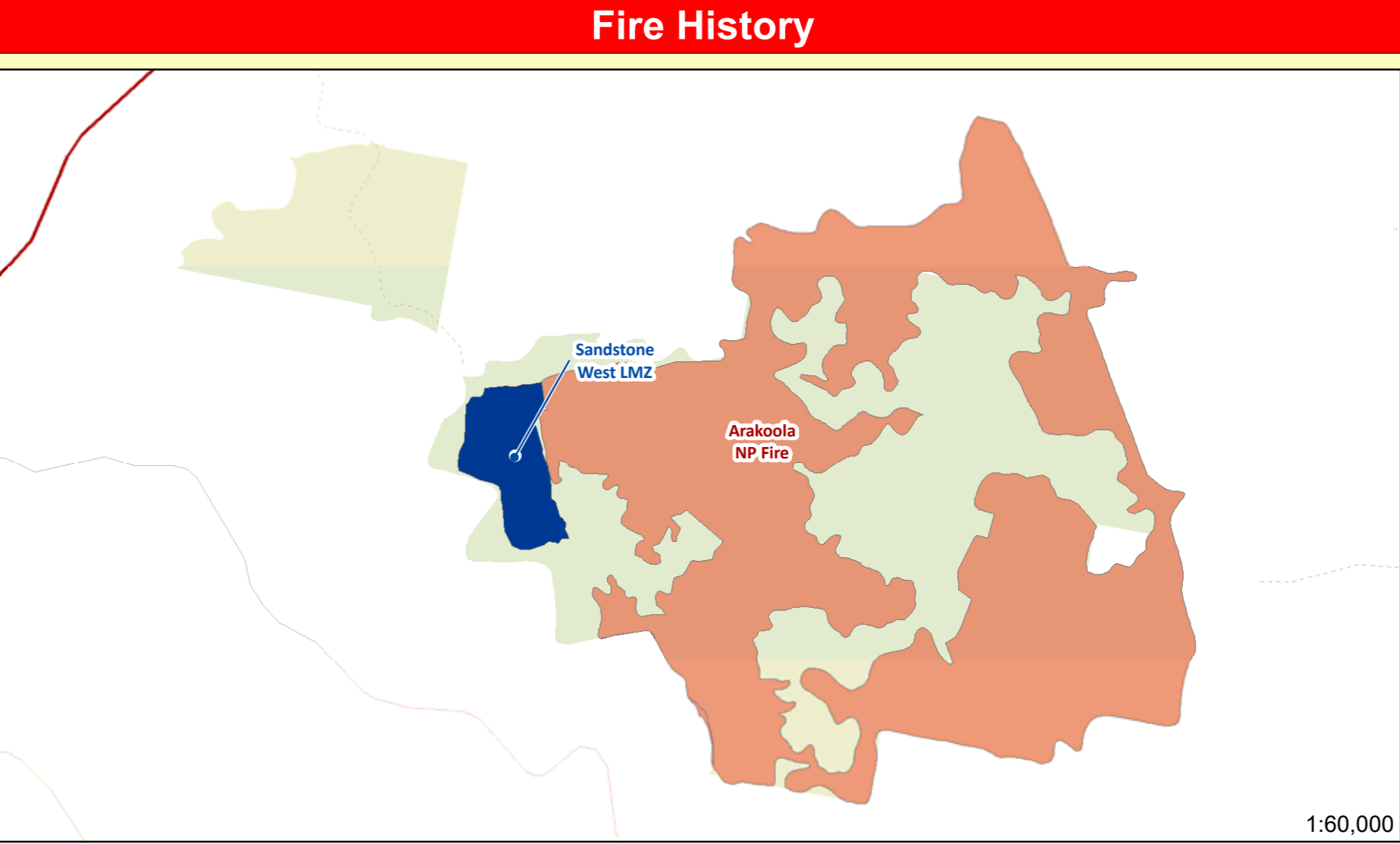
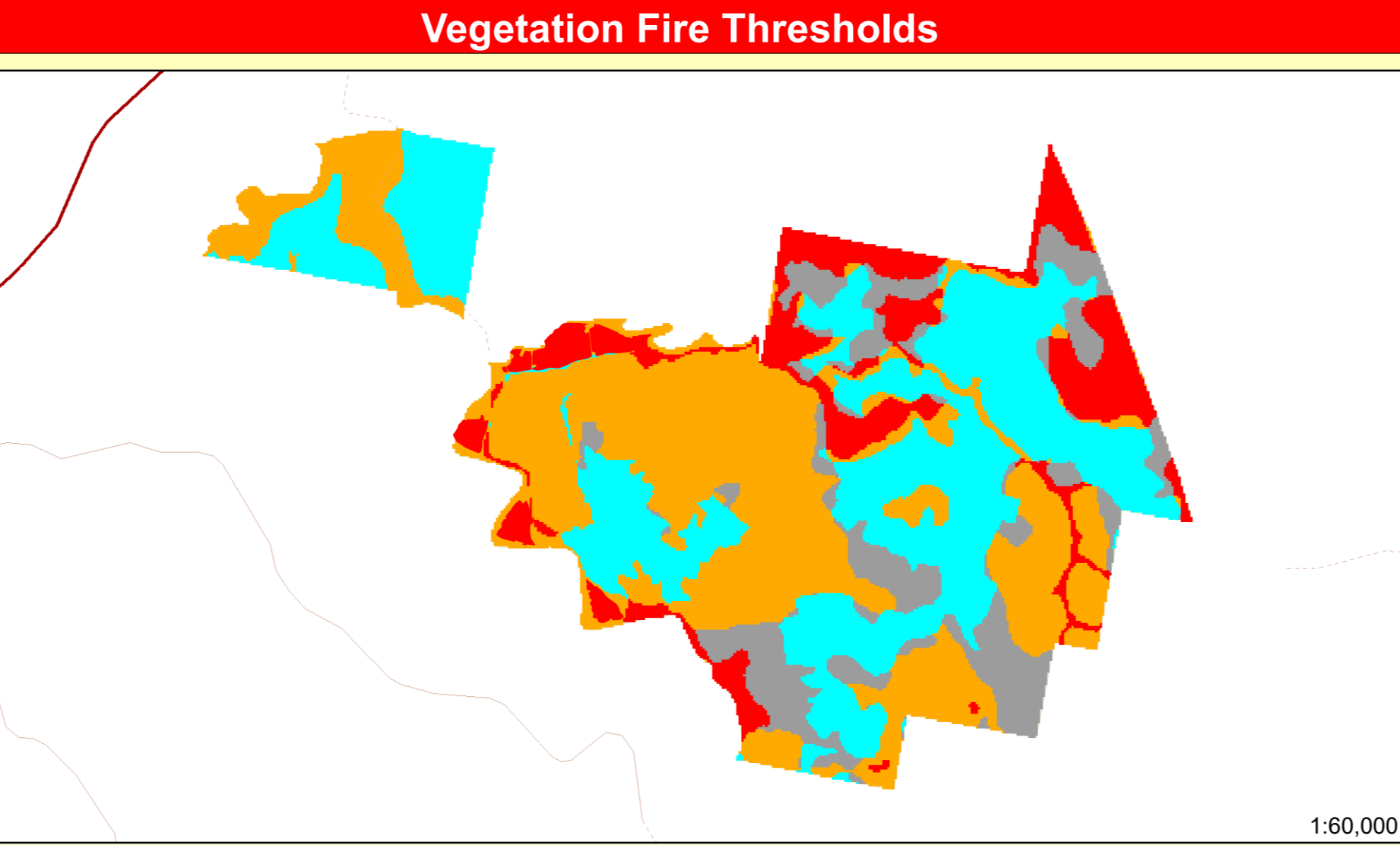
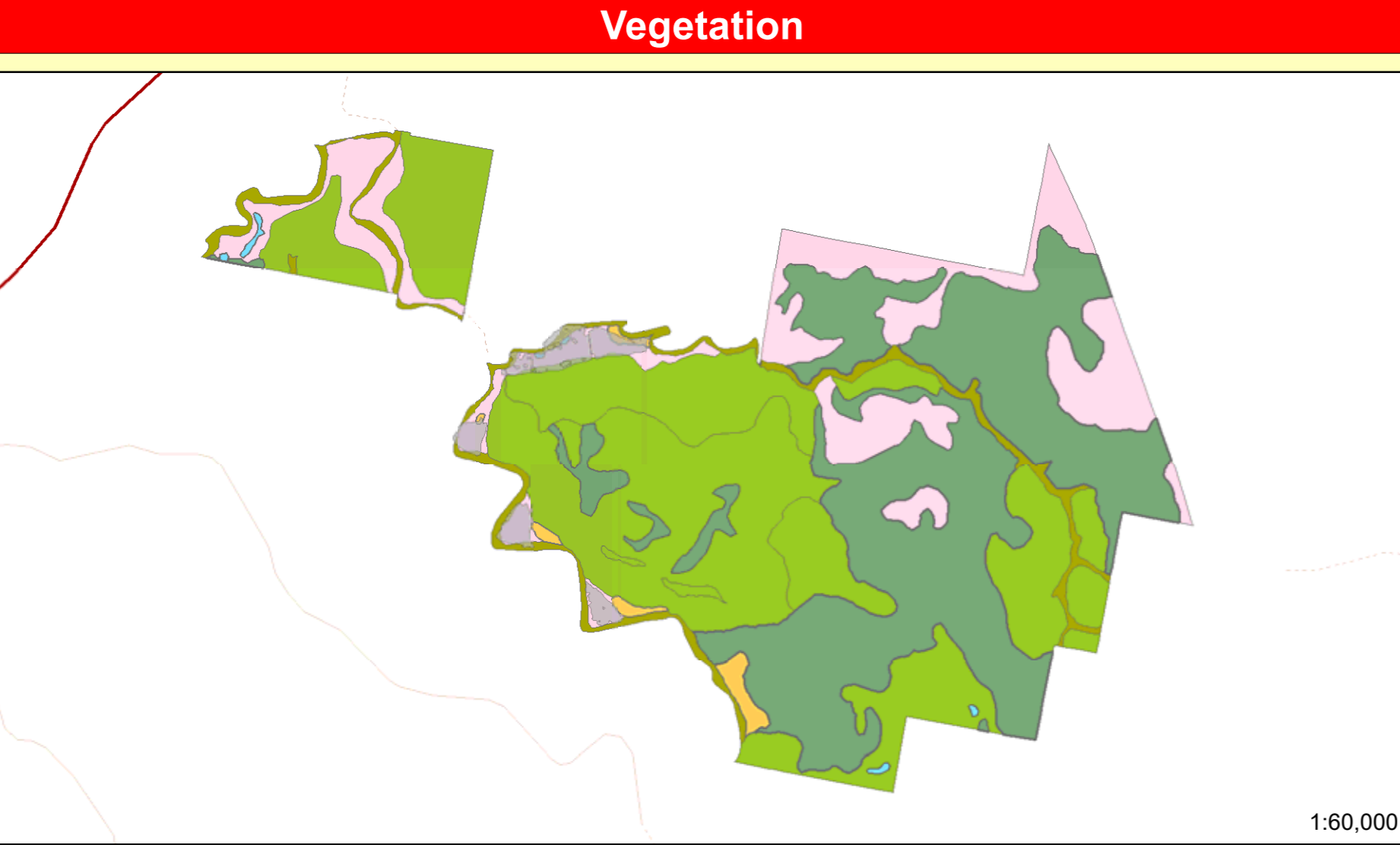
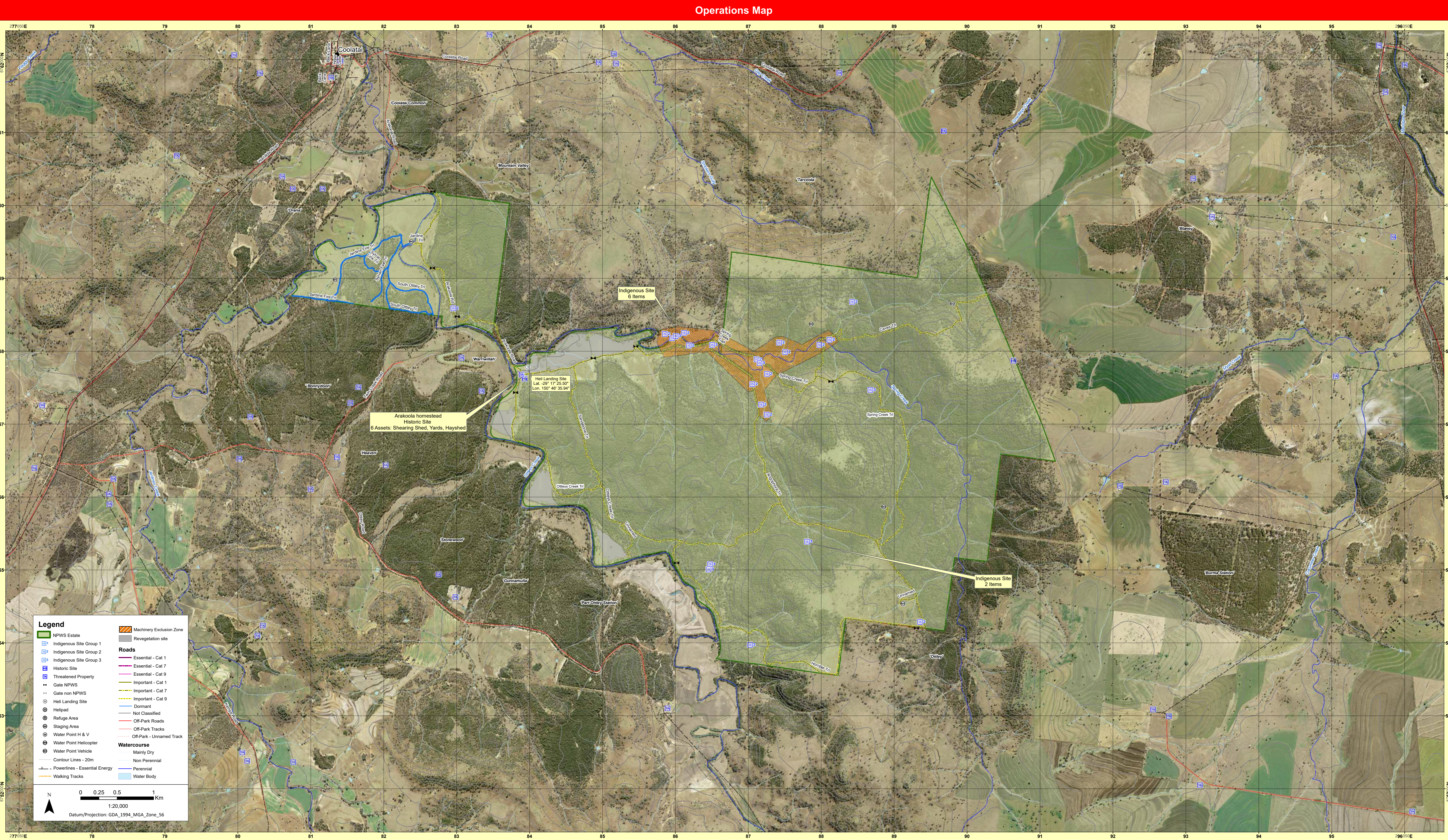
Operational Guidelines	Backburning	Command & Control	Containment Lines	Earthmoving Equipment	Fire Suppression Chemicals	Rehabilitation	Water Points	Smoke Management	Visitor Management	WARNINGS
<ul style="list-style-type: none"> Aerial operations will be managed by trained and competent personnel. This 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 a senior NPWS officer or the Section 44 Approver. 	<ul style="list-style-type: none"> All personnel must be fully briefed before back burning operations begin. Backburning in areas of low - Moderate OPH will require the use of wind, or low humidity to maintain effectiveness. WARNING: Areas of High Very High OPH including Smooth-bark Apple/Coolibah grasslands can burn with a rapid rate of spread. Under no circumstances should backburning be used for essential life and property protection. 	