

Evans Crown Nature Reserve Fire Management Strategy 2009

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.

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Contact: NPWS Kangaroo Area Office - 38 Ross St - Oberon NSW 2787.

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Endorsed by: Robert Conroy, Executive Director, Park Management Division

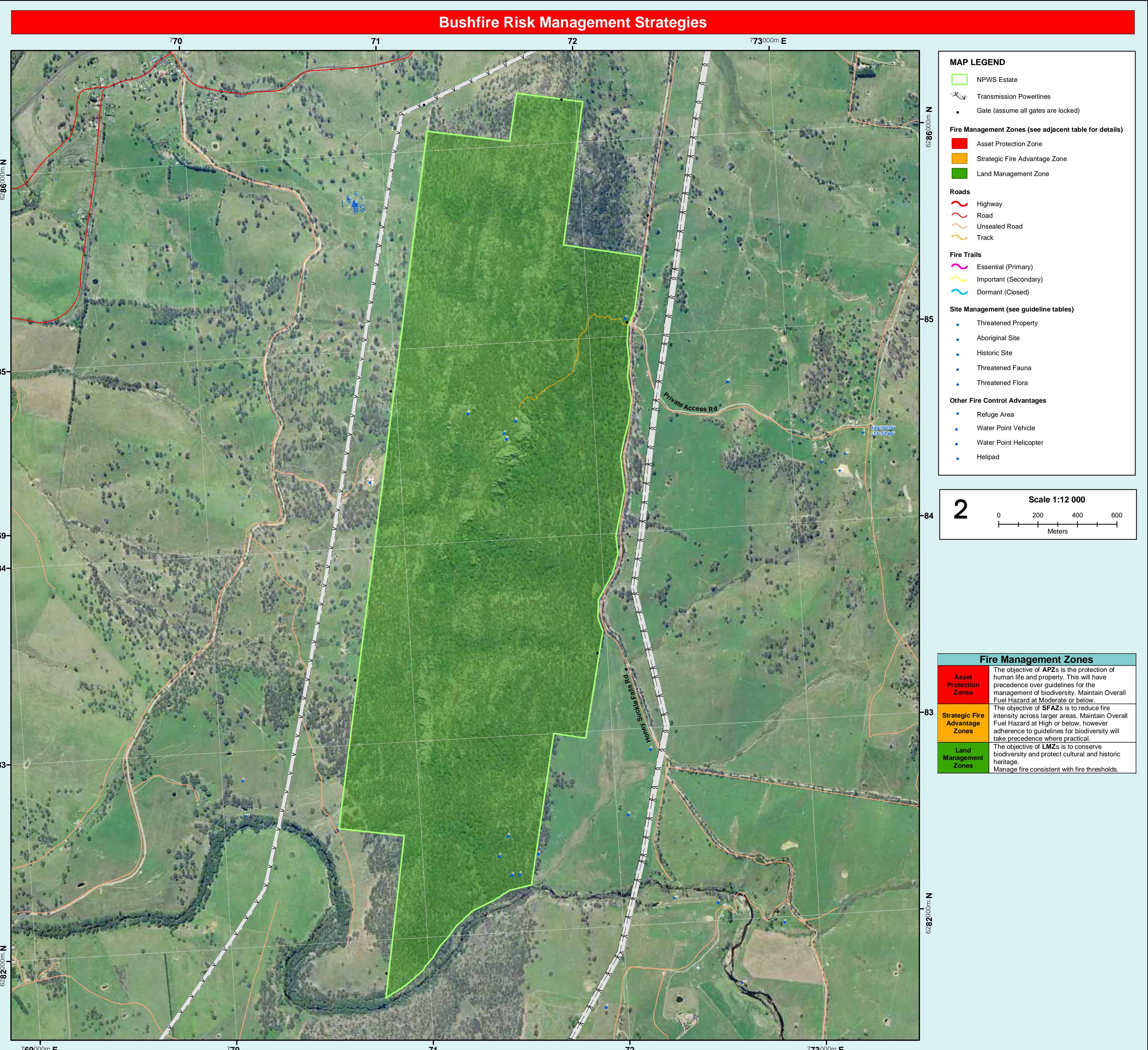
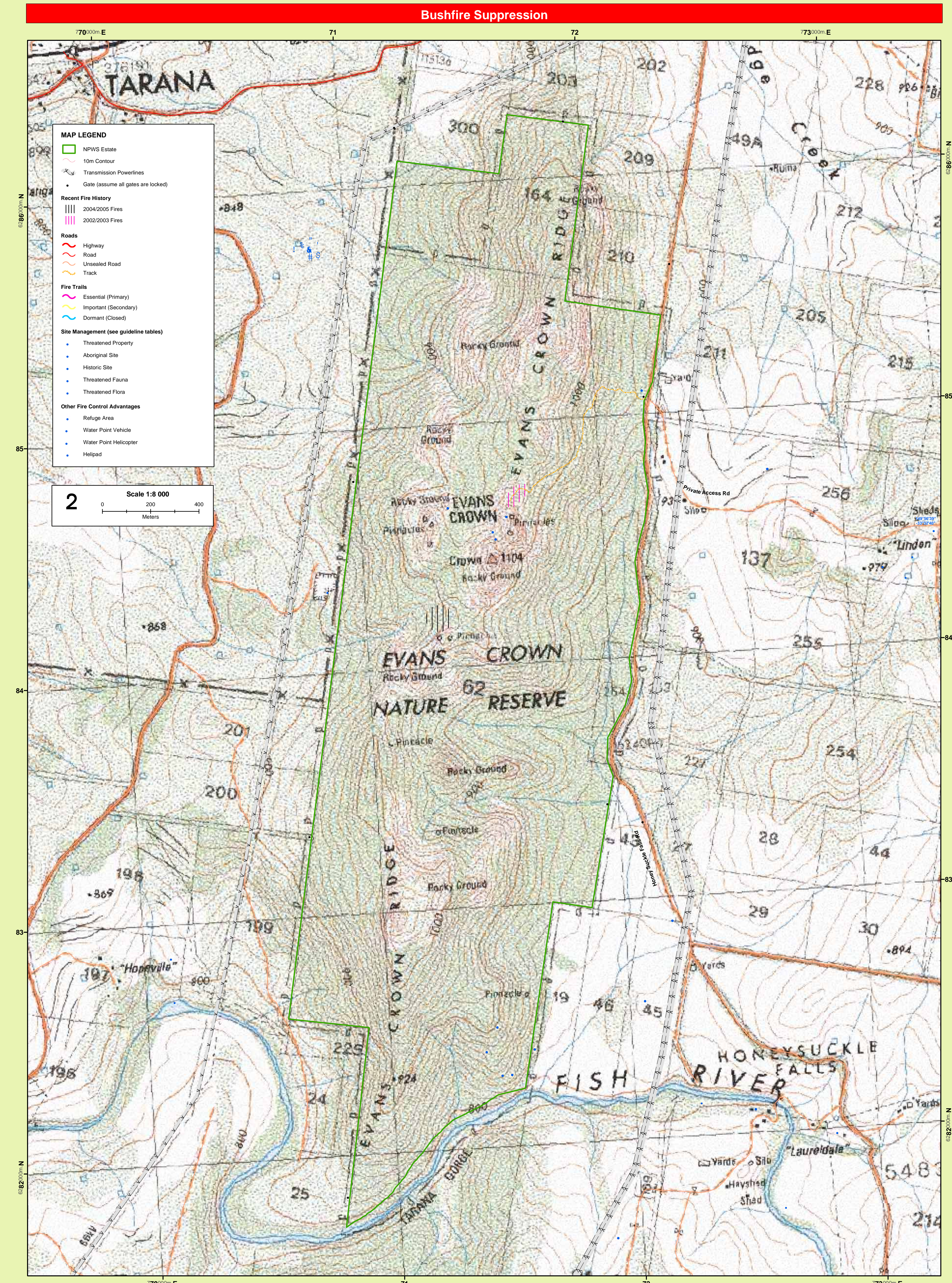
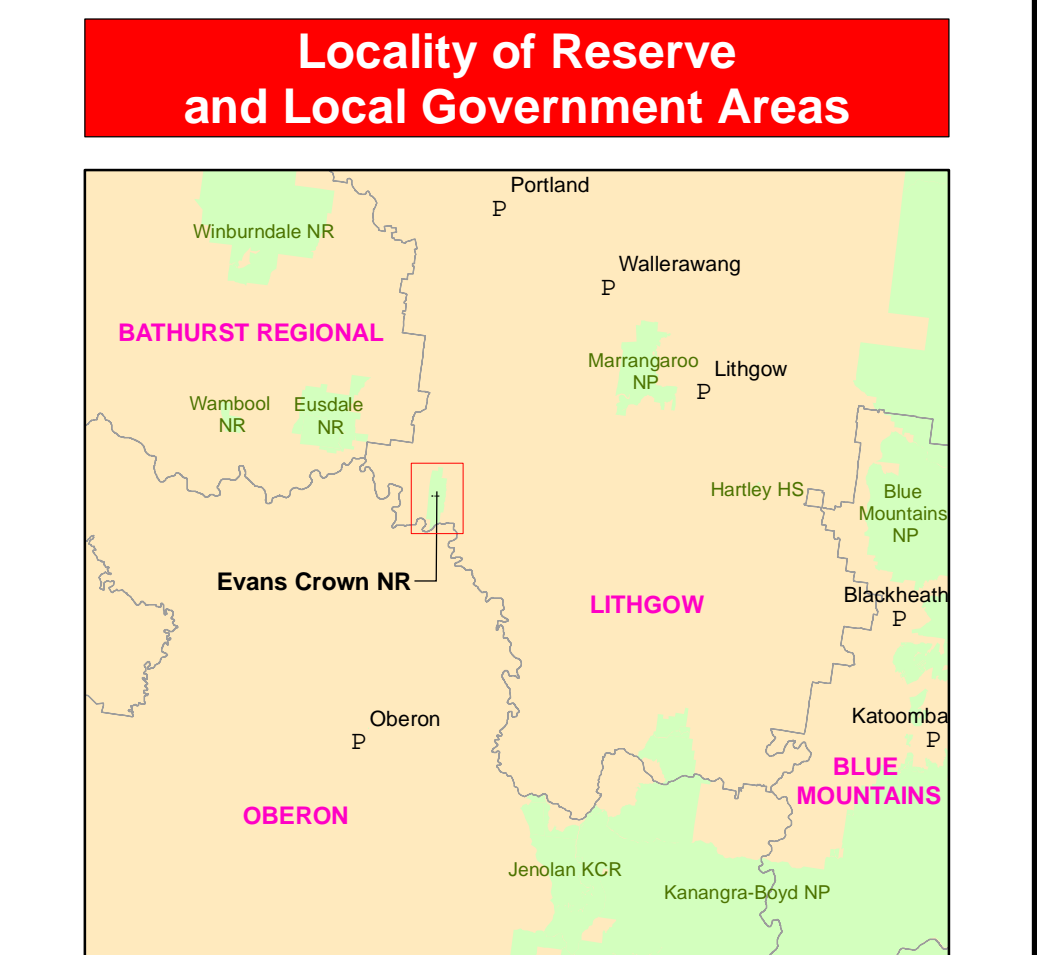
Map Details: Base Topography: Satellite orthorectified image (see link above) 1:25k Topographic Map: Tams 850-18 1867 (LPI)

