



September 2006 (Revision August 2 This Map should be used in conjunction with topographic maps and ground reconnaissance during incidents and the development of incident action plans. pyright Department of Environment and Conservation. These data are not guaranteed to be free from error or omission. The Department of Environment and Conservation

and its employees disclaim liability for any act done on the information in the data

and any consequences of such acts or omissions. Grid Interval 1000m Australian Map Grid Zone 56

Please foward comments on this strategy to: sc.fireplans@environment.nsw.gov.au

They are framed by current cooperative arrangements with other fire authorities, NPWS strategies for fire management, reserve management plans, neighbours and other sitespecific issues that need to be considered. Feedback on these matters is always appreciated and should be directed to NPWS Ulladulla Area, PO Box 72, Ulladulla Command and Control: The NPWS is responsible for fire management within the

or NPWS Ulladulla Area Office, PO Box 72, Ulladulla NSW 2539

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, walking tracks and recently burnt areas. Where possible to limit unnecessary damage, earthmoving equipment should be limited to

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. For operator safety earthworks off-track should be avoided in the abandoned mines area. 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, wetlands, rainforests or swampy areas. 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: Consider safety implications where aircraft will operate over public use 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: Consider prompt advice to communities downwind and consider traffic management during fire suppression operations. Consider safety and health implications during Prescribed Burning operations. Cold air drainage patterns in this area may also carry smoke some distance from the fireground and may adversely affect transport operations. Notify nearby highway and airspace management agencies if a 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 Locked Gates: Any NPWS locked gates within the reserve are fitted with standard key kept in fire tankers and available from Fire Control. Report any missing or damaged locks via Fire Control or to NPWS. For public safety during fire operations, some gates may need to left in closed position <u>but not locked</u>. Close/lock NPWS gates after operations. Where safe, leave farm gates as you find them.

Map Grid: (zone 56) 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

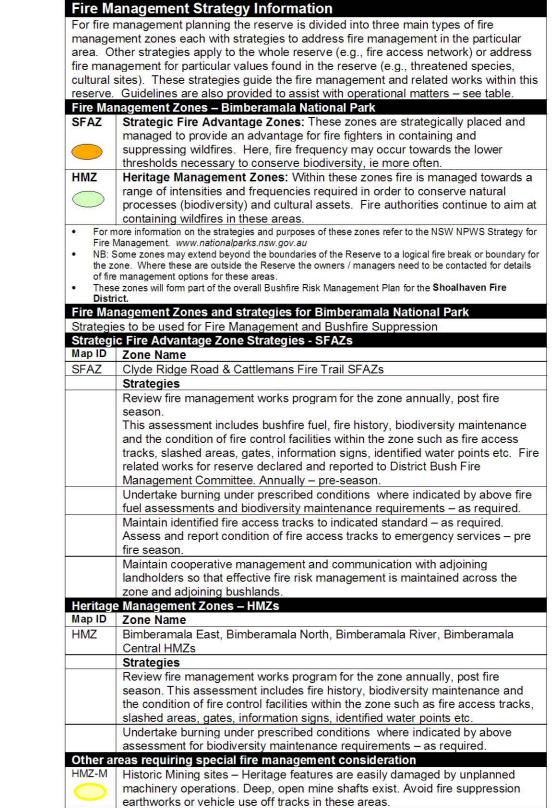
suppression operations. Prepare control lines to avoid introducing fire to these "habitat" trees during prescribed burning activities (also saves considerable "mop-up" effort). Report all injured wildlife to NPWS or wildlife carer organisations. Rare or threatened plant species - known sites: Fireground control personnel should seek relevant information and brief all personnel involved in control line construction and suppression activities on the location of threatened species sites or habitats and appropriate actions to protect these sites - refer to relevant strategies table. Cultural sites - known Aboriginal and Historic sites: Fireground control personnel should seek relevant information and brief all personnel involved in control line construction and suppression activities on the location of sites within the operational area and appropriate actions to protect these sites – refer to relevant strategies tables. **Historic Mine workings:** Hazardous operational conditions may occur near historic mine workings – concealed shafts, etc. Avoid operations in times of poor visibility – (at night, heavy smoke etc.) unless worksites / routes are defined by informed personnel - Vehicles MUST remain on designated tracks. Do not use earthmoving machinery.

