

Pilliga North

Pilliga North, Pilliga National Park & State Conservation Area, Including AWC Managed Lands
Fire Management Strategy
2018 - 2023

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

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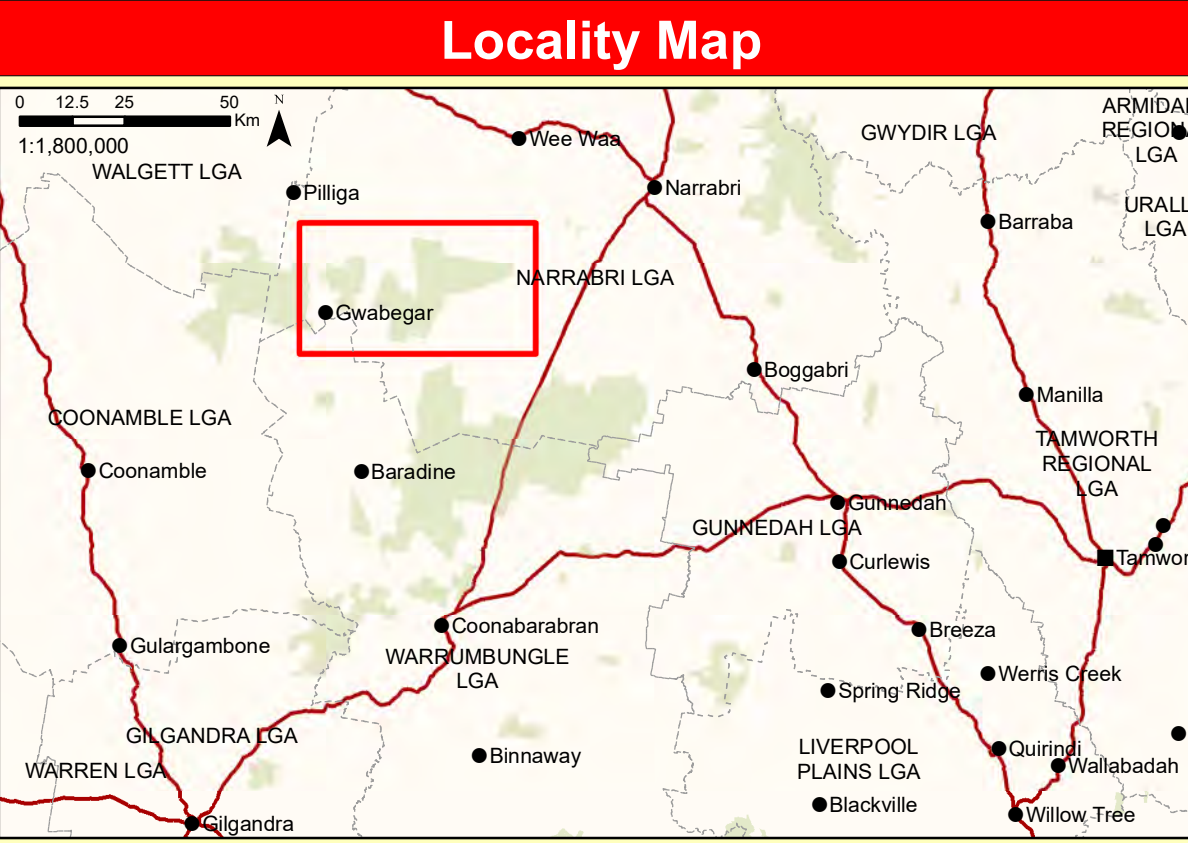
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Office of Environment & Heritage

This strategy is a relevant Plan under Section 38 (4) and Section 43 (3) of the Rural Fires Act 1997.



Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer (24 hour) Cathryn Ann Office (bus. hours)	6275 1742 6843 4000
Australian Wildlife Conservancy	Pilliga Operations Manager AWC Level Office (Cherry) National Operations Manager AWC Northern Office	0476 853 413 0419 892 590 02 6592 3813
NSW Rural Fire Service Gwydir Team	Duty Officer Zone Office	6792 3667 6792 3667
Forest Corporation of NSW	District Manager District Manager Northern Cypress	6843 6258 6796 2902 6796 6111 6796 4416
NSW Fire Brigade	Fire and Rescue NSW	000
Emergency Services SES	Police, Fire, Ambulance	132 500
Police	NSW Police	6843 1888 6792 7199
Council	Narrabri	6799 6860