Communications Information

Service	Channel	Location and Comments
NPWS - VHF	Ch 1	High points only
Aircraft - VHF	Ch 7	Will be allocated by the State Air Desk
Mobile Phone - Next G		High points only
Mobile Phone - GSM		High points only
Satellite Phone		Service is best available in areas that are not covered by heavy canopy or open areas such as grazing land, quarries or road intersections (limited)

Contact Information

Agency	Position/Location	Phone
EMERGENCY	ANY FIRE	000
Blue Mountains Regional Duty Officer / After Hours Page		Call pager 016 301 161 and request the "Blue Mountains Regional Duty Officer". Leave brief message and a reply contact number. Fire Room 400 1107, 4787 3114. Fire exclusion line 4787 6094, 4787 6114 (fax).
National Parks & Wildlife Service (NPWS)	Kangaroo Area Office, 38 Ross St Oberon 2787	6336 1972 - 6336 2122 (fax)
		4784 7300
		6336 1996
		4784 7306 (Senior Ranger, Fax)
		4784 7311 (Regional Manager)
		4782 9159 (fax)
		9792 1700
		9792 1602 (fax)
Rural Fire Service (RFS)	Oberron District Office	6336 3044 - 6336 4073 (fax)
	Lithgow Fire Control Centre	6331 1862 - 6332 3077 (fax)
NSW Fire Brigades	Emergency (see contacts list)	000
State Emergency Service (SES)	Emergency	132 500 (Emergency Line)
	Emergency (see contacts list)	6331 1729 (Oberron)
NSW Police Service	Emergency	6336 1900 (Oberron)
	Emergency (see contacts list)	6332 8209 (Lithgow)
Tourism Centres	Heritage Centre Blackheath	4787 8877 ext 1
	Oberron Tourism Office	6331 1869 - 6331 4259 (fax)
	Lithgow Tourism Office	6331 2044 - 6331 2023 (fax)
State Forests	Lithgow Council	6334 9999 - 6331 4259 (fax)
Local Councils	Oberron Council	6336 1930 - 6336 2001 (fax)
	Bathurst	6331 1066



