



NADGEE Nature Reserve

Fire Operations Map

2005

Sheet 2 of 2

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.

The NSW National Parks and Wildlife Service is a part of the Department of Environment and Climate Change.

Published by the Department of Environment and Climate Change (NSW), December 2005

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ISBN 1 74122 151X DECC 2008/228 Updated: 17 July 2008

Operational Guidelines	
Refer to Strategy for Fire Management 2003 and Fire Management Manual 2005. Brief all personnel involved in suppression operations on the following issues:	
General	Guidelines
Aerial Water Bombing (NPWS PHM 4.2.3.1 & 4.2.3.2) (NPWS PHM 4.2.3.1 & 4.2.3.2) (NPWS PHM 4.2.3.1 & 4.2.3.2)	<ul style="list-style-type: none">The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spot-covers.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 may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Regional Manager or Section 4 delegate.Utilise incendiaries to rapidly progress back-burns down slope where required.
Backburning (NPWS PHM 4.2.3.3 & 4.2.3.4) (NPWS PHM 4.2.3.3 & 4.2.3.4) (NPWS PHM 4.2.3.3 & 4.2.3.4)	<ul style="list-style-type: none">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.Where practicable, a fire radius around dead and/or diseased trees adjacent to containment lines prior to backburning, or wet down these trees as part of the backburn ignition.Avoid possible backburns at the bottom of slopes where a long and intense up slope burn is likely.The first containment agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified.On the arrival of other combatant agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management requirements as per the relevant OFAC 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 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 may only be used with the prior consent of a senior NPWS officer, and then only if the probability of its success is high.Earthmoving equipment must be always guided and supervised by an experienced officer, and accompanied by a support vehicle. When engaged in direct or parallel attack the vehicle must be a firefighting vehicle.Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species and Cultural Heritage Operational Guidelines, and be surveyed, where possible, to identify unknown cultural heritage.Earthmoving equipment should be washed down, where practicable, prior to entering NPWS estate.Where possible avoid soil disturbances to upland & coastal heaths, cultural sensitive zones and within the Baycliff/Greenglade dune area.
Fire Advantage (NPWS PHM 4.2.3.5 & 4.2.3.6) (NPWS PHM 4.2.3.5 & 4.2.3.6) (NPWS PHM 4.2.3.5 & 4.2.3.6)	<ul style="list-style-type: none">All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.Wetting and foaming agents (surfactants) are permitted for use in wildfire suppression.The use of fire 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 50m of rainforest, watercourses, dams and swamps.Areas where fire suppression chemicals are used must be mapped and the used product's name recorded.The Threatened Species Operational Guidelines are to be observed.
Fire Suppression Chemicals (NPWS PHM 4.2.3.7 & 4.2.3.8) (NPWS PHM 4.2.3.7 & 4.2.3.8) (NPWS PHM 4.2.3.7 & 4.2.3.8)	<ul style="list-style-type: none">Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.The potential impacts of smoke 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 media must be notified.Smoke management must be in accordance with relevant RTA traffic management guidelines.
Rehabilitation (NPWS PHM 4.2.3.9 & 4.2.3.10) (NPWS PHM 4.2.3.9 & 4.2.3.10) (NPWS PHM 4.2.3.9 & 4.2.3.10)	<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.
Smoke Management (NPWS PHM 4.2.3.11 & 4.2.3.12) (NPWS PHM 4.2.3.11 & 4.2.3.12) (NPWS PHM 4.2.3.11 & 4.2.3.12)	
Victor Management (NPWS PHM 4.2.3.13 & 4.2.3.14) (NPWS PHM 4.2.3.13 & 4.2.3.14) (NPWS PHM 4.2.3.13 & 4.2.3.14)	

Aboriginal Cultural Heritage

Aboriginal Cultural Heritage Site Management (NPWS PHM 4.2.3.15 & 4.2.3.16)

- As far as possible protect site from fire.
- Do not cut down trees.
- Use of foam, wetting agents & retardant is acceptable.
- As far as possible protect site from fire.
- Avoid ground disturbance including hand tools, dozers.
- Avoid water bombing which may cause ground disturbance.
- Avoid ground disturbance including hand tools, dozers.
- Avoid water bombing which may cause ground disturbance.
- Site may be burnt by wildfire, backburn, prescribed burn.
- Cultural Sensitive Zone
- Prior to suppression activities commencing within a cultural sensitive zone the Incident Controller should contact a NPWS Cultural Officer. The Incident Controller should exercise extreme caution before authorising any ground disturbance whilst waiting for the Cultural Officer.

