Culgoa National Park

Fire Management Strategy 2015

This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the develop ment 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, November 2014.

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Related Documents

Office of Environment and Heritage (2013-2014) Fire Management Manual

In case of emergency call duty officer (fire season) on (08) 8080 3222

Operational Guidelines - General

General	Guidelines
Aerial operations	• Due to limited water availability, suitable airstrips and potentially long turnaround times aerial water bombing is not a preferred option. • Aerial operations will be managed by trained and competent personnel. • Aerial bombing should be supported by ground based suppression crews wherever practical. • All aerial ignition operations require the consent of the NPWS Regional Manager or the Section 44 Appointee. • Consider deployment of 10 000L Buoywall from Bourke.
Backburning	• All personnel must be fully briefed before back burning operations begin. • Effective backburning in LOW – MOD OFH areas will require the use of wind, slope or low humidity.
Command & Control	• The first combatant agency on site may assume control of the fire, but then must ensure the NPWS is notified promptly. • Upon arrival of other fire fighting agencies, liaison will take place to determine suitable in-charge arrangements and strategies.
Containment Lines	• 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 must be briefed on and 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.
Earthmoving Equipment	• 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. When engaged in direct or parallel attack, this vehicle must be a fire fighting vehicle. • Earthmoving equipment is not permitted in areas infested with spiny burrgrass. • Plant 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 NOT be permitted within 50 metres of dams and watercourses holding water. • The aerial use of foam, gels and retardants should be approved by Regional Manager or delegate.
Rehabilitation	• Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Smoke Management	• Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations.
Threatened Property	• Sites where property or assets may be threatened are identified on the suppression map. These sites are Asset Protection Zones where fire season preparation will be undertaken (slashing, pruning, chemical spraying). • Fire units are to be deployed for asset protection.
Visitor Management	• The park may be closed to the public during periods of extreme fire danger and during fire operations.
Watering points	• Most water points at Culgoa are ephemeral, local knowledge will be essential to determine the availability of water. • Consider deployment of a bulk water carrier to support fire operations. • Consider deployment of 10 000L Bouywall from Bourke
WARNING	• Overhead powerlines

Operational Guidelines - Heritage

General	Guidelines
Aboriginal Cultural Heritage Site Management	All personnel involved in containment line construction and or vehicle based fire suppression operations are to be briefed regarding site locations. *Modified trees (AS1)* • Protect the site from fire, clear base of litter and shrubs, exclude site tree from fire where possible • Foam may be used to protect the tree, or to extinguish fire • Do not cut trees *Ground based sites (AS2), including:* *middens, artefact scatters, quarry sites, hearths* • Protect sites from any ground disturbance, including the use of earth-moving equipment and vehicles *Burial Sites* • Protect sites from any disturbance by excluding operations by at least 50m • Area may be burnt
Historic Heritage Site Management	*Wooden cattle grids , survey trees* • Protect sites from fire by slashing grass during high growth years • Exclude sites from fire where possible, including during the construction of a control line around the perimeter • Foam may be used to protect the site • Do not cut trees *Toulby, Cawwell and Byewarring sheds and yards* • Regularly maintain APZs • Protect the site from fire, exclude area from fire where possible • Foam may be used to protect the structures, or to extinguish fire
Threatened Flora and Fauna Management	*Threatened plant species – Narrow-leafed Bumble (Capparis loranthifolia)* • Apply a machinery exclusion zone in habitat areas • Monitoring to record fire response must be initiated after a fire event *Endangered ecological communities –Coolibah-Blackbox Woodlands, Brigalow-Gidgee Woodlands* • All efforts to be made to protect • Avoid the removal of mature trees • Monitoring to record fire response must be initiated after a fire event

Suppression Strategies

Vegetation Type	Fire Danger Rating	Guidelines
Grassland	LOW- HIGH	**WARNING!** This vegetation burns with an extreme fire intensity. Fire runs should be anticipated with winds from any direction. Entrapment risk is very 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.
Mixed open shrubland/woodland	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
	VERY HIGH – EXTREME	• Fallback to existing trails and roads, recently burnt areas of 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