Operational Guidelines

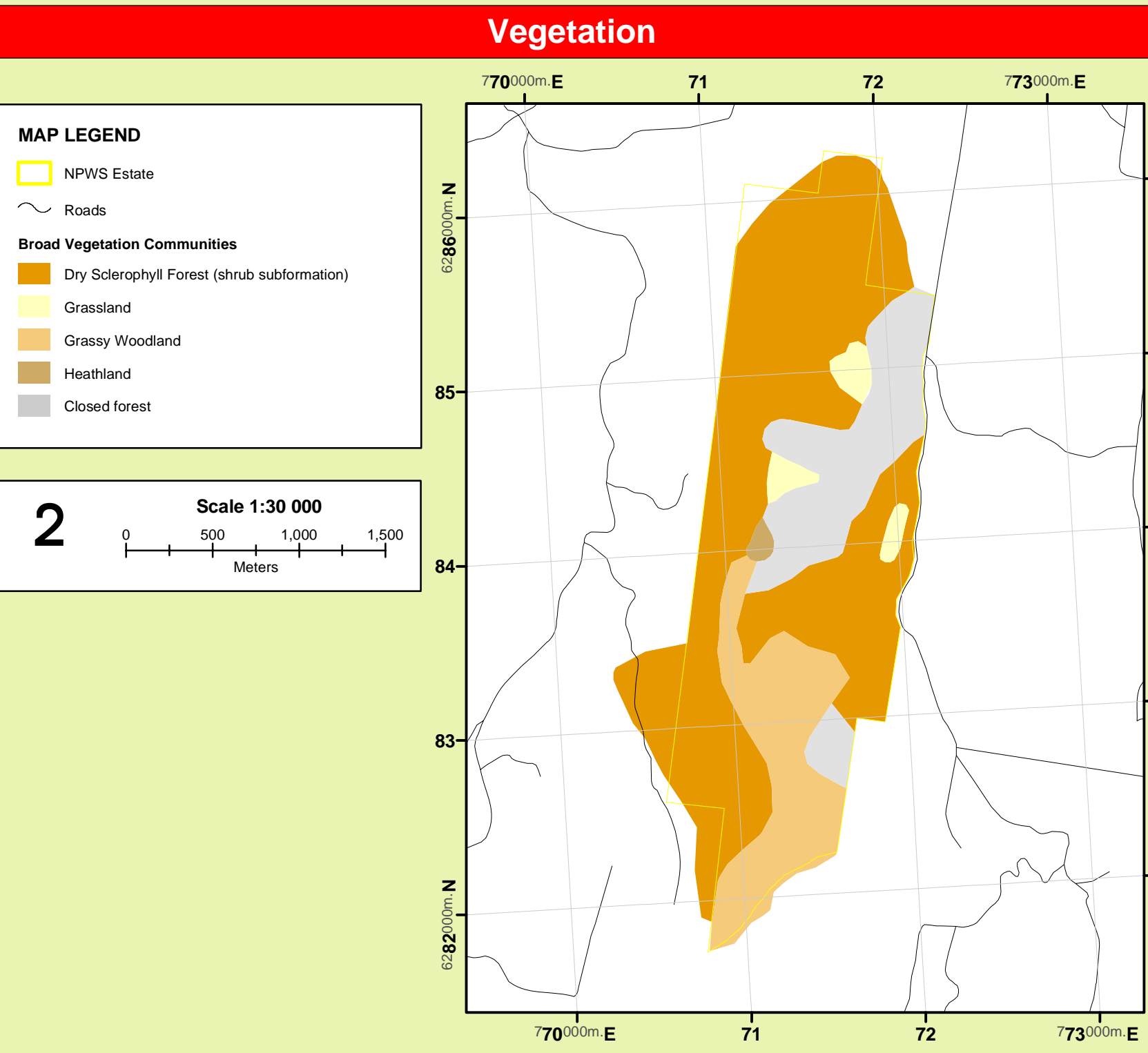