<ul style="list-style-type: none"> The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly. The initial Incident Controller will liaise with the RFS to ensure that the agency in command is determined and an Incident Controller is appointed. 	<ul style="list-style-type: none"> 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 personnel involved in containment line construction should be briefed on, and must consider both natural and cultural heritage sites in the location. All containment lines not required for other purposes should be closed immediately at the cessation of the incident. 	<ul style="list-style-type: none"> Plant may only be used with the prior consent of a senior NPWS officer. Plant must always be guided and supervised by an experienced officer and accompanied by a support vehicle (NPWS). When engaged in direct or parallel attack, the vehicle must be a fire fighting vehicle. Plant must be washed down, where practicable, prior to entering NPWS estate and chain on exiting NPWS estate. Avoid off-site works around Indigenous Sites as indicated on Operations Map by Machinery Exclusion Zone. 	<ul style="list-style-type: none"> The use of foam, wetting agents and retardants will NOT be permitted within 50 metres of dams and watercourses. The aerial use of gels and retardants should be approved by a senior NPWS officer. The use of retardants requires the approval of a senior NPWS officer. 	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. 	<ul style="list-style-type: none"> Water points may not be reliable in extended dry periods. Consider deployment of a bulk water carrier to support fire operations. 	<ul style="list-style-type: none"> Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations. 	<ul style="list-style-type: none"> The reserve may be closed to the public during periods of extreme fire danger, and will be closed during fire operations. 	<ul style="list-style-type: none"> The potential rate of spread in exposed pine woodlands and shrublands can be very rapid, and the risk of entrapment very high in periods of higher fire danger. Backburning should not be attempted during periods of curing fire, particularly in front of the head. Many trails in Arakoola NP contain long sections. Vehicle movement on these trails requires careful