Communications Information

Service	Location and Comments	Channel
NPWS/Air band (Cross-band repeater)	• Far West Region has two portable repeaters for deployment out of Broken Hill	
Aircraft - VHF	• Contact State Air Desk for frequency allocation	
Mobile phone – Next G	• Patchy reception with car kit	
Satellite Phone	• Good Reception	
UHF - CB		37

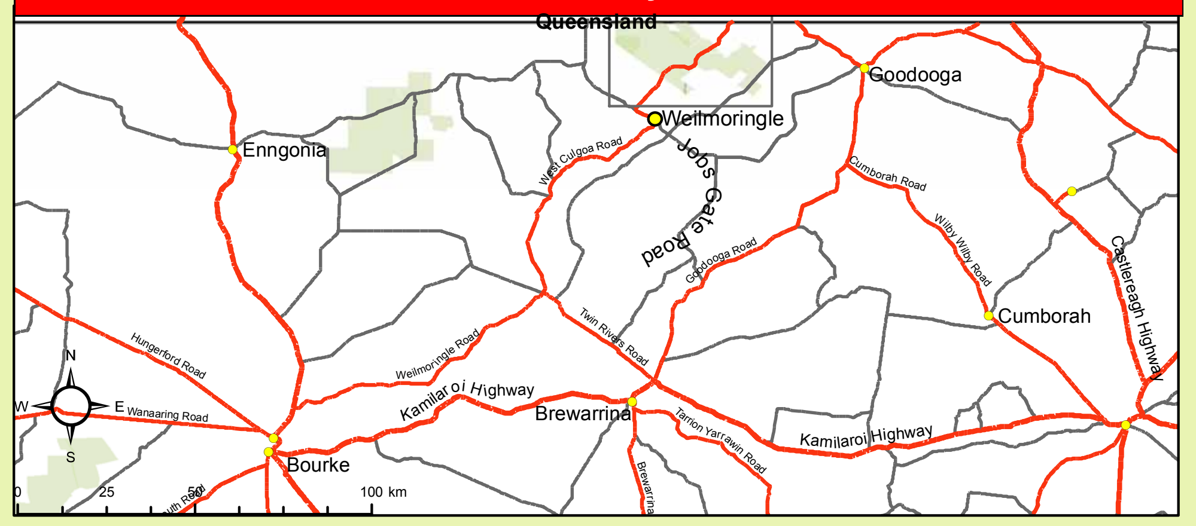
Contact Information

Agency	Position/ Location	Phone
National Parks & Wildlife Service	Area Office (bus. hours)	(02) 6830 0200
	Regional Duty Officer (fire season)	(08) 8080 3222
Barwon Darling Zone NSW Rural Fire Service	Zone Manager: Chris Favelle (bus. hour)	(02) 6836 1226
	Zone Manager: Chris Favelle (24 hour)	0419 691 815
	Operations Manager: Robyn Favelle (bus. hour)	(02) 6836 1226
	Operations Manager: Robyn Favelle (24 hour)	0407 904 940
	Brewarrina Station	(02) 6839 2589
RMS	Brewarrina	(02) 6830 5100
Emergency Services		000
Hospital	Brewarrina	(02) 6830 5000
SES	Call Centre	132 500
	Brewarrina Unit	(02) 6839 2338
Police	Brewarrina Station	(02) 6830 5599
	Goodooga Station	(02) 6829 6844
Council	Brewarrina Shire Council (bus. hours)	(02) 6830 5100
	Brewarrina Shire Council (24 hour)	0427 392 101

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. Past fire behaviour would indicate that two or more consecutive years of above average rainfall would be required to produce fuel loads which would support any significant fires.
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.

