

South Coast Region Cookbundoon Nature Reserve Fire Management Strategy (Type 2) 2015

Sheet 1 of 1

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 the Rural Fires Act 1997.

Endorsed by: _____ Date: / /

Director Coastal, Parks & Wildlife Group

Fire Season Information

The statutory wildfire season occurs between 1 October and 31 March. This may be extended if weather conditions lead to increased fire danger outside of this period.

Fire history indicates that fires of greater intensity & control difficulty occur between late spring and early autumn, though periods of drought may extend this from late August to June.

Prescribed burning in this area is normally undertaken from late spring to autumn. Burning may take place outside these periods for specific operational and biodiversity management objectives.

Communications Information

Service	Channel	Location and Comments
NPWS - VHF	241	• South Coast Region VHF Control
NPWS - VHF (fire ground control)	244	• Ellerslie repeater - Patchy coverage
NPWS - VHF (portable repeater)	244	• Red Rocks repeater - Patchy coverage
NPWS - VHF (portable repeater)	244	• Bulbarung repeater - Patchy coverage
NPWS - VHF (portable repeater)	244	• Line of sight to short distance
NPWS - VHF (portable repeater)	244	• 5 Watt VHF
RFS Fireground Channels	41 to 60	• Shared at NPWS Bungonia
Mobile Phone	-	• These NPWS channels correspond to RFS channels 1 to 20
Satellite Phone	-	• Moderate coverage on upper slopes, poor coverage elsewhere
		• Moderate coverage

Locality of Reserve and Local Government Areas

Operations Map - Bushfire Risk Management Strategies

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 High or below, however adherence to guidelines for biodiversity will take precedence where practical.

No APZs have been identified for this Reserve.

The objective of SFZs 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.

No areas of SFZ have been identified for this Reserve.

The objective of LMZs is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.

Zone Name	Action	Responsibility
Tarlo Gap North LMZ (11)	Maintain fire regime specific to vegetation communities detailed in the Vegetation Communities and Biodiversity Thresholds table	NPWS
Tarlo Gap South LMZ (12)	Implement the threatened species management strategies specified in the Operational Guidelines table as required	
Macquarie LMZ (14)	Implement the cultural and historic heritage management strategies specified in the Operational Guidelines table as required	
Cookbundoon North LMZ (15)		
Cookbundoon South LMZ (16)		
Escarpment South East LMZ (17)		
Escarpment South LMZ (18)		

For fire management purposes, this reserve has been divided into management units. These units can be used to treat prescribed fire or potentially as control units in the event of wildfire and generally follow trails or creek lines. These management units are identified on the map with an alpha numerical label e.g. 2.

Recent Fire History

Nil Fire in Previous 5 Years

MAP LEGEND

- NPWS Reserve Boundary
- 2013/14 Fires
- 2012/13 Fires
- 2007/08 to 2011/12 Fires

Scale 1:50 000

Operational Guidelines

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

General

- Aerial operators should be briefed on the location of transmission lines. There are no powerlines located on the reserve but numerous feeder lines are located on private property.
- Consider any locations where aircraft will operate over adjacent dwellings, or operate from publicly accessible freighting sites.
- The use of bombing aircraft should be supported by ground based suppression crews should be limited to very specific circumstances.
- Control lines must be established to isolate the burning area.
- 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 Section 44 delegate.
- Temperature, humidity trends must be monitored carefully to determine the safest times to implement back-burns. Generally, when the FDI is Very High or greater, back-burns should be avoided. When the FDI begins to rise in the late afternoon or early evening, with a lower FDI and a wind shift, back-burns may be considered.
- Avoid ignition of backburns at the bottom of slopes where a long & narrow fire front may develop.
- The NPWS is responsible for fire management within the reserve. The fire control agency on site may assume control of the fire, but must ensure the local NPWS office is notified promptly.
- On the arrival of other command agencies, the initial incident commander will consult with regard to the ongoing command, control & incident management team requirements as per the relevant BPMC Plan of Operations.
- Construction of new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact. New containment lines require the prior consent of the NPWS Area Manager.
- Preference should be given to the use of the existing trails before construction of new containment lines.
- Containment lines should be stabilised & rehabilitated as part of the wildfire suppression operation.
- All containment lines not required for other purposes will be closed at the cessation of the incident.
- All personnel involved in containment line construction should be briefed on both natural & cultural heritage sites at the location.
- Earthmoving equipment may only be used with the prior consent of a senior NPWS officer, & then only if the probability of containment is high.
- Earthmoving equipment must be always guided & supervised by an experienced officer & accompanied by a support vehicle. When engaged in direct or parallel attack this vehicle must be a firefighting vehicle.
- Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species & Cultural Heritage Operational Guidelines, & be surveyed, where possible, to identify unknown cultural heritage sites.
- Earthmoving equipment should be washed down, where practicable, prior to entering NPWS estate to avoid the transport of weeds.