management as there is a high potential for dry bogging. Fire risk should be anticipated with winds from any direction. Decommission vehicles to remove Coolibah seed before travelling to other reserves. <p>Black text - general guidelines Blue text - reserve specific guidelines Red text - important warnings</p>

Heritage Guidelines

Aboriginal Cultural Heritage	Historic Sites	Threatened Fauna & Flora	Soil Erosion Management
<ul style="list-style-type: none"> Arakoola Nature Reserve has a rich history of aboriginal occupation. B2.1 - As far as possible protect the site from fire. Do not cut down trees. B2.2 - As far as possible protect the site from fire. Avoid all ground disturbance and driving over sites. B2.3 - Avoid ground disturbance. Avoid water bombing. Site may be burnt by fire without damage. Fire risk should be anticipated with winds from any direction. Decommission vehicles to remove Coolibah seed before travelling to other reserves. 	<ul style="list-style-type: none"> As far as possible, protect the site from fire, and do not cut trees. Use of foams & retardant is acceptable. Use of foams & retardant is acceptable. Exclude control line construction from sites. Consider a buffer zone of about 50 metres from the sites. All HMs databases must be checked as part of planning for fire operations. Arakoola Shearing Shed Precinct As far as possible, protect from fire. Use of foams & retardant is acceptable. Avoid construction of new control lines. Chinese Fence As far as possible, protect from fire and machinery. Use of foams & retardant is acceptable. 	<ul style="list-style-type: none"> The protective actions for Threatened fauna have been incorporated into the Operational Guidelines. White Box Woodlands and pockets of Red Gum - Yellow Box Woodlands in close proximity to 'Chapel Creek'. Parts of these communities fit the description of the EEC 'Red Gum Woodlands'. Manage fire frequency if possible to not fall into the 'vulnerable to frequent fire' category. 	<ul style="list-style-type: none"> The soils within the reserve are generally red, brown, or grey, and are highly erodible. Fire trails used in fire operations should be drained as soon as possible after use.