Historic Heritage Management

Historic Heritage Management (NPWS PHM 4.2.3.17 & 4.2.3.18)

- High RCHMS priority
- Avoid fire, including wildfire, backburning & HR.
- Avoid all water bombing activities.
- High RCHMS priority
- Avoid fire, including wildfire, backburning & HR.
- High or low RCHMS priority
- Heritage site unlikely to be affected by fire.
- Danger to any fire crew activity. Avoid site at all costs.
- Low RCHMS priority
- Avoid fire, including wildfire, backburning & HR.
- Avoid all water bombing activities.
- Low RCHMS priority
- Avoid fire, including wildfire, backburning & HR.
- High or low RCHMS priority
- Heritage site unlikely to be affected by fire.
- Avoid use of earth moving machinery.
- High or low RCHMS priority
- Heritage site unlikely to be affected by fire.
- Avoid use of earth moving machinery.
- Avoid use of retardant and foam in wetland habitats.
- Avoid use of earth moving machinery in wetland habitats.
- Avoid use of retardant and foam in wetland habitats.
- Avoid high intensity fires that consume tree canopies and fallen logs.
- Avoid fire, including wildfire, backburning & HR, as far as possible.
- Avoid use of earth moving machinery.
- Eastern Bristlebird refugia
- Consider aerial application of foam around identified high priority Eastern Bristlebird refugia areas

Threatened Fauna Management

Threatened Fauna Management (NPWS PHM 4.2.3.19 & 4.2.3.20)

- Protect large and hollow bearing trees.
- Protect large and hollow bearing trees.
- Avoid interfire intervals of < 10 yrs.
- Avoid high intensity fires that consume tree canopies and fallen logs.
- Avoid interfire intervals of < 10 yrs.
- Habitat unlikely to be affected by fire.
- Avoid use of earth moving machinery in wetland habitats.
- Avoid use of retardant and foam in wetland habitats.
- Habitat unlikely to be affected by fire.
- Avoid use of earth moving machinery in dune habitats.
- Avoid fire, including wildfire, backburning & HR, as far as possible in wetland habitat.
- Avoid use of earth moving machinery in wetland habitats.
- Avoid use of retardant and foam in wetland habitats.
- Avoid high intensity fires that consume tree canopies and fallen logs.
- Avoid fire, including wildfire, backburning & HR, as far as possible.
- Avoid use of earth moving machinery.

Threatened Flora Management

Threatened Flora Management (NPWS PHM 4.2.3.21 & 4.2.3.22)

- Avoid interfire intervals of < 10 yrs.
- Avoid the use of earthmoving machinery.
- Avoid the use of retardant.
- Avoid fire, including wildfire, backburn, HR, as far as possible.
- Avoid the use of earthmoving machinery.
- Avoid the use of retardant.
- Avoid high intensity fire.
- Avoid interfire intervals < 10 years, effect unknown.
- Avoid the use of earth moving machinery.
- Avoid summer fire.
- Avoid high intensity fire.
- Avoid earth-moving machinery.
- Avoid low intensity fire.
- Avoid interfire intervals of < 5 yrs.
- Avoid earth-moving machinery.
- Avoid the use of retardant.

Threatened Property

- 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.

