



Carrabear Nature Reserve Fire Management Strategy 2016 – 2021



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.

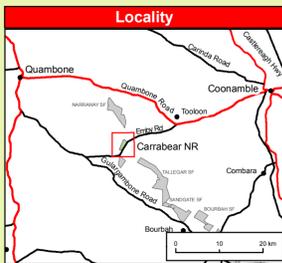
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Service	Channel	Location and Comments
NPWS VHF		• Unavailable, on the fringe of both Channels 31 and 32
RFS	W112	• Mount Foster
UHF - CB		• Small fires - Channel 10 • Large fires - determined by IMT
Aviation	126.7	• C1A
Mobile phone		• Telstra 3G available only with boosted signal • Satphone required

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer (24 hour) Coonabarabran Area Office (bus. hours)	6842 3041 6842 1311
NSW RFS North West	Bill Britt (Zone Manager) Duty Officer	0427 263 299 6822 4422
RFS Rural Fire Brigades	Nedgera - Ross Chandler	0429 032 941
NSW Fire Brigade	Katombra	4782 6077
Emergency Services	Police, Fire, Ambulance	000
SES		13 2500
Police	Coonamble	6822 1468
Council	Coonamble	6822 1333

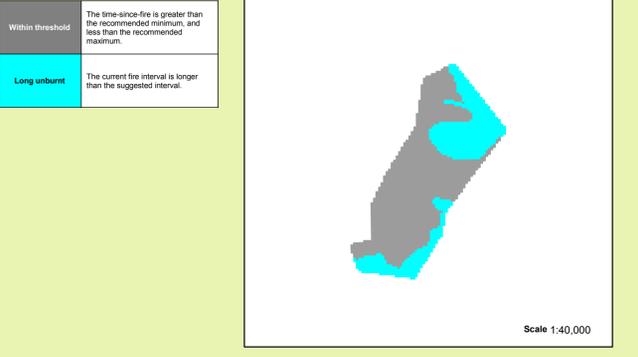


Map Details	
Date: Geocentric Datum of Australia 1994 GDA 94	Date: ADS 40 Base Imagery Gulgargombone 2012
Projection: Map Grid Australia Zone 55	Scale: 1:50000 Topographic mapsheets 8535N COMBARA
	Scale: Noted scales are true when printed on A1 size paper

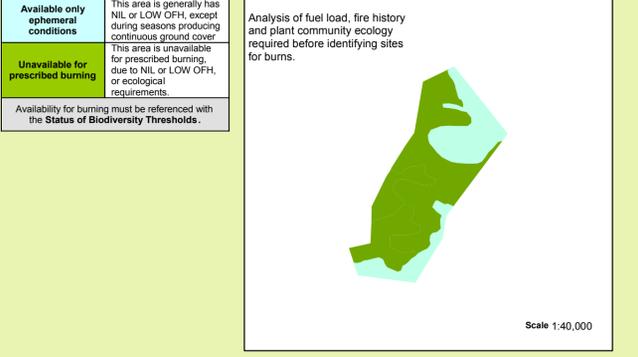
Vegetation



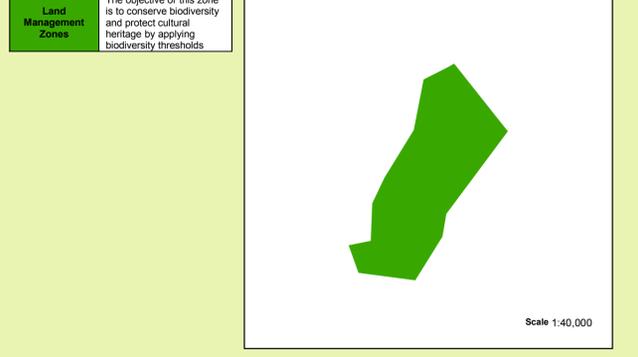
Status of Biodiversity Thresholds



Vegetation Suitability for Prescribed Burning



Bushfire Risk Management Strategies



Fire Season Information

Wildfires	The critical wildfire season is likely to occur: • after a prolonged period of above average rainfall, leading to prolific grass growth; • during the period November to January when there is a higher incidence of lightning.
Prescribed Burning	Prescribed burning is unlikely to be effective in most years. The exception will be after a prolonged period of above average rainfall, leading to prolific grass growth. Recommended timing for prescribed burning is following curing of this grass.