Suppression Strategies

Conditions	Guidelines
All vegetation types	Given the size and location of the reserve fire response is likely to be multi agency
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads and cleared land, allowing long-term management requirements for biodiversity. Direct and parallel attack may be applied with earthmoving machinery and fire units. Close parallel or direct attack may be an option at night depending on weather conditions. Distance between the bank and machinery and fire units should be kept to a minimum. Secure and deepen containment lines on the ground side of the fire. Require aerial support to manage spot covers and monitor fire spread. Allowance for lighting operations within exposed pine or shrubby woodlands in very high or above fire conditions presents a significant entrapment risk to ground crews. Fluelighter safety is the paramount consideration in deployment.
Fire danger rating VERY HIGH	<ul style="list-style-type: none"> Consider a broad containment strategy using main fire trails and cleared country. Tradition will include property protection where safe and necessary. Close parallel or direct attack and/or mop up off the edge may be an option at night depending on weather conditions. Warning: Fire risk should be anticipated with winds from any direction. Entrapment risk is very high.
Fire danger rating SEVERE - EXTREME	<ul style="list-style-type: none"> Fluelighter safety is the paramount consideration in deployment. Consider a broad containment strategy using main fire trails and cleared country. Tradition will include property protection where safe and necessary. Close parallel or direct attack and/or mop up off the edge may be an option at night depending on weather conditions. Warning: Fire risk should be anticipated with winds from any direction. Entrapment risk is very high.



Vegetation Class (Kath)	Vegetation Management Guidelines	Fire Behaviour
Inland Poolscape Swamp	<ul style="list-style-type: none"> Current vegetation community is open and values. Fire frequency is low. The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. 	<ul style="list-style-type: none"> Fire risk is low to moderate. Fire intensity is low to moderate.
Inland Poolscape Woodlands	<ul style="list-style-type: none"> The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. 	<ul style="list-style-type: none"> Fire risk is low to moderate. Fire intensity is low to moderate.
Western Slopes Grasslands	<ul style="list-style-type: none"> The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. 	<ul style="list-style-type: none"> Fire risk is low to moderate. Fire intensity is low to moderate.
Yellow Dry Woodland Forest	<ul style="list-style-type: none"> The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. The highest fire frequency is from the grassy hill branches of wetland woodlands. A minimum fire interval of 40 years. 	<ul style="list-style-type: none"> Fire risk is low to moderate. Fire intensity is low to moderate.

Vegetation Threshold	Treatment
Too Frequently Burnt	Fire thresholds have been exceeded. Protect from fire as far as possible except in locations dominated by introduced Coolibah Grass, which may need to be burnt to manage fuel loads. This classification also includes CP Australia revegetation sites which should be excluded from fire.
Vulnerable to Frequent Fire	The area will be Too Frequently Burnt if 8 burns within the life of this plan. Protect from fire as far as possible except in locations dominated by introduced Coolibah Grass, which may need to be burnt to manage fuel loads.
Within Threshold	Fire history is within the threshold for vegetation in this area. A burn is neither required nor should one necessarily be avoided.
Long Unburnt	Fire frequency is below fire thresholds in the area. A prescribed burn may be advantageous. Consider allowing unplanned fires to burn.
Unknown	Insufficient data to determine fire threshold.
No Regime Assigned	Areas which do not have recommended fire intervals assigned to them e.g. cleared land, rock.

Fire Type	Fire Details
Prescribed Burn	2017-18: Sandstone West LMZ
Wildfires	2009-10: Arakoola NP Fire

Fire Management Zone	Treatment
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 Overall Fuel Hazard at Moderate or below.
Strategic Fire Advantage Zones	The objective of SFAZs is to reduce fire intensity in locations to assist containment of wildfires, by maintaining the Overall Fuel Hazard less than HIGH.
Land Management Zones	The objective of LMZs is to conserve biodiversity and protect cultural heritage. Manage fire consistent with fire thresholds.