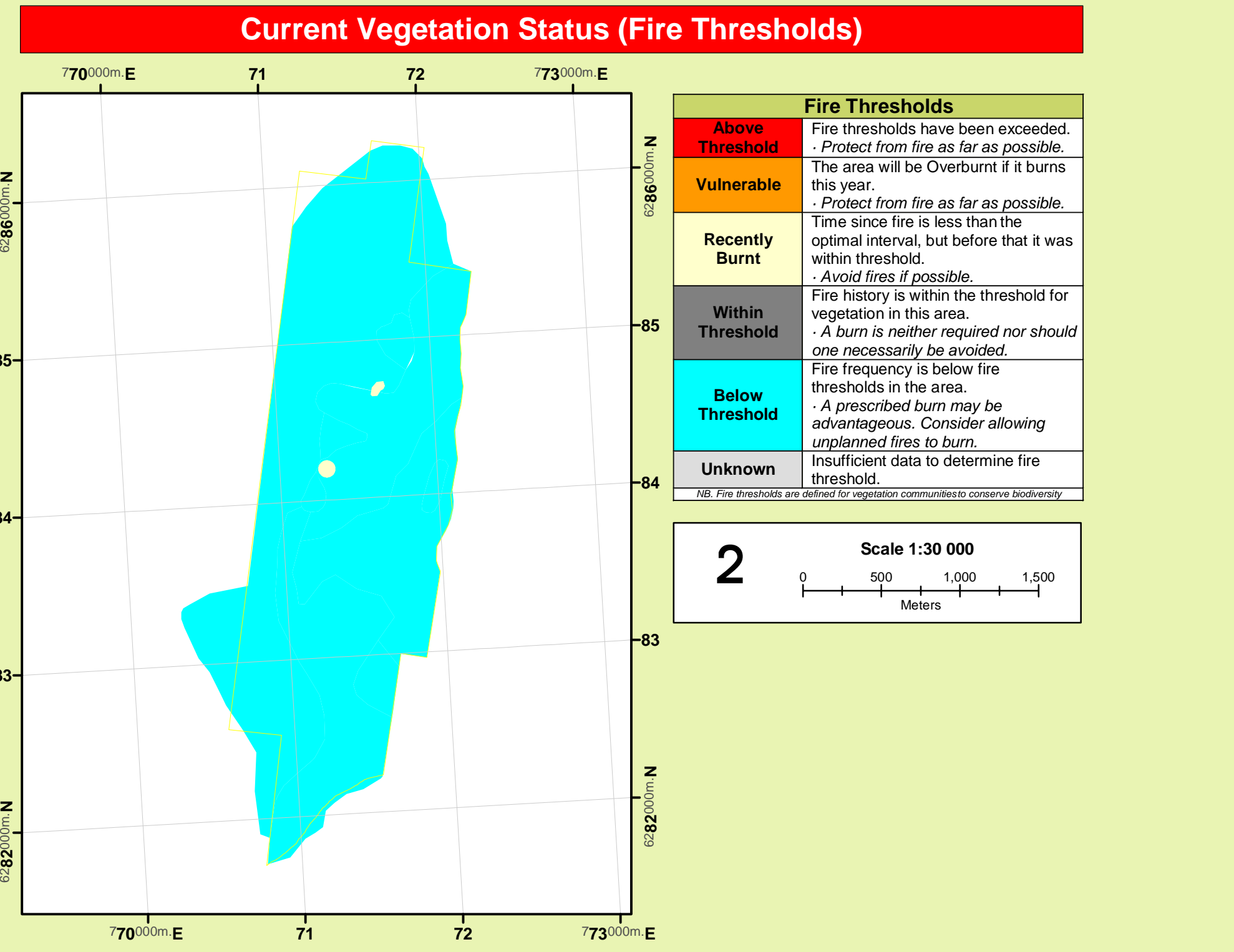
Refer to Fire Management Manual 2008.