Operational 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 Incident Controller. All personnel must be fully briefed before back burning operations begin.
Backburning	<ul style="list-style-type: none"> Backburning in areas of Low - Moderate OFH will require the use of wind, or low humidity to maximise effectiveness. Backburning should be timed for late afternoon and early evening. Where practicable to assist 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.
Command & Control	<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. A senior NPWS officer is to liaise with the RFS to ensure that the agency in command and control is determined and an Incident Controller is appointed.
Containment Lines	<ul style="list-style-type: none"> Existing or previous roads, tracks and control lines should be used wherever possible. 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.
Earthmoving Equipment	<ul style="list-style-type: none"> Plant may only be used with the prior consent of a senior NPWS officer. Plant must always be supervised by an experienced officer, and accompanied by a fire-fighting vehicle when engaged in direct or parallel attack. Plant must be washed down, where practicable, prior to entering and exiting NPWS estate.
Fire Suppression Chemicals	<ul style="list-style-type: none"> The use of foam, wetting agents 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 a senior NPWS officer.
Rehabilitation	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Watering points	<ul style="list-style-type: none"> Consider deployment of bulk water carriers to support fire operations.
Smoke Management	<ul style="list-style-type: none"> Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations.
Visitor Management	<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.
WARNINGS	Black text – general guidelines Blue text – reserve specific guidelines Red text – Major warnings

Operational Guidelines - Heritage

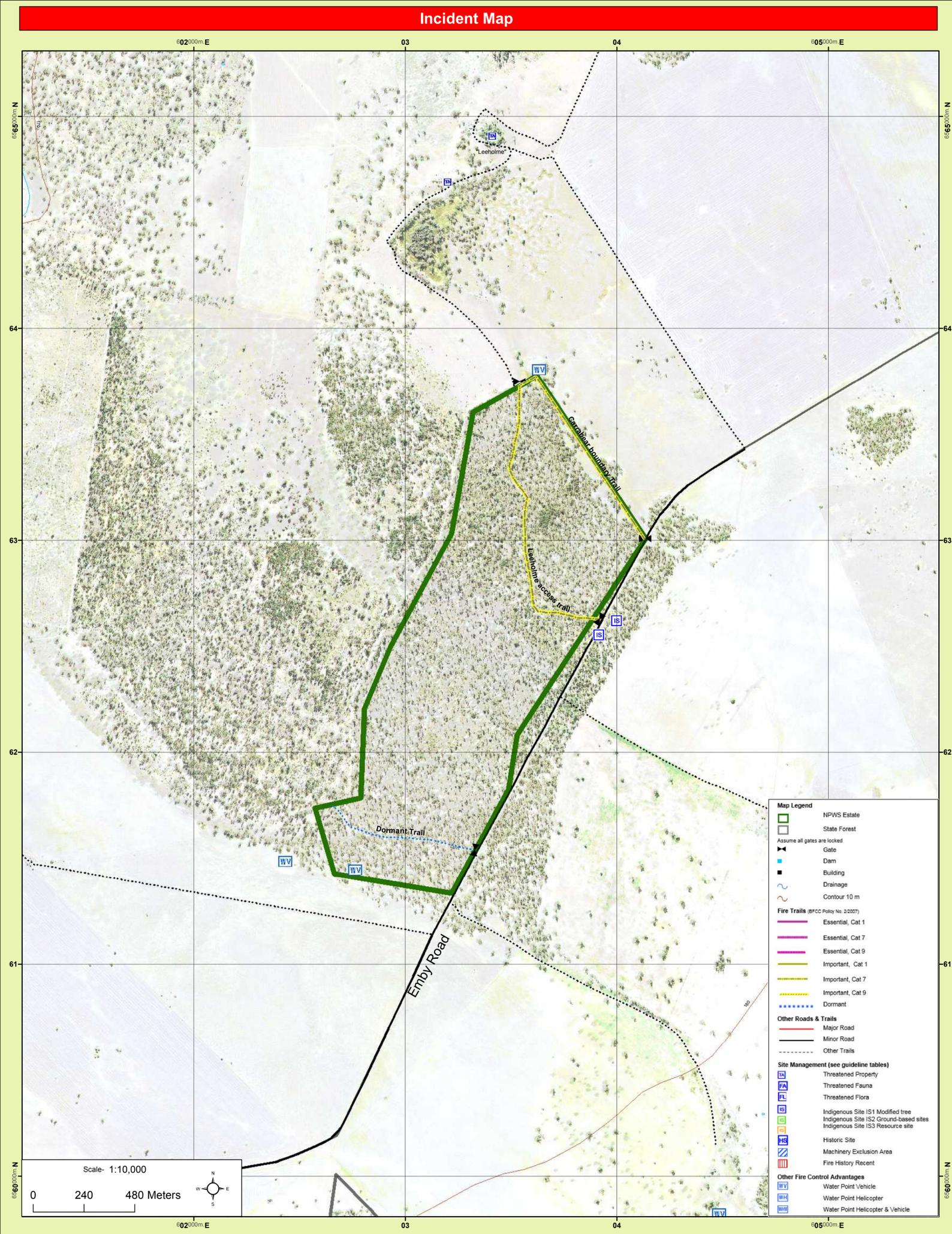
Resource	Guidelines
Modified trees (IS1), including scarred trees	<ul style="list-style-type: none"> Protect the site from fire, clear base of litter and shrubs, exclude site tree from fire where possible Foam may be used to protect the tree, or to extinguish fire Do not cut trees
Aboriginal Cultural Heritage Site Management	<ul style="list-style-type: none"> Ground based sites (IS2), including: camp sites, artefacts, grinding grooves, waterholes and quarries Protect site from any ground disturbance, including the use of earth-moving equipment and vehicles Resource sites (IS3), including fig-tree groves Protect site from physical disturbance Avoid any burning into Dry Vine Rainforests AIIMS database must be checked as part of planning for fire operations
Historic Heritage Site Management	<ul style="list-style-type: none"> No historic structures and sites identified
Threatened Species Management	<ul style="list-style-type: none"> Protective actions are incorporated in the Operational Guidelines