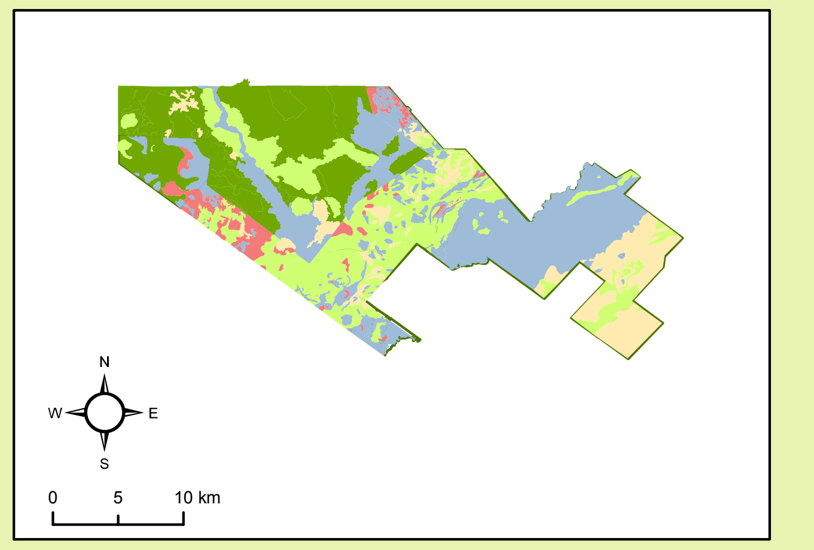
Locality



Vegetation management

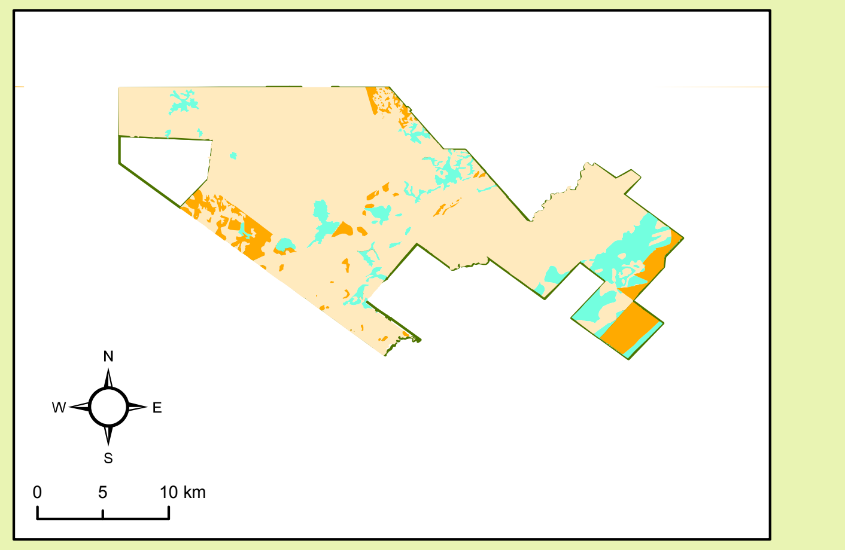
Vegetation Community	Vegetation management guidelines	Fire Behaviour
Grasslands	An interval between fire events less than 3 years and greater than 10 years should be avoided	• Potential rate of spread is High with high winds • Localised areas of **High – Very High** OFH after periods of ephemeral growth
Arid shrublands (Chenopod subformation)	Fire events (including prescribed burns) should always be avoided	• Potential rates of spread are low due to Low – Moderate OFH. Potential rates of spread will be higher after periods of ephemeral growth
Arid shrublands (Acacia subformation)	An interval between fire events less than 15 years should be avoided	• Potential rate of spread is highest in stands of elevated (shrub) fuel (4 – 6 kph under extreme conditions) • Localised areas of **High – Very High** OFH
Semi-arid woodlands (shrubby subformation)	An interval between fire events less than 15 years should be avoided	• Potential rates of spread are 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 9 years should be avoided	• Potential rates of spread are low due to **Low – Moderate** OFH • Localised areas of **High** OFH may produce restricted areas of higher fire intensity