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

General	Guidelines
Aerial Water Bombing	<ul style="list-style-type: none"> The use of bombing aircraft should support containment operations by aggressively attacking fire fronts and backing. 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.
Aerial Ignition	<ul style="list-style-type: none"> Aerial ignition may be used during back burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Regional Manager or Senior NPWS Officer. Unless incineraries to rapidly progress back-burns down slope where required. 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, backburning should commence when the humidity begins to rise in the late afternoon or early evening. With a lower FDI backburning may be safely undertaken during the day. When practicable, clear a fire track around dead and fibrous fuelbed trees adjacent to containment lines prior to backburning, or wet down these trees as part of the backburn operation. Avoid ignition of backburns at the bottom of slopes where a long and intense fire may result.
Backburning	<ul style="list-style-type: none"> The first competent agency on site may assume control of the fire, but must ensure the relevant local management agency is notified promptly. On the arrival of other competent agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BEMC Policy of Operations. Construction of new containment lines should be avoided, where practicable, except where they can be controlled and managed to avoid environmental impact. New containment lines require the prior consent of a senior NPWS officer. Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. All containment lines not required for other purposes should be closed at the cessation of the incident. All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location. Earthmoving equipment not to be used in this reserve for firefighting purposes.
Command & Control	<ul style="list-style-type: none"> Construction of new containment lines should be avoided, where practicable, except where they can be controlled and managed to avoid environmental impact. New containment lines require the prior consent of a senior NPWS officer. Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. All containment lines not required for other purposes should be closed at the cessation of the incident. All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location. Earthmoving equipment not to be used in this reserve for firefighting purposes.
Containment Lines	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. All containment lines not required for other purposes should be closed at the cessation of the incident. All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location. Earthmoving equipment not to be used in this reserve for firefighting purposes.
Earthmoving Equipment	<ul style="list-style-type: none"> Earthmoving equipment not to be used in this reserve for firefighting purposes.
Fire Advantage Recording	<ul style="list-style-type: none"> All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database. Writing and logging agency (if available) are permitted for use in wildfire suppression. The use of retardant is 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 100m of rainforest, wetlands, dams and beaver. Areas where the suppression chemicals are used must be mapped and the used product name recorded. The Threatened Species Operational Guidelines are to be observed.
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. The overall impact of retardant 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 agencies must be notified. Smoke management must be in accordance with relevant RTA traffic management guidelines.
Rehabilitation	<ul style="list-style-type: none"> The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations. Always assume fires are energised. Bushes or trees burning in prescribed burnings present a real threat of creating a phase to ground shot - KEEP AT LEAST 50M CLEAR. An fire trail requires the prior consent of the Senior NPWS Officer and should be avoided where reasonable alternatives are available.
Smoke Management	<ul style="list-style-type: none"> The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations. Always assume fires are energised. Bushes or trees burning in prescribed burnings present a real threat of creating a phase to ground shot - KEEP AT LEAST 50M CLEAR. An fire trail requires the prior consent of the Senior NPWS Officer and should be avoided where reasonable alternatives are available.
Visitor Management	<ul style="list-style-type: none"> Always assume fires are energised. Bushes or trees burning in prescribed burnings present a real threat of creating a phase to ground shot - KEEP AT LEAST 50M CLEAR. An fire trail requires the prior consent of the Senior NPWS Officer and should be avoided where reasonable alternatives are available.
High Voltage Powerlines	<ul style="list-style-type: none"> Always assume fires are energised. Bushes or trees burning in prescribed burnings present a real threat of creating a phase to ground shot - KEEP AT LEAST 50M CLEAR. An fire trail requires the prior consent of the Senior NPWS Officer and should be avoided where reasonable alternatives are available.
Tree Management	<ul style="list-style-type: none"> Always assume fires are energised. Bushes or trees burning in prescribed burnings present a real threat of creating a phase to ground shot - KEEP AT LEAST 50M CLEAR. An fire trail requires the prior consent of the Senior NPWS Officer and should be avoided where reasonable alternatives are available.