Service	Channel	Location and Comments
VHF Communications (NPWS Two Way Radios)	23.26	Reception poor along sections of coast to the south.
UHF-PMR (RFS Two Way Radios)	85	Timbillica – widespread coverage except far SE corner.
Mobile Phone	43	Benmil Hill – unknown coverage in far SE corner.
		3G – Higher points along Table Ridge and Storkeys Fire Trails

Fire Control Advantages	
Index	Type
162	Assembly Area
163	Dozer unloading ramp
164	Dozer unloading ramp
165	Dozer unloading ramp
213	Dozer unloading ramp
236	Dozer unloading ramp
237	Dozer unloading ramp
238	Dozer unloading ramp
269	Refuge Area
270	Helipad (not maintained)
274	Helipad (not maintained)
275	Helipad (not maintained)
276	Helipad (not maintained)
278	Helipad (not maintained)
312	Helipad (not maintained)
313	Helipad (not maintained)
314	Helipad (not maintained)
321	Helipad (not maintained)
322	Helipad (not maintained)
326	Water Point Helicopter
327	Water Point Helicopter
328	Water Point Helicopter
334	Water Point Helicopter
353	Refuge Area
359	Water Point Vehicle
360	Water Point Vehicle
362	Water Point Vehicle
367	Water Point Vehicle
368	Water Point Vehicle
369	Water Point Vehicle
370	Water Point Vehicle
371	Water Point Vehicle
372	Water Point Vehicle
448	Water Point Vehicle
449	Water Point Vehicle
450	Water Point Vehicle

Legend

Assets

- Built asset
- Homestead
- Threatened fauna
- Threatened flora
- European sites (HHIMS)
- Aboriginal site (type 1)
- Aboriginal site (type 2)
- Aboriginal site (type 3)
- Powerline
- Built-up area
- Cultural Sensitive Zone
- Eastern bristlebird refugia
- On-park access (BPCC class)
- Essential
- Important
- Dormant
- Trail capacity
- Cat 1
- Cat 7
- Cat 9
- Gale
- Walking Track

Fire Control Advantages

- Water Point Vehicle
- Fire tower
- Heavy vehicle turn-around
- Dozer unloading ramp
- Water Point Helicopter
- Assembly Area
- Water Vehicle
- Helipad (not maintained)
- Refuge Area

Elevation contours

- 10 metre
- 100 metre
- High point
- Spot height

Water features

- River/creek
- Watercourse (perennial)
- Watercourse (intermittent)
- Waterbody

Tenure

- NPWS Estate
- State Forest
- Cadastral
- Crown land

Vegetation/Landform

- Forest/Rainforest
- Woodland/Heath
- Swamp/Wetland
- Grassland/Pasture
- Rock/Rocky scrub

Off-park access

- Major sealed road
- Minor sealed road
- All weather unsealed track
- Dry weather only track
- 4WD track
- Former track
- Travel time from Eden

0 1 2 3 4 5 6 Kilometres

Scale 1:32,000 Projection: UTM, Datum: AGD86, Zone: 55

Department of Environment & Climate Change NSW

Contact Information		
Agency	Position / Location	Phone
NSW National Parks & Wildlife Service (Dept. of Environment & Climate Change)	Merimbula Office (0830-1630 Mon-Fri)	(02) 6495 5000
	NPWS Incident Response Answering Service (after hours)	1800 629 104
NSW Rural Fire Service	Bega Fire Control	(02) 6494 7400
	Emergency	000
NSW Fire Brigade	Merimbula captain – Dave Huntley	(02) 6495 7248
	Eden captain – David Staught	(0427) 989 960
Forests NSW	Eden captain – Craig Butt	(02) 6496 9101
	Eden	(02) 6496 1500
DSE (Victoria)	Gippsland Regional Office (Traralgon)	(03) 5172 2111
	Orbost Office	(03) 5161 1222
SES	Bendoo Office	(03) 6459 0500
	Carm River Office	(03) 5106 2100
Police	Emergency	132 500
	Bega Headquarters	(02) 6492 4123
Ambulance	Duty Officer – Norm McIntire	000
	Bega	(02) 6492 9999
Hospital	Eden	(02) 6496 1444
	Merimbula	(02) 6496 1366
Council	Emergency	000
	Bookings	131 233
	Bega	(02) 6492 9111
	Pambula	(02) 6495 6000
	Bega Valley Shire Council	(02) 6495 2222