Fire Advantages

- All fire advantages used during wildfire suppression operations must be mapped & where relevant added to the database.
- Watering & watering agents are permitted for wildfire suppression. Exclude the use of surfactants & retardants within 50m of watercourses and wetlands.
- The use of fire retardant is only permitted with the prior consent of the senior NPWS officer, & should be avoided where reasonable alternatives are available.
- Assets where the suppression chemicals are used must be mapped & relevant details must be noted.
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- Smoke management must be in accordance with relevant RMS traffic management guidelines.
- Any NPWS locked gates within the reserves are filled with standard key left in the area and available for use.
- During fire operations, gates may be left in closed position but not locked. All NPWS gates must be locked at the completion of the operations.
- White Box Toilet Bins
- Blakely's Red Gum Woodland EEC

Rehabilitation

- Containment lines should be stabilised & rehabilitated as part of the wildfire suppression operation.
- The Threatened Species Operational Guidelines are to be observed.
- If smoke becomes a hazard on local roads or highways, the Police, RMS & relevant media must be notified.
- Smoke management must be in accordance with relevant RMS traffic management guidelines.
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Gates

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Visitor Management

- This reserve receives minimal visitation.
- Consider public safety with initial response operations (i.e., warnings and information, closures or evacuation where instructed by Police).
- The reserve will be closed to the public during periods of Catastrophic fire danger & during wildfire suppression operations.

Fire Response & Management Strategies

General

- NPWS maintains & contributes to the detection and response arrangements across the Southern Tablelands Fire Zone, including lookouts, surveillance flights, lighting detection & communications. During periods of higher fire danger, restrictions may be placed on visitor access to the reserve. These will be notified via local media and NPWS website.
- As a NSW fire authority, NPWS ensures & maintains personnel & equipment and undertakes fire management & response within this zone.
- Fire suppression tactics in an area will primarily consider immediate safety of firefighters, minimising unnecessary disturbance & will be in accordance with Operational Guidelines detailed in this document.
- NPWS maintains & responds to fire incidents within this zone for management purposes, including bushfire risk mitigation. Some of these incidents may be detected by the public and reported to Police via Fire Control. Priority ignition points or evidence. Report any suspicious activity on or near the fireground.

Fire Detection

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Fire Response

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Fire Management (Including Fire Trails)

- NPWS will review these fire trails prior to each fire season & will maintain to specific standards.
- Other management trails will be maintained as required for management purposes or to meet environmental impacts.
- All trails should be assessed before being used for fire operations.
- Report any suspicious activity on or near the fireground.

Arson

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- Other management trails will be maintained as required for management purposes or to meet environmental impacts.
- All trails should be assessed before being used for fire operations.
- Report any suspicious activity on or near the fireground.

Contact Information

Agency	Position / Location	Phone
Regional Duty Officer (24 hour)		0428 040 584
Highlands Area Manager		0487 824
Highlands Area Office		0419 282 453
Fire Management Officer		0428 428 396
Highlands Area Office		0428 428 396
Bungonia Office		0487 232 (fax)
South Coast Regional Office		0487 470 (fax)
South Coast Regional Office		0422 2730
24 Hours		0626 3100
SES	Emergency Assistance	132 000
Goulburn	Emergency	0452 1600
Police	Emergency	0424 0799
Goulburn LAC	Emergency	0452 0399
Emergency	Emergency	000
Bookings	Bookings	131 233
Goulburn Base	Emergency	0427 3111
Goulburn Emergency Dept	Emergency	0427 3023
Council	Goulburn City Council	0427 4444
Upper Lachlan Council	Upper Lachlan Council	0452 1988
Essential Energy	24hr emergency	13 20 00
Wildfire Rescue	Wildfire Rescue	0422 3888
Wildfire Rescue	Wildfire Rescue	0422 3888
Aircraft Fuel Supply	Hill & Co (Mab) Goulburn (stump stock)	0431 3252
Aircraft Fuel Supply	Stybil (Shell) Barkers (bulk & drum)	0791 0003

Current Vegetation Status (Fire Thresholds)

Fire thresholds have been exceeded - Protect from fire as far as possible.

The area will be too frequently burnt if it burns this year.

Protect from fire as far as possible.

Fire history is within the threshold for vegetation in this area.

A burn is neither required nor should one necessarily be avoided.

Fire frequency is below fire thresholds in the area.

A prescribed burn may be advantageous. Consider allowing unburned areas to burn.

Insufficient data to determine fire threshold in this area.

Areas which do not have recommended fire intervals assigned to them are cleared land, rock.

Scale 1:50 000

Threatened Fauna Fire Ecology

WILDFIRE - Where possible, apply the following prescriptions if wildfire will impact locations where the following threatened fauna species are recorded - see Operations Map. These species have either been recorded in the reserve or within close proximity.