AH-B	As far as possible – protect site from fire Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites. Avoid water bombing, which may cause ground disturbance.	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	Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites. Avoid water bombing, which may cause ground disturbance. Site may be burned by bushfire, backburn or prescribed burn without damage.	Sites least affected by fire itself but still prone to disturbance by fire suppression operations. eg - burial sites, artefact scatters, middens.
НН3	Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites. Avoid water bombing.	Sites which are not flammable but are structurally unsound including dry stone walls.

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 Uliadulla Area depot / transportable.
RFS - PMR - UHF	CH 70	Mt Budawang
	CH 35	Boyne State Forest
CB - UHF	28	Also used in forestry operations
Aircraft - VHF		As advised by State Ops
PHONE		
Nearest Public Phone		Nelligen
Mobile Phone - CDMA		Minimal coverage available, none in valleys.
Mobile Phone - GSM		Poor coverage
Satellite Phone		Available for deployment ex Ulladulla and Nowra Are offices

ite Phone		ailable for deployment ex Ulli ices	adulla and Nowra Area
ire Regi	mes - Vegetation		
or vegeta imes sinc where neo hresholds ntervals a be consid The veget	o maintain biodiversity within the resettion types that <u>may</u> be present. The telefire within these intervals. Within these sin order to provide a strategic adva are broad guidelines only and fire requered. Itation types listed below are not all not management Strategy.	aim is for a range of area APZs these thresholds ma quency in SFAZs may tre ntage in containing wildfir uirements for specific spe	as with differing ay be exceeded and toward lower re. The below ecies may need to
Map ID Regime	Vegetation type	Minimum fire interval	Maximum fire interval
A	Coastal complex, Woodland, Grass forest	sy dry 5	30
В	Wetlands	6	35
C	Open forest, Woodland	5	40
D	Grass forest, Riparian forest, Coast/Plateau complex, Dry forest	5	50

Regime		interval	interval
Α	Coastal complex, Woodland, Grassy dry forest	5	30
В	Wetlands	6	35
С	Open forest, Woodland	5	40
D	Grass forest, Riparian forest, Coast/Plateau complex, Dry forest	5	50
E	Coastal Dune Scrub, Coastal Sands Forest, Open Forest, Dry Forest, Heathland	7	30
F	Riparian Forest, Dry Forest, Swamp Forest, Moist Forest	7	35
G	Acacia Scrub, Shrubland, Grassland	8	30
Н	Moist Forest, Gorge/Gully Forest	25	200
į	Rainforest, Exotic Forest, Mangrove, Marsh	Exclude fire where possible	Exclude fire where possible
No Regime	Rural, Urban, Waterbodies	N/A	N/A



Call "000" stating service required National Parks & Wildlife Service NSW

Local NPWS Area Office - Ulladulla

55 Graham St. Nowra NSW 2541

Business Hours - 0830-1630 Mon.-Fri.

(02) 4423 2170

(02) 4423 2170

4454 9500

4474 2855

4424 4424

4472 4600

4842 2524

4455 1020

4472 6211

4472 0099

4842 2101

44551236

132 500

4454 2121

4423 0081

4429 3111

4421 3100

4474 1000

4474 1222

4472 4504

4421 3111

4455 1333

0418 427 214

1800 629 104

(Dept.of Environment & Conservation)

After Hours / All areas

Coller Rd Ulladulla

Eurobodalla Fire Control

Shoalhaven Fire Control

Ulladulla Fire Station

Batemans Bay office

Batemans Bay Police Station

State Emergency Service (SES)

Shoalhaven Council After Hours

Eurobodalla Counci After Hours

Batