











Bushfire Fuel Types and comparative fire behaviour This map shows modelling of comparative fire behaviour that may be expected in the various vegetation types across the reserve and surrounding areas. It is intended as an operational guide to assist fire suppression and prescribed burning operations but does not replace constant surveillance of on-site fire behaviour, weather trends and local terrain effects.

Emergency Calls - Fire, Ambulance, Police	
Call "000" stating service required	
National Parks & Wildlife Service NSW	
Dept.of Environment & Conservation)	
Emergency Contact	
Business Hours - 0830-1630 MonFri.	4423 2170
After Hours / All areas	1800 629 104
Local NPWS Area Office - Ulladulla	4454 9500
Coller Rd Ulladulla	
South Coast Regional Office	4423 2170
55 Graham St. Nowra NSW 2541	
Rural Fire Service	
Emergency Calls	000
Eurobodalla Fire Control	4474 2855
Shoalhaven Fire Control	4424 4424
NSW Fire Brigades	
Batemans Bay	4472 4600
Braidwood	4842 2524
Ulladulla Fire Station	4455 1020
State Forests	
Hardwood Forests	
Batemans Bay office	4472 6211
Police	
Batemans Bay Police Station	4472 0099
Braidwood Police Station	4842 2101
Ulladulla Police Station	44551236
State Emergency Service (SES)	81
Emergency Assistance No.	132 500
Ulladulla Headquarters	4454 2121
Nowra Headquarters	4423 0081
Local Government	
Shoalhaven Council	4429 3111
Shoalhaven Council After Hours	4421 3100
Eurobodalla Council	4474 1000
Eurobodalla Counci After Hours	4474 1222
COMMUNITY CONTACTS	
Nearest Hospital/s	
Batemans Bay Hospital	4472 4504
Shoalhaven Hospital, Nowra	4421 3111
Milton Hospital	4455 1333
NANA	0418 427 214

MapID	inal Heritage Sites Strategy	Site Type
AH-B	<ul> <li>As far as possible – protect site from fire</li> <li>Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites.</li> <li>Avoid water bombing, which may cause ground disturbance.</li> </ul>	Site Type  Sites less affected by fire but prone to disturbance by suppression operations eg - stone arrangements, ceremonial rings, rock engravings, rock art, grinding grooves.
AH-C	<ul> <li>Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites.</li> <li>Avoid water bombing, which may cause ground disturbance.</li> <li>Site may be burned by bushfire, backburn or prescribed burn without damage</li> </ul>	Sites least affected by fire itself but still prone to disturbance by fire suppression operations. eg - burial sites, artefact scatters, middens.

## These guidelines are provided to assist fire management activities within the reserve. They are framed by current cooperative arrangements with other fire authorities, NPWS strategies for fire management, reserve management plans, neighbours and other site-specific issues that need to be considered. Feedback on these matters is always

appreciated and should be directed to NPWS Ulladulla Area, P.O. Box 72, Ulladulla Command and Control: The NPWS is responsible for fire management within the reserve. Any fire authority may initiate size-up and attack with advice to the NPWS upon initial fire sighting or report. See Contacts section to advise fire reports in or within 8km of the reserve. Class 1 fire suppression operations may remain under command of the initial attack agency following assessment and advice by NPWS. Visitor Safety: Consider public safety within initial response operations (i.e., clearing likely visitor use areas and sites, warnings and information, on-site protection, closures or evacuation where instructed by Police). Fire Suppression: Firefighter safety is paramount. Containment options should consider using existing roads, trails and recently burnt areas. Where possible to limit unnecessary damage, earthmoving equipment should be limited to brushing up existing Earthmoving Equipment: Except for immediate initial attack, the use of earthmoving

equipment for fire suppression within the reserve requires NPWS consent. Contact the

NPWS if earthworks are required. ALL use of earthmoving equipment will be consistent with NPWS safety, operational and environmental guidelines. Foam and Retardant Use: Avoid foam and retardant use within the reserve unless there is a significant necessary operational advantage. DO NOT use on or near watercourses or wetlands. DO NOT use foams or retardants near water storages or supply infrastructure. Unless under emergency conditions always obtain permission before using rural water supplies / sources. Take care when tanker filling not to contaminate water sources. Aerial operations: Aerial operators should be briefed on location of transmission lines in the area. Consider safety implications where aircraft will operate over adjacent urban areas or dwellings, or operate from publicly accessible fireground sites. Aerial operations should be postponed or abandoned if there is a high risk of a storm moving through the area, or there is a significant wind change anticipated. Smoke Management: This reserve is adjacent busy roads. Consider prompt advice to communities downwind and consider traffic management during fire suppression operations. Consider safety and health implications during prescribed burning