PRESCRIBED FIRE - When determining prescriptions to apply, refer to RFS Bushfire Environmental Assessment Code prescriptions as well as the latest research on the species.

Label	Name	Fire Ecology
F1	Callopsochilus binibinbin	• Maximise protection of hollow bearing trees by not allowing to burn out base, by aerial water bucketting and ground water bucketting.
F2	Presura australis	• Avoid falling hollow bearing trees during mop-up and control construction.
F3	Glyptotendipes leishani	• Maximise protection of Allocasuarina thickets.
F4	Glossy Black-Cockatoo	• Maximise protection of hollow bearing trees.
F5	Chironomus signatus	• Minimise extent of intense wildfire.
F6	Spotted Pardalote	• Maximise protection of coarse woody debris and stags by ground attack and mop-up with support net attack bucketting.
F7	Daphrosinota chrysopyra	• Minimise extent of intense wildfire.
F8	Scarlet Robin	• Minimise extent of intense wildfire.
F9	Scarlet Robin	• Minimise extent of intense wildfire.
F10	Scarlet Robin	• Minimise extent of intense wildfire.
F11	Phascolosaurus oenurus	• Minimise extent of intense wildfire.
F12	Koala	• All observations of Koalas are to be reported to NPWS. Do not remove or disturb Koalas. Injured and distressed animals to be removed and taken to veterinary treatment if safe to do so.

Threatened Flora Fire Ecology

Note: There are no Threatened Flora species of EUC identified within this reserve.

WILDFIRE - Where possible, apply the following prescriptions if wildfire will impact locations where the following threatened flora species are recorded - see Operations Map. These species have either been recorded in the reserve or within close proximity but not within the reserve.

PRESCRIBED FIRE - When determining prescriptions to apply, refer to RFS Bushfire Environmental Assessment Code prescriptions as well as the latest research on the species.

Label	Name	Fire Ecology
F1	Leucopodium	• No ground disturbance (grazing, rakehoing or driving) above any species.
F2	Hoary Sunray	• In areas of known occurrences, exclusion sites for machinery should be flagged by NPWS staff familiar with the species.
F3	White Box Toilet Bin	• No staking, lopping or tree removal, minimise ground disturbance.

Vegetation

Map Legend

- NPWS Reserve Boundary
- Vegetation Formation (Keith)
- Dry Sclerophyll Forest (shrubby)
- Dry Sclerophyll Forest (shrubby/grassy)
- Forested Wetlands
- Freshwater Wetlands
- Grassy Woodlands
- Wet Sclerophyll Forest (shrubby)
- Cleared
- Endangered Ecological Community (EEC)
- White Box Toilet Bin
- Blakely's Red Gum Woodland

Scale 1:30 000

Vegetation Communities and Biodiversity Thresholds

Vegetation Community	Biodiversity Thresholds
Freshwater Wetland	• Avoid successive fires at intervals of < 15 years.
Grassy Woodland	• Avoid fire exclusion for a period of > 35 years.
Shrubby Dry Sclerophyll Forest	• Avoid successive fires at intervals of < 8 years.
Grassy Dry Sclerophyll Forest	• Avoid fire exclusion for a period of > 40 years.
Wet Sclerophyll Forest	• Avoid successive fires at intervals of < 10 years.
Cleared/Eucalyptus/Disturbed Sand/Rock/Bare Ground/Water	• Avoid successive fires at intervals of < 8 years.
	• Avoid fire exclusion for a period of > 50 years.
	• Avoid successive fires at intervals of < 25 years.
	• Avoid fire exclusion for a period of > 80 years.

Suppression Strategies

- In developing wildfire suppression strategies, the protection of life including firefighter safety is the utmost importance.
- Depending on current and forecast Fire Danger Index, fuel and resources, undertake appropriate fire control strategies (indirect, parallel or direct attack).
- Identify and survey control lines including fuel breaks.
- 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.
- Secure control lines along the predicted downward side of the fire.
- As far as possible, implement threatened species and cultural heritage management guidelines.

MAP LEGEND

- NPWS Reserve Boundary
- 10m Contour
- Fire Management Zones (see adjacent table for details)
- Land Management Zone
- Roads and Trails
- Essential Cat 1
- Essential Cat 7
- Essential Cat 9
- Important Cat 1
- Important Cat 7
- Important Cat 9
- Downed (closed)
- Management Trail
- Walking Track
- Powerline
- Other Road
- Site Management (see guideline tables)
- Indigenous Site
- Gate (assume locked)
- Threatened Fauna
- Refuge Area
- Threatened Flora
- Helped
- Historic Site
- Water Point Vehicle
- Threatened Property
- Water Vehicle & Hill
- Vehicle Turn Around

Scale 1:10 000