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



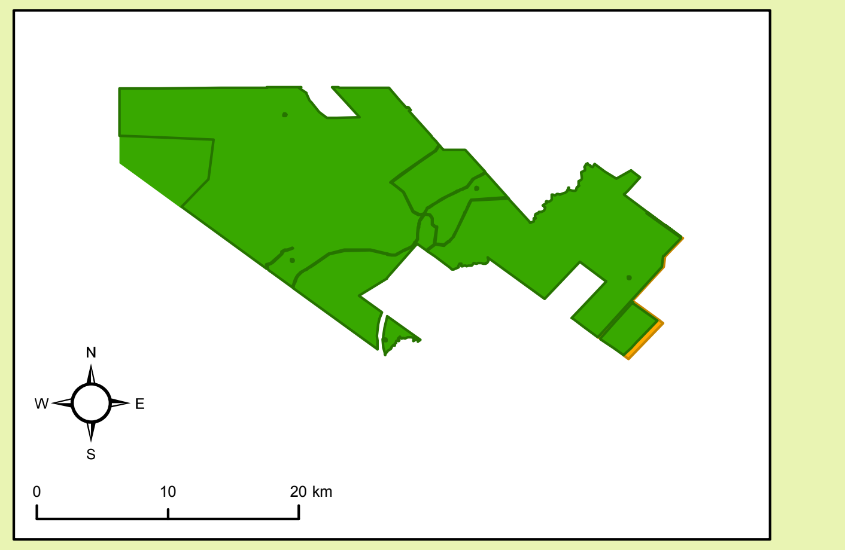
Status of Biodviersity Thresholds

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.
Unknown	Fire history unknown.



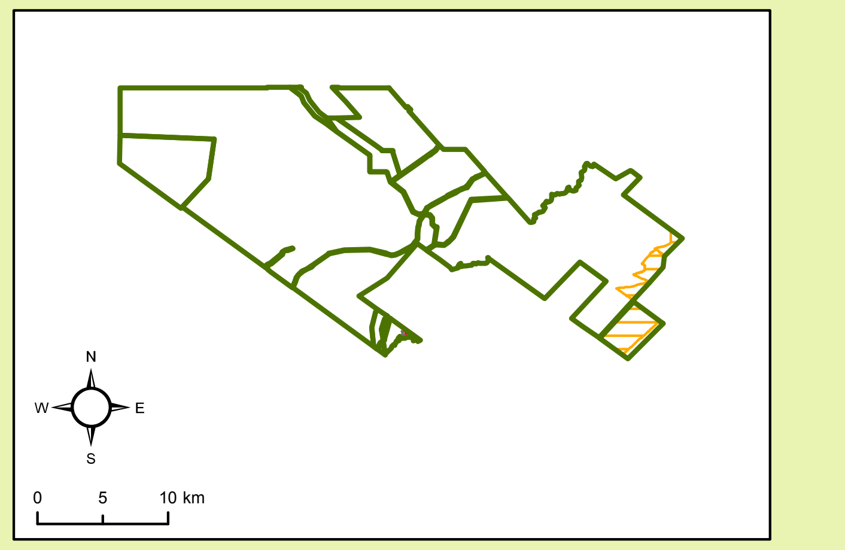
Bush Fire Risk Management Stategy

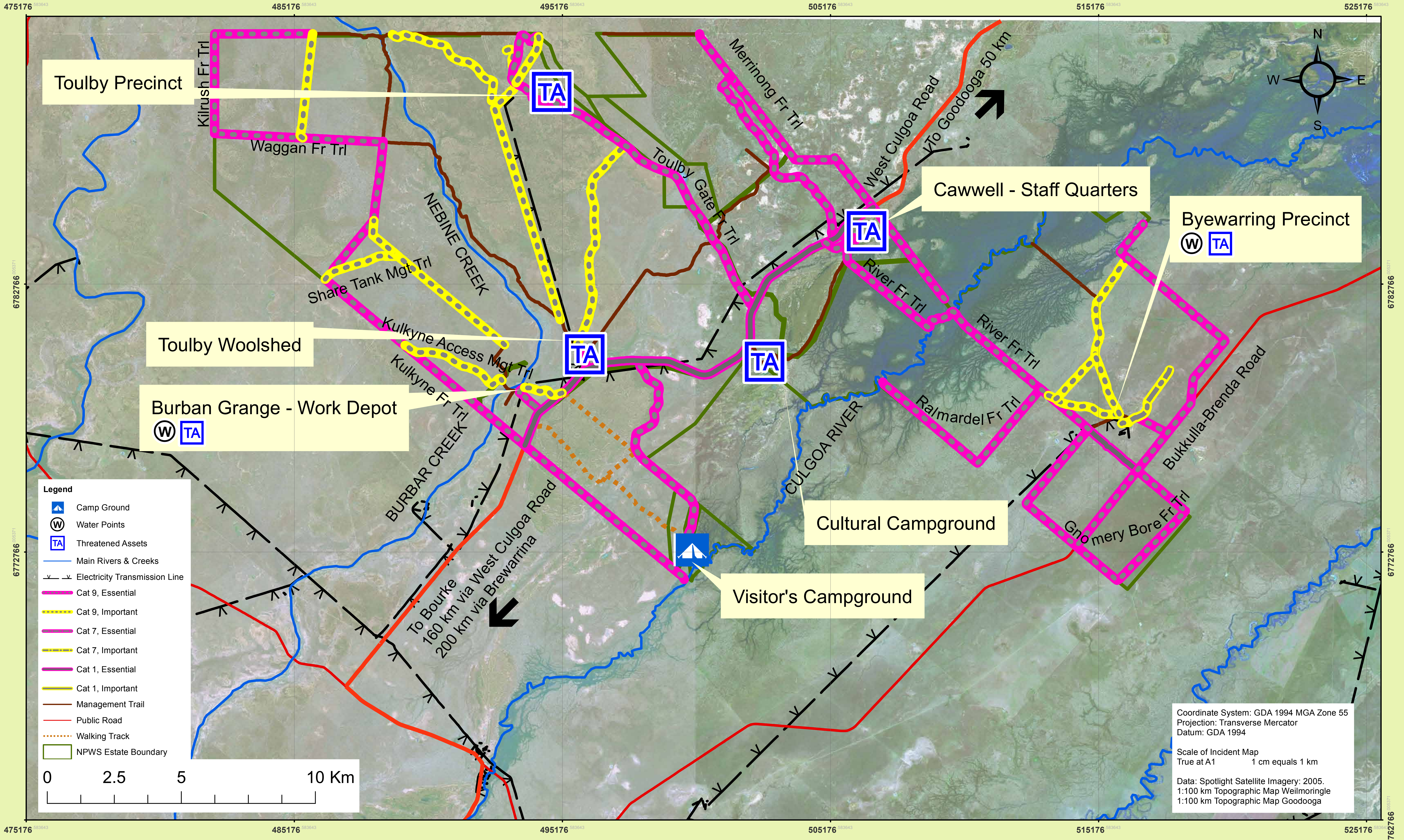
FMZ	Objective
Asset Protection Zones	The objective of **APZ**s is the protection of human life and property. This will have precedence over guidelines for the management of biodiversity. Maintain Overall Fuel Hazard at Moderate or below.
Strategic Fire Advantage Zones	The objective of **SFAZ**s is to 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.



Fire History

▤	Prescribed burns that occurred within the last 5 years (2009/10 to 2013/14)
▥	Wildfire that occurred within the last 5 years (2009/10 to 2013/14)





Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator
Datum: GDA 1994

Scale of Incident Map
True at A1 1 cm equals 1 km

Data: Spotlight Satellite Imagery: 2005.
1:100 km Topographic Map Weilmoringle
1:100 km Topographic Map Goodooga