Communications

Service	Channel	Location and Comments
NPWS	311	• Gwydir
NPWS	244	• Pilliga East (Newell Highway)
NPWS	211	• Australian Wildlife Conservancy (AWC)
RFS	266 (VHF)	• Mount Doree
RFS	266 (UHF)	• Digital Voice
UHF - CB	N/A	• Small fire channel 10, large fires determined by MT, AWC usually 14
Aviation - CTAF	134.70	NB frequency unless another frequency is allocated on an incident
Cellphone	N/A	• Telstra 3G coverage is generally unavailable for most of the reserve

Fire Season Information

The critical wildfire season occurs during November and December. This period may extend into the first half of January. Particular care is required during periods of negative Southern Oscillation indices. The end of the critical fire season is often marked by wet soot activity.

Effective prescribed burning in areas with LOW - MODERATE Overall Fuel Hazard may need to be conducted once the "critical fire season" and thunderstorm season is over. Prescribed burning attempted after autumn rain is unlikely to be effective.

Operational Guidelines

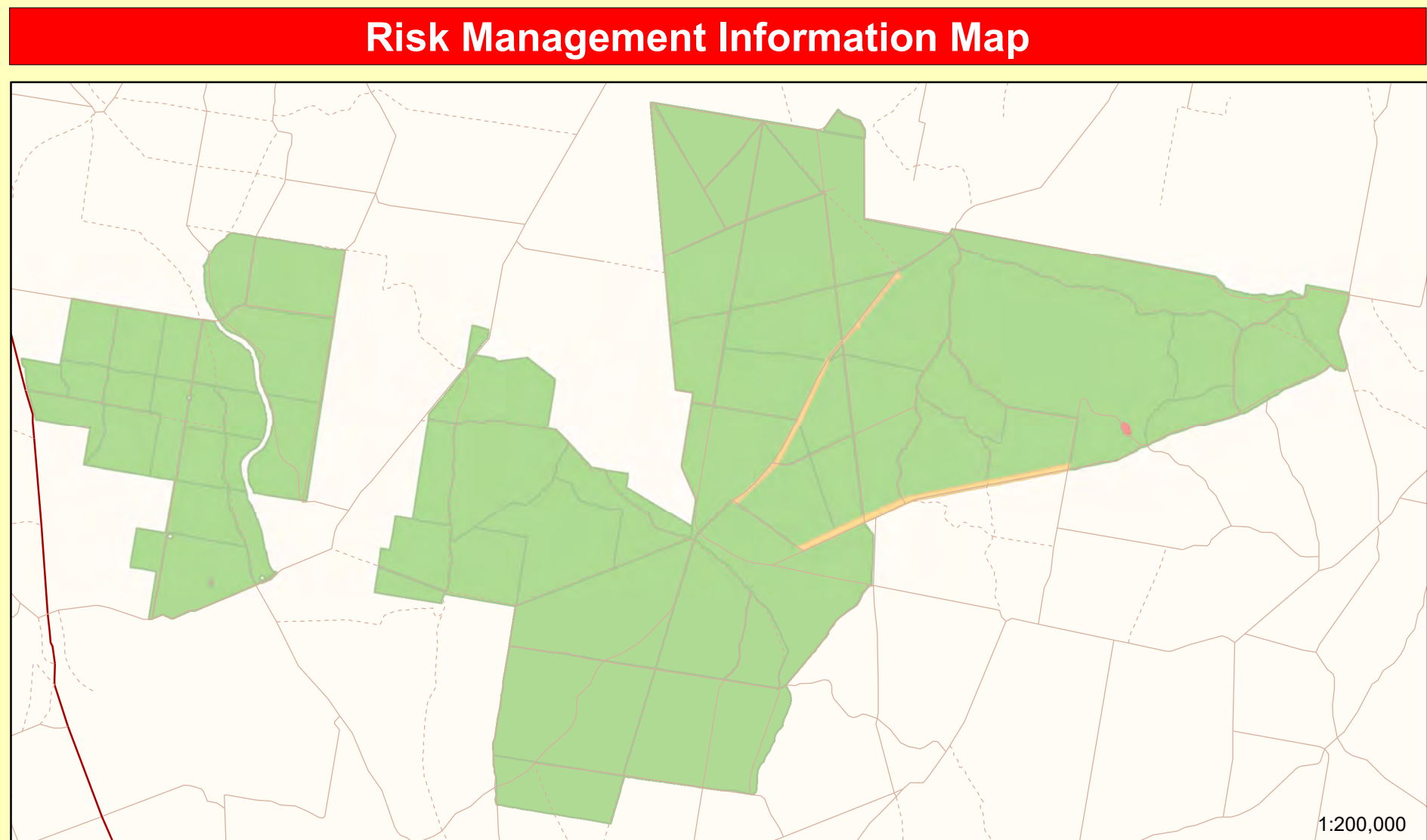
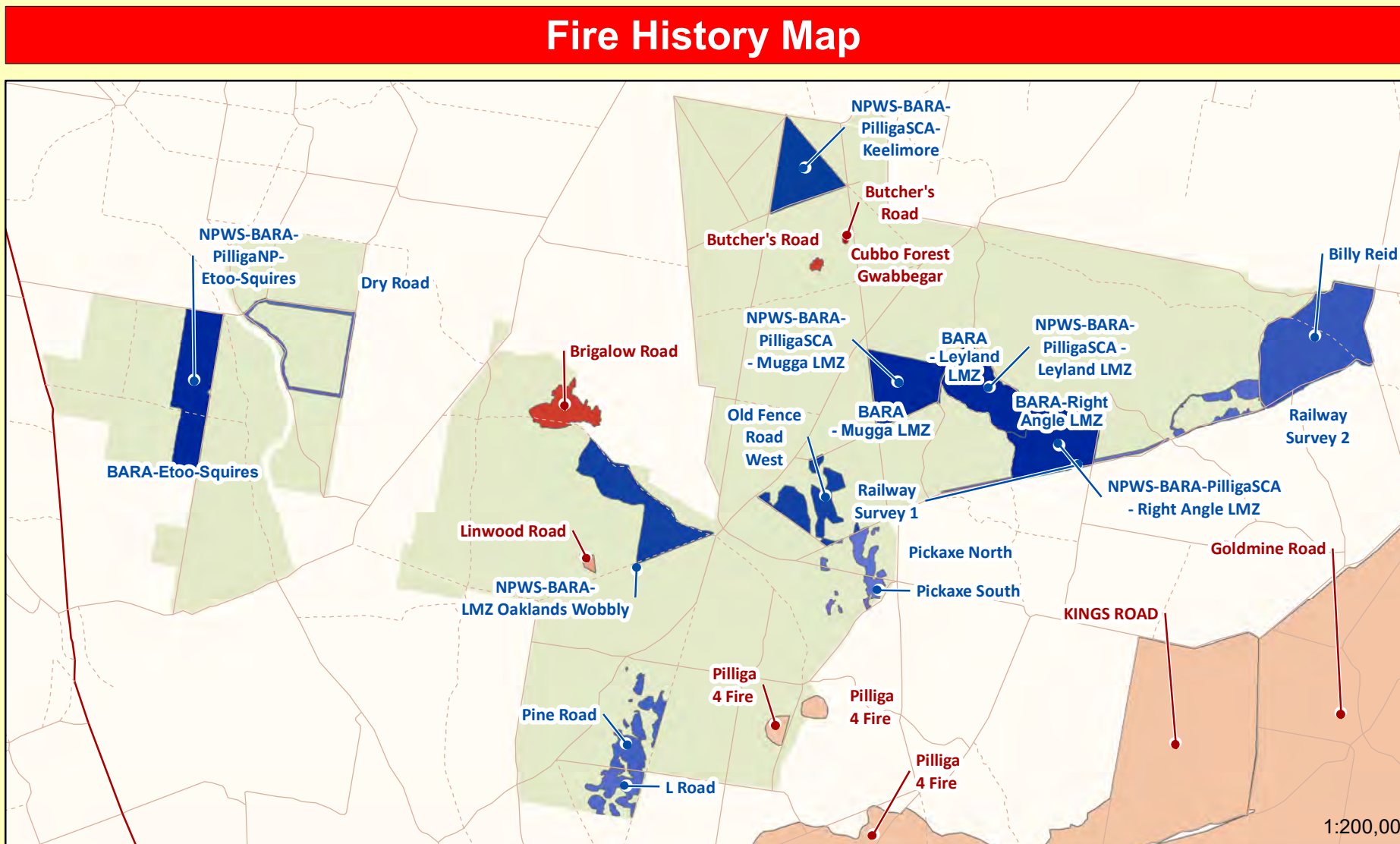
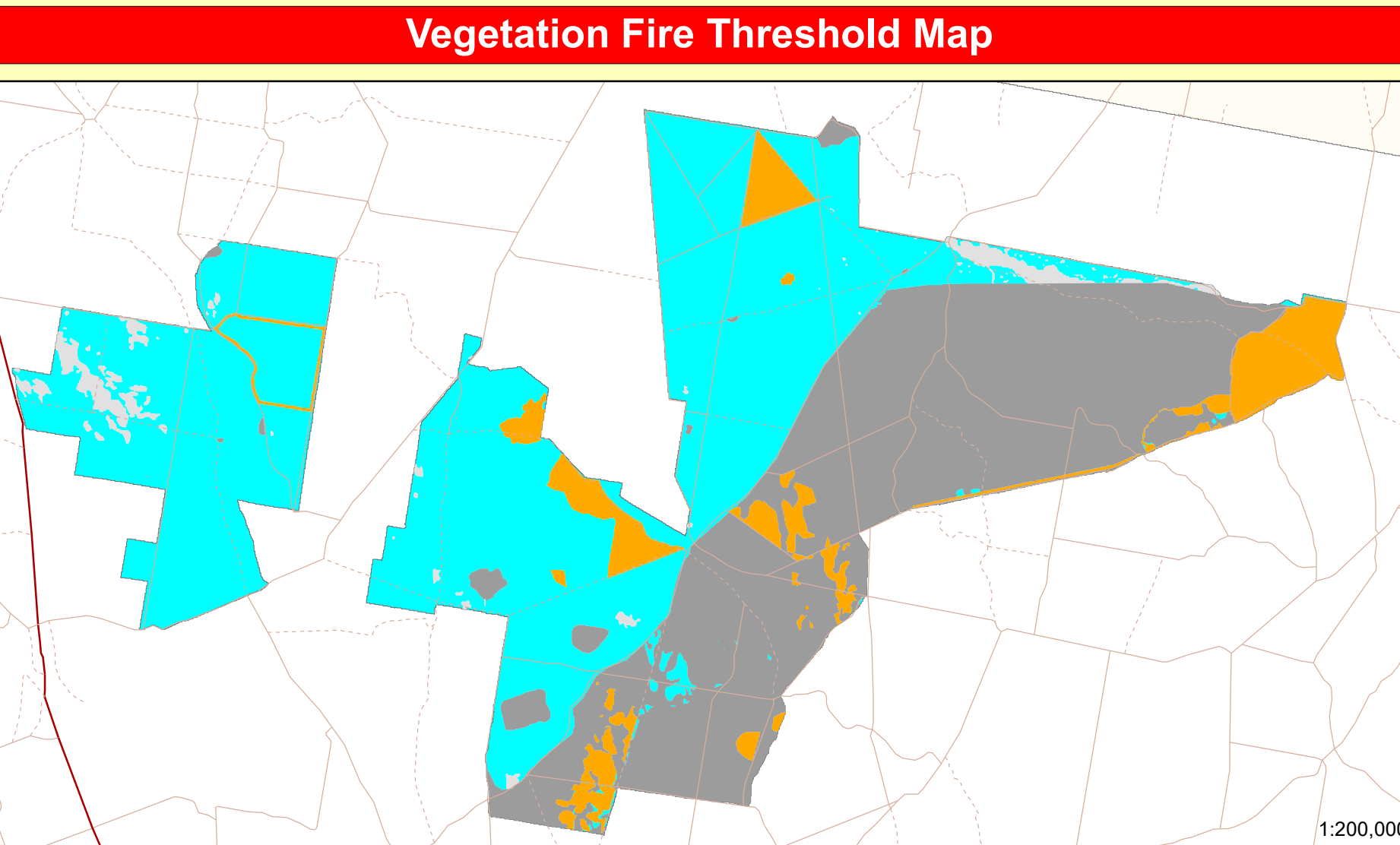
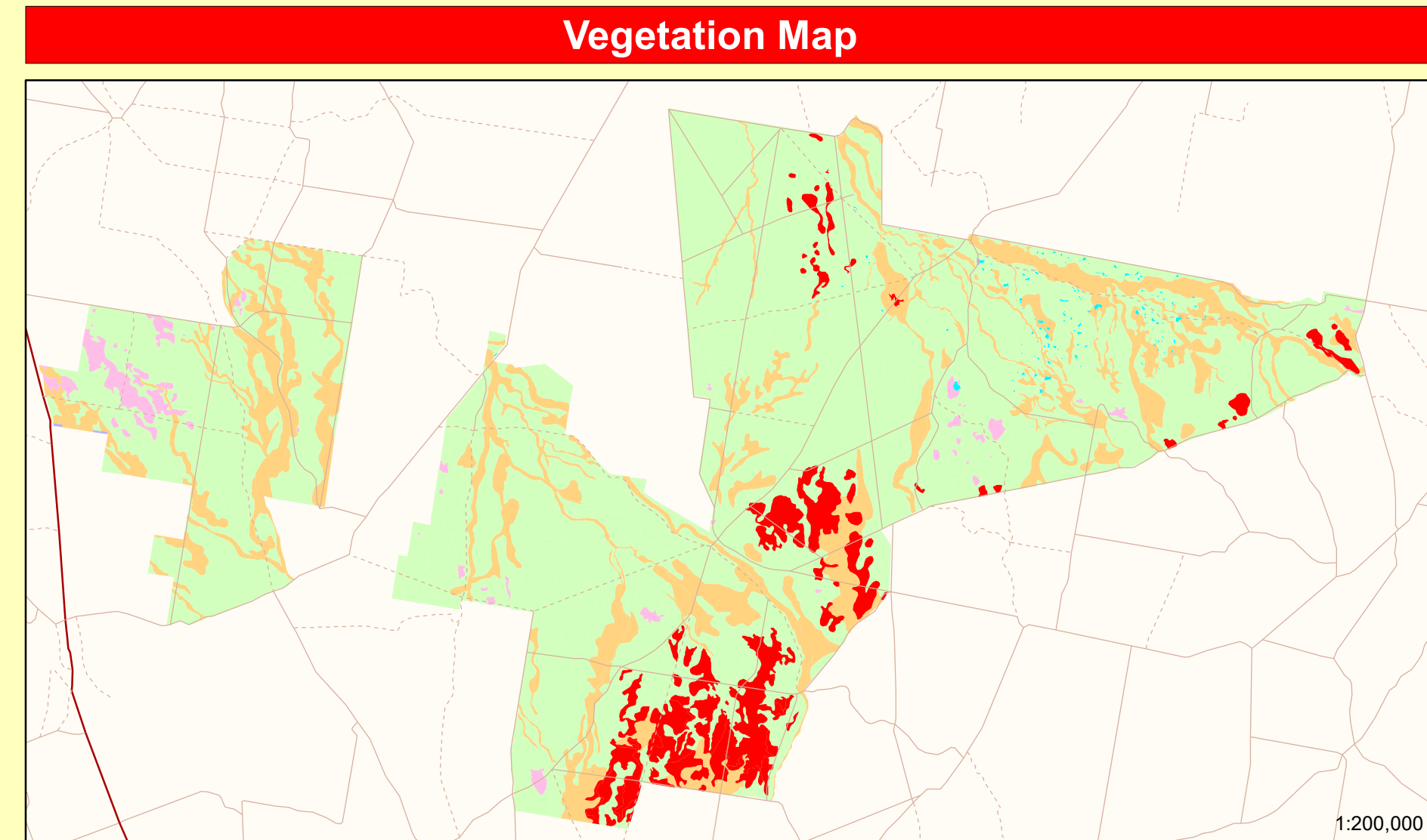
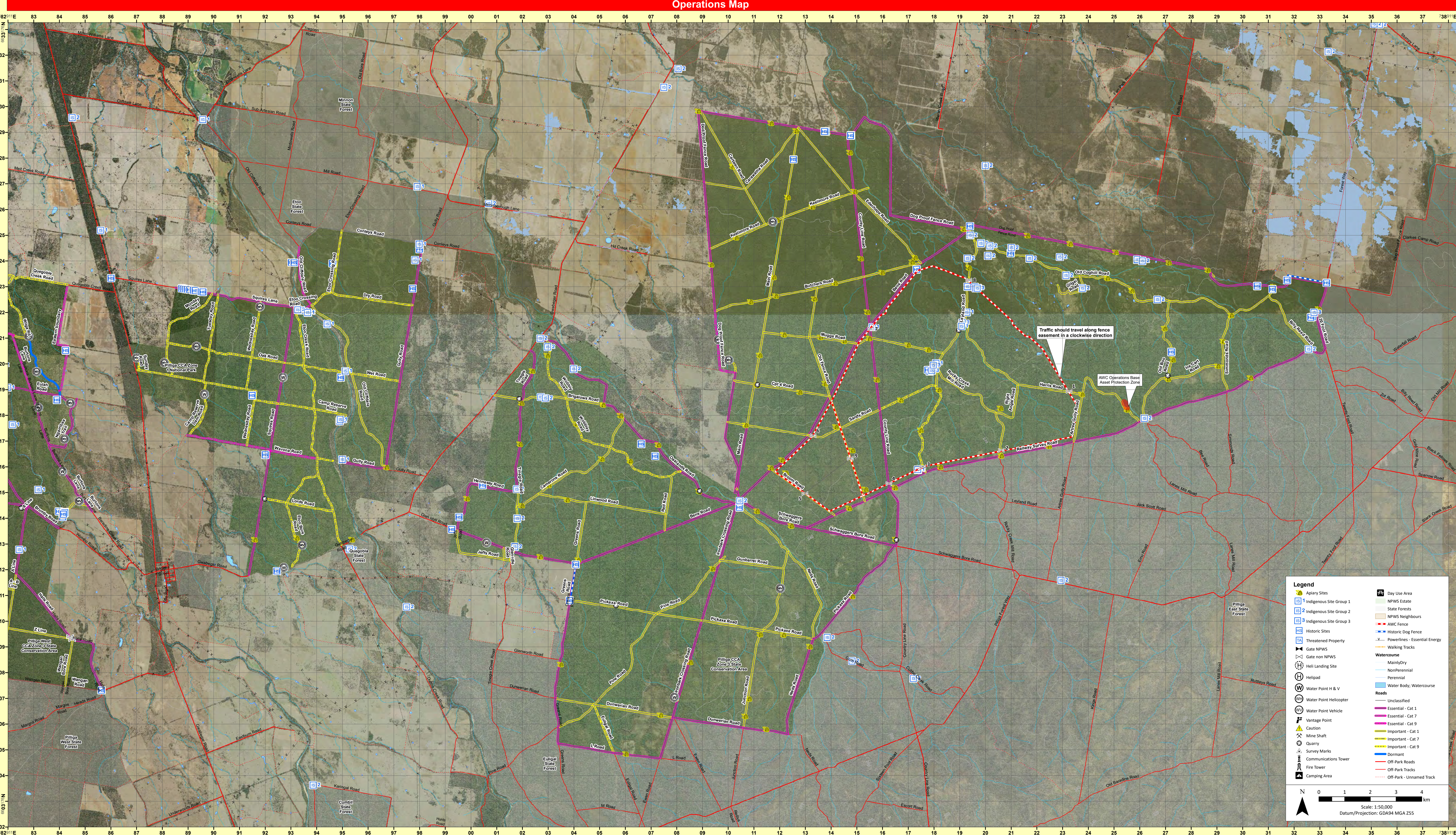
Operational Area	Guidelines
Aerial Operations	<ul style="list-style-type: none"> Aerial operations will be managed by trained and competent personnel. This includes directing aerial bombing and aerial ignition operations. The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances. All aerial ignition operations require the consent of the NPWS Branch Director or the Section 44 Approver.
Backburning	<ul style="list-style-type: none"> All personnel must be fully briefed before back burning operations begin. Backburning in areas of Low - Moderate DFH will require the use of wind, or low humidity to maintain effectiveness. Backburning in Broadbush must be carefully planned and timed to avoid fire runs. Preparation for backburning may require "seed" Broadbush on the edge of containment lines to assist light-up during low wind conditions.