hazard to traffic is likely. Rehabilitation: Earthmoving equipment and other resources should be allocated to soil erosion control works and remedial restoration before standing down from fire Arson: Report ALL fires of unknown cause or suspected arson to Police via Fire Control. Protect likely ignition point/s or evidence. Report any suspicious activity on or near the fireground. Map Grid: Datum for map grid shown is AGD 66. This will remain in use until the majority of map sheets covering the area are revised to the newer GDA datum. To approximately locate a map reference given in GDA to this map (AGD 66) move approximately 200 metres to the southwest from the given grid reference. Conversely, to relay a grid reference from this map (AGD 66) to someone with a GDA map, give the reference of a point approximately 200m to the northeast of the position shown on this

operations. Notify nearby highway and airspace management agencies if a smoke

Wildlife: Where possible, protect hollow trees adjacent to control lines during fire suppression operations. Prepare control lines to avoid introducing fire to these "habitat" trees during prescribed burning activities (also saves considerable "mop-up" effort). Report all injured wildlife to NPWS or wildlife carer organisations.

## response arrangements across the Eurobodalla Fire District. This includes lookouts, surveillance flights, lightning detection and communications systems. During periods of higher fire danger this reserve may be patrolled and restrictions placed on visitor access Fire Response: Apart from any specific conditions indicated in the Operational Guidelines, the NPWS as a NSW fire authority prepares and maintains personnel and equipment to undertake fire management and response within the reserve. These resources are also provided under cooperative contact, callout and incident management arrangements within the Eurobodalla Fire District and across NSW. Fire Suppression: As this reserve is relatively small and isolated from other natural areas, most unplanned fire will require a prompt response aimed at assessing fire size, access, and options for containment/limit to spread of fire. Fire suppression tactics in all areas will primarily consider immediate visitor and firefighter safety, minimising innecessary disturbance and will have regard to constraints defined within the reserve Prescribed Fire: May be introduced to maintain biodiversity or meet protection obligations as identified within the fire management zones as mapped. The NPWS maintains a record of known fire history and will annually review the need to undertake prescribed burning. Each proposal is subject to environmental assessment and operational safety planning. All burning proposals for the coming season (July-June) are listed with the Eurobodalla district Bush Fire Management Committee. For details or nquiries contact the NPWS Area (see Contacts) or Eurobodalla Fire Control. Fire Management Access: Management tracks will be maintained as required for reserve management operations or to limit environmental effects and should always be assessed before being used for fire operations. Any firefighting access problems should be immediately notified to the NPWS Area office (see Contacts). Also refer to operational Community Information: The NPWS will participate in cooperative community information programs in the Eurobodalla Fire District. For this reserve these will focus on

The works program arising from the above strategies is prepared and reviewe annually. This program is prepared from the post fire season assessment of each of the zones as above. Also considered are seasonal weather trends, available resources and cooperative arrangements with neighbours, other fire authorities and land management agencies. Fire related works for the reserve are summarised and presented to the local District Bush Fire Management Committee annually, usually before the bushfire danger period. Some works indicated may not be completed due to prevailing weather patterns, or the necessary redirection of effort and resources to other priority fire tasks such as wildfire control and rehabilitation. In most cases, such deferred works are carried forward into subsequent programs. Information on the works to be undertaken are available from local NPWS offices and the relevant District Bush Fire Management Fire Season information and weather patterns

fire management works and biodiversity maintenance, NPWS role in cooperative fire

spring, summer and early autumn, though periods of drought may extend this from late August to June. Strong, drier westerly winds are noted from late August to mid October. During summer, moister north-east sea-breezes may cover the area in a daily pattern, diminishing after sunset. Blustery southerly changes may also progress up the coast over this period causing sudden changes in wind speed and direction. Thunderstorm activity in the summer months may produce unstable fireground weather with possible lightning ignitions.

Prescribed Burning: Late summer / autumn / and winter are the preferred seasons for prescribed burning where desirable stable conditions and trends are more likely. Burning may take place outside these periods for specific operational and biodiversity management objectives.

Service	Channel	Location and Comments
RADIO		
NPWS - VHF	32	Mt Budawang repeater
NPWS - VHF (Fireground Comms)	43-44	17-18 - 5 Watt Channels
NPWS - VHF (Portable Repeater)	14	Stored at Ulladulla Area depot / transportable.
RFS - PMR - UHF	CH 26	Big Bit
	CH 70	Mt Budawang
	CH 26	Boyne State Forest
CB - UHF	28	Forestry use
Aircraft - VHF		As advised by State Ops
PHONE		
Mobile Phone - CDMA		Minimal coverage available
Mobile Phone - GSM		Poor coverage
Satellite Phone		Available for deployment ex Ulladulla and Nowra Are offices

management zones each with strategies to address fire management in the particular

fire management for particular values found in the reserve (e.g., threatened species, cultural sites). These strategies guide the fire management and related works within this

eserve. Guidelines are also provided to assist with operational matters – see table.

managed to provide an advantage for fire fighters in containing and

thresholds necessary to conserve biodiversity, ie more often.

HMZ Heritage Management Zones: Within these zones fire is managed towards a

range of intensities and frequencies required in order to conserve natural processes (biodiversity) and cultural assets. Fire authorities configure to

containing wildfires in these areas.

suppressing wildfires. Here, fire frequency may occur towards the lower

For more information on the strategies and purposes of these zones refer to the NSW NPWS Strategy for Fire Management. www.nationalparks.nsw.gov.au

NB: Some zones may extend beyond the boundaries of the Reserve to a logical fire break or boundary for the zone. Where these are outside the Reserve the owners / managers need to be contacted for details of fire management options for these areas.

hese zones will form part of the overall Bushfire Risk Management Plan for the Eurobodalla Fire

Review fire management works program for the zone annually, post fire

to District Bush Fire Management Committee. Annually - pre-season. Undertake burning under prescribed conditions where indicated by above fire fuel assessments and biodiversity maintenance requirements – as required.

Heritage Management Zones – HMZs

Review fire management works program for the zone annually, post fire

slashed areas, gates, information signs, identified water points etc.

assessment for biodiversity maintenance requirements – as required.

season. This assessment includes fire history, biodiversity maintenance and

the condition of fire control facilities within the zone such as fire access track

Undertake burning under prescribed conditions where indicated by above

Cylde, Holmes, Islands and South Clyde HMZs

Strategies

maintenance and the condition of fire control facilities within the zone such as

trails, slashed areas etc. Fire related works for reserve declared and reported

processes (biodiversity) and cultural assets. Fire authorities continue to aim at

area. Other strategies apply to the whole reserve (e.g., fire access network) or address

may be pr these thre lower thre	o maintain biodiversity within the reserve the foll esent. The aim is for a range of areas with diffi isholds may be exceeded where necessary for sholds in order to provide a strategic advantage sonly and fire requirements for specific species	ering times since fir asset protection. F e in containing wild	re within these intervals. Within APZs irre frequency in SFAZs may trend toward fire. The below intervals are broad	
	ation types listed below are not all necessarily			
Map ID Regime	Vegetation type	Minimum fire interval	Maximum fire interval	
В	Wetlands	6	35	
D	Grass forest, Riparian forest, Coast/Plateau complex, Dry forest	5	50	
Е	Coastal Dune Scrub, Coastal Sands Forest, Open Forest, Dry Forest, Heathland	7	30	
F	Riparian Forest, Dry Forest, Swamp Forest, Moist Forest	7	35	
Н	Moist Forest, Gorge/Gully Forest	25	200	
I	Rainforest, Exotic Forest, Mangrove, Marsh	Exclude fire where possible	Exclude fire where possible	
No Regime	Rural, Urban, Waterbodies	N/A	NA	

MapID	Strategies	Species	Common Name	Species status
Fauna				
FA 1	<ul> <li>Mechanical hazard reduction ok, avoid allocasuarina thickets.</li> <li>No burning of Allocasuarina thickets.</li> </ul>	Calyptorhynchus lathami	Glossy Black- Cockatoo	Vulnerable
FA 2	No slashing, trittering or tree removal at these sites.	Petaurus australis	Yellow-bellied Glider	Vulnerable
FA 3	No burning around known nesting sites at any time.     No slashing, trittering or tree removal at these sites.	Tyto novaehollandiae	Masked Owl	Vulnerable

Map 5: 1	: 25000 Topogra	aphic Map I	ndex
MONGA 88261N	CURROWAN 89264N Monga NP		KIOLOA 89261N
ARALUEN 88261S	NELLIGEN 89264S	Murram	DURRAS 89261S
~ }	Clyde	RiverNP	
URRUMBELA 88262N	MOGO 89263N	Maps	heet
The		7	S Reserves