Threatened Fauna Fire Ecology

Label	Name	Fire Ecology
F01	Booroolong Frog (Vulnerable)	<ul style="list-style-type: none"> Buffer known habitat (rocky flowing streams) from all fire management activities. Avoid high frequency and intensity fires to limit erosion potential. Avoid fire during breeding season of August to early autumn.
F02	Southern Bell Frog (Vulnerable)	<ul style="list-style-type: none"> Buffer potential or known habitat (100m) from all fire management activities. Avoid high frequency fires - may lead to a build up of sediments in small ponds used for breeding. Avoid fire during breeding season. Breeding season is in warmer months, spring through to autumn, and is triggered by increased water flow and flooding events. Maintain a mosaic of age classes within habitat. Avoid frequent, high intensity burns within known potential habitat. Burns should be of low intensity preferably outside the flowering season of preferred feed trees, Eucalyptus spp. Low intensity burns will ensure that sufficient prey resource remains for the short term survival. Protect known nest sites. Potential for inappropriate fire regimes to reduce habitat and prey diversity. Hollows in standing dead or live trees and tree stumps are essential for nesting and need to be protected prior and post fire activity. Maintain fire frequency suitable for management of western slope Dry sclerophyll forest and western slopes Grassy woodlands (preferred vegetation associations).
F03	Swift Pardal (Endangered)	<ul style="list-style-type: none"> Maintain a mosaic of age classes within habitat. Avoid frequent, high intensity burns within known potential habitat. Burns should be of low intensity preferably outside the flowering season of preferred feed trees, Eucalyptus spp. Low intensity burns will ensure that sufficient prey resource remains for the short term survival. Protect known nest sites. Potential for inappropriate fire regimes to reduce habitat and prey diversity.
F04	Barking Owl (Vulnerable)	<ul style="list-style-type: none"> Low intensity burns will ensure that sufficient prey resource remains for the short term survival. Protect known nest sites. Potential for inappropriate fire regimes to reduce habitat and prey diversity.
F05	Brown Thornbill (Vulnerable)	<ul style="list-style-type: none"> Hollows in standing dead or live trees and tree stumps are essential for nesting and need to be protected prior and post fire activity. Maintain fire frequency suitable for management of western slope Dry sclerophyll forest and western slopes Grassy woodlands (preferred vegetation associations).
F06	Grey-crowned Babbler (Vulnerable)	<ul style="list-style-type: none"> Avoid high frequency fires, maintain open grassy woodlands habitat essential for this species. Avoid all fire during breeding season July to February, with nests located in shrubs, saplings and low branches. Protect known nesting sites from fire. Maintain mosaic burn within habitat to ensure food resources.
F07	Diamond Firetail (Endangered)	<ul style="list-style-type: none"> Fire ecology unknown.
F08	Brush-tailed Rock Wallyaby (Endangered)	<ul style="list-style-type: none"> Fires may reduce cover, increase predation. Protect refuge areas from high intensity burns. Avoid fire during breeding season. Maintain variety of age classes in understorey vegetation by mosaic burning. Monitor population demographics in relation to fire.



Vegetation Communities and Biodiversity Thresholds

Vegetation Community	Biodiversity Thresholds	Fire Behaviour	Year Burnt	Area (Ha)
Dry Sclerophyll Forest (Shrub subcommunity)	<ul style="list-style-type: none"> Avoid successive fires at intervals of < 7 years. Avoid fire exclusion for a period of > 30 years. 	Moderate	2002	0.40
Grassland	<ul style="list-style-type: none"> Avoid successive fires at intervals of < 2 years. Avoid fire exclusion for a period of > 10 years. 	Moderate	-	-
Greasy Woodland	<ul style="list-style-type: none"> Avoid successive fires at intervals of < 5 years. Avoid fire exclusion for a period of > 40 years. 	Low	-	-
Heathland	<ul style="list-style-type: none"> Avoid successive fires at intervals of < 7 years. Avoid fire exclusion for a period of > 20 years. 	High	-	-
Closed Forest	<ul style="list-style-type: none"> Not applicable. 	Low	2002 2005	0.15 0.85

Resource Management Guidelines

Resource	Aboriginal Cultural Heritage Site Management	Guidelines
A		<ul style="list-style-type: none"> Site unlikely to be affected by fire. Avoid ground disturbance including earthmoving machinery, hand tools and driving over sites. Avoid all water bombing activities that may cause ground disturbance.
H1		<ul style="list-style-type: none"> As far as possible protect site from fire. Reduce fuel loads by mowing / slashing a 10m buffer around structure / barn.
H2		<ul style="list-style-type: none"> Heritage site unlikely to be affected by fire. Avoid use of earth moving machinery. Avoid all water bombing activities that may cause ground disturbance.
T		<ul style="list-style-type: none"> Where possible property owners with assets at risk from a wildfire event should be kept informed regarding the progress of the fire, and asked for an assessment of their current level of asset protection preparedness.

Suppression Strategies

Current FDR	Forecast FDR	Suppression Strategies
Low - Mod	Low - Mod	<ul style="list-style-type: none"> As far as possible, undertake indirect, parallel or direct attack along existing control lines. As far as possible, maximise areas burnt without threatening assets, including biodiversity. Identify and survey backfire control lines.
Low - Mod	-> High	<ul style="list-style-type: none"> Understand indirect, parallel or direct attack to minimise the time taken to contain the fire. Construct new control lines if necessary to minimise the time to contain the fire. Identify and survey backfire control lines.
High	AB	<ul style="list-style-type: none"> Secure and deeper control lines along the most predicted downwind side of the fire. Understand indirect attack along existing or newly constructed control lines. Secure and deeper control lines along the most predicted downwind side of the fire. Identify and survey backfire control lines.
AB	AB	<ul style="list-style-type: none"> Ensure there is sufficient time to secure control lines before the fire gets to them. If there is insufficient time to secure control lines, fall back to the next potential control line. As far as possible, implement threatened species and cultural heritage management guidelines.