Command & Control	<ul style="list-style-type: none"> The "on-site" agency or the primary manager of the fire, but must ensure the relevant land management agency is notified promptly. On the arrival of other containment agencies, the initial Incident Controller shall liaise with the RFS to ensure that the agency in command is determined and an Incident Controller is appointed. 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 after the cessation of the incident.
Containment Lines	<ul style="list-style-type: none"> Plant must only be used with the prior consent of a senior NPWS/AWC Officer. Plant must always be guided and supervised by an experienced officer, and accompanied by a support vehicle (NPWS/AWC). When engaged in direct or parallel back, this must be in a fighting vehicle. Plant must be excluded from Brigalow woodland and Gyalga Tanklands. Containment lines running along valley areas should be constructed 20-50 metres from the gully line to avoid stream erosion. Plant must be washed down, where practicable, prior to entering NPWS estates and again on exiting NPWS estates.
Earthmoving Equipment	<ul style="list-style-type: none"> The use of boom, wetting agents and retardants will NOT be permitted within 50 metres of dams and the aerial use of foam, gels and retardants should be approved by the Branch Director or delegate. The use of retardants requires the approval of the Branch Director or delegate. Where practicable, containment lines should be established and established as part of the wildfire suppression operation.
Fire Suppression	<ul style="list-style-type: none"> Consider employment of a bulk water carrier to support fire operations. Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations.
Visitor Management	<ul style="list-style-type: none"> Implement the emergency management plan during Severe + Fire Danger, or when fires are threatening walking trails and public use facilities. Ensure the closure is advertised on the NPWS visitor website. A risk assessment of any guided activities will be undertaken if the FDI is Very High, or if there is a fire in the reserve. Advise agencies of fire threats, and the restrictions in place for entry to the reserve.
WARNINGS	<ul style="list-style-type: none"> The potential rate of spread in Broadbush areas is very rapid, and the risk of entrainment very high. Backburning should not be attempted during periods of raving fire, particularly in front of the head. New containment lines may only be constructed in adjoining vegetation with LOW - MODERATE DFH. Sub-soils in low gradient areas can turn to slush when saturated. Nights, grades and dozers can readily bog in to slush, or worse. Western fire runs may occur from unsecured western flanks with night-time easterly changes. Parts of the AWC managed lands are surrounded by a fence with locked gates as part of their land management plans. Keys are held by AWC staff. The Director Northern Inland Branch (NPWS) and the Cathryn Ann Manager (RFS) AWC must be contacted if access is required to fenced lands. AWC should be consulted on any fire issues likely to impact on this management area. Black text - general guidelines. Blue text - reserve specific guidelines. Red text - important warnings.