Suppression Strategies

Conditions & forecast	Guidelines
Fire danger rating LOW - HIGH	<ul style="list-style-type: none"> Consider a broad containment strategy using existing tracks, low fuel areas, open areas and recently burnt areas.
Fire danger rating VERY HIGH - EXTREME	<ul style="list-style-type: none"> Consider a strategy containing the fire to the smallest area practicable, using a combination of ground crews, fire units, machinery and aircraft. Secure flank as soon as possible on the next predicted downwind side of the fire. Any proposed back burning must be assessed on the required resources, their capacity and the time required to mop-up and secure proposed burn edges prior to the onset of Severe + conditions, and then hold.
Catastrophic	<ul style="list-style-type: none"> Revert to property protection.

Vegetation Community	Vegetation management guidelines	Fire Behaviour
Floodplain Woodlands	<ul style="list-style-type: none"> Avoid two fire events in a period of less than 10 years Exclude fire events during extended periods of low soil moisture Prescribed burning only during late winter - early spring 	<ul style="list-style-type: none"> Potential rates of spread is low during most conditions due to LOW OFH Ephemeral seasons produce continuous grass cover, increasing potential rate of spread.
Bimble Box with ephemeral grassy understorey		
Alluvial Woodlands		
Bimble Box / White Pine / Dirty Gum with tall semi-arid shrubs	<ul style="list-style-type: none"> Avoid two fire events in a period of less than 10 years Exclude fire events during extended periods of low soil moisture 	<ul style="list-style-type: none"> Potential rates of spread is generally low due to LOW OFH Ephemeral seasons do not produce continuous grass cover

OFH = Overall fuel hazard - A rating system that includes surface (leaf litter), near surface (low shrubs & grasses), elevated (shrubs), and bark fuels



Map Legend

- NPWS Estate
- State Forest
- Assume all gates are locked
- Gate
- Dam
- Building
- Drainage
- Contour 10 m

Fire Trails (RFS Policy No. 22007)

- Essential, Cat 1
- Essential, Cat 7
- Essential, Cat 9
- Important, Cat 1
- Important, Cat 7
- Important, Cat 9
- Dormant

Other Roads & Trails

- Major Road
- Minor Road
- Other Trails

Site Management (see guideline tables)

- Threatened Property
- Threatened Fauna
- Threatened Flora
- Indigenous Site IS1 Modified tree
- Indigenous Site IS2 Ground-based sites
- Indigenous Site IS3 Resource site
- Historic Site
- Machinery Exclusion Area
- Fire History Recent

Other Fire Control Advantages

- Water Point Vehicle
- Water Point Helicopter
- Water Point Helicopter & Vehicle