Heritage Guidelines

Category	Guidelines
Aboriginal Cultural Heritage	<ul style="list-style-type: none"> NS 1 - As far as possible protect site from fire. Do not cut down trees. NS 2 - As far as possible protect the site from fire. Avoid all ground disturbance and driving over sites. Avoid water bombing which may cause ground disturbance. NS 3 - Avoid all ground disturbance. Avoid water bombing. Site may be burnt by fire without damage. Moulded trees <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. Habitat sites <ul style="list-style-type: none"> Exclude control line construction from sites. Consider a buffer zone of about 50 metres from the sites. AWC's easements should be checked as part of planning for fire operations. Old dog fence <ul style="list-style-type: none"> As far as possible, protect sections of dog fence from fire. Use of foams & retardant is acceptable. Ironbark Creeper Historic precinct <ul style="list-style-type: none"> As far as possible, protect the precinct from fire. Exclude control line construction from the precinct. Use of foams & retardant is acceptable.
Threatened Plants & Flora	<ul style="list-style-type: none"> The protective actions for threatened flora have been incorporated into the Operational Guidelines. Machinery should be excluded from Brigalow woodland. The soils within this reserve are generally highly dispersive, and very susceptible to erosion after disturbance. The construction of control lines aligned to the direction of water flow will be particularly vulnerable. Light blading must be employed during control line construction. Rip drains or roll-overs must be constructed as soon as possible.
Soil Erosion Management	<ul style="list-style-type: none"> Light blading must be employed during control line construction. Rip drains or roll-overs must be constructed as soon as possible.

Suppression Strategies

Vegetation Class	Guidelines
Conditions	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. Direct and parallel attacks may be applied with earthmoving machinery and fire units. Fire danger rating VERY HIGH - EXTREME <ul style="list-style-type: none"> As far as possible, protect the site from fire, and do not cut trees. If fire is running, it will slow considerably when it reaches Brigalow, Bimble Box or Pilliga Box.
Broadbush / Ironbark woodland	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. Direct and parallel attacks may be applied with earthmoving machinery and fire units. Fire danger rating LOW - HIGH <ul style="list-style-type: none"> Fire runs extended control line construction rates. Secure and deeper control lines on the next predicted downwind side of the fire. Backburning effectiveness will drop significantly in the after humidity starts to rise in the early morning.
Broadbush / Hook-leaved wattle shrublands	<ul style="list-style-type: none"> Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. Direct and parallel attacks may be applied with earthmoving machinery and fire units only on dead grasses or vegetation with LOW DFH. Fire danger rating LOW - HIGH <ul style="list-style-type: none"> Do not attempt backburning in the predicted path of running fire, 10-20m tall. Backburning must be carefully timed and planned to avoid adding to fire runs. Secure and deeper control lines on the next predicted downwind side of the fire, and wind drops, in the early evening. Parallel attacks may be applied with earthmoving machinery and fire units only on dead grasses or vegetation with LOW DFH. Fire runs should be anticipated with winds from any direction. Entrapment risk is very high.



Vegetation Class (Keith)

Vegetation Class	Vegetation Management Guidelines
Pilliga Outwash Dry Scrophyl Forests	<ul style="list-style-type: none"> Open forest dominated either by white cypress pine, ironbark or bullock or dirty gum and while cypress pine, 10-25m tall. An interval between fire events of less than 20 years should be avoided. A high intensity fire may be permitted after a fire free interval of 30 - 50 years. Communities dominated by ironbark and hook-leaved wattle or fringe myrtle and western gum. An interval between fire events greater than 25 years should be avoided (includes Broadbush areas).
Shrublands	<ul style="list-style-type: none"> Open forest dominated by ironbark acalyptus and cypress pine, 10-20m tall. An interval of fire events less than 15 years and greater than 40 years should be avoided, but a higher fire interval may be permitted after a fire free interval of 25 years.
Western Slopes Dry Scrophyl Forests	<ul style="list-style-type: none"> Open woodlands dominated by bimbale box, belt, wattle and brigalow, 10-20m tall, with an understorey of sparse shrubs and ephemeral grassy ground cover. An interval of fire events less than 20 years should be avoided. Exclude the use of machinery from brigalow woodland.
North-west Floodplain Woodlands	<ul style="list-style-type: none"> Woodlands with wattle, ironbark, recently burnt areas of vegetation with LOW DFH. Do not attempt backburning in the predicted path of running fire, 10-20m tall. Backburning must be carefully timed and planned to avoid adding to fire runs. Secure and deeper control lines on the next predicted downwind side of the fire, and wind drops, in the early evening. Parallel attacks may be applied with earthmoving machinery and fire units only on dead grasses or vegetation with LOW DFH.
Western Slopes Grassy Woodlands	<ul style="list-style-type: none"> Derived sparsely-grassy grassy woodland, with sparse white box and white cypress pine. An interval of fire events less than 15 years and greater than 40 years should be avoided. Exclude the use of machinery from brigalow woodland.
Inland Floodplain Swamps	<ul style="list-style-type: none"> No prescribed burning to be applied. Exclude the use of machinery.

Vegetation Threshold

Vegetation Threshold	Treatment
Too Frequently Burnt	Fire thresholds have been exceeded. Protect from fire as far as possible.
Vulnerable to Frequent Fire	The area will be Too Frequently Burnt if it burns this year. Protect from fire as far as possible.
Within Threshold	Fire history is within the threshold for vegetation in this area. A burn is neither required nor should one necessarily be avoided.
Low 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 eg. cleared land, rock.

NB. Fire thresholds are defined for vegetation communities to conserve biodiversity

Fire Type

Fire Type	Fire Details
Prescribed Burn	<ul style="list-style-type: none"> 2016-17: Keelmore - low intensity patchy burn 2015-16: Oaklands Wobby, Old Fence Rd West - low intensity patchy burns 2015-12: Billy Road - low intensity patchy burn 2010-11: Railway Survey 2, L Road, Dry Road - low intensity patchy burns 2009-10: Railway Survey 1, Pickaxe North, Pickaxe South - low intensity patchy burns
Wildfire	<ul style="list-style-type: none"> 2014-15: Cubbo Forest Gwabber, Brigalow Road 2008-09: Linwood Road 2006-07: Goldmine Road, Pilliga 4, Kings Road (off-park)

Fire Management Zone

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 LZMs is to conserve biodiversity and protect cultural heritage. Manage fire consistent with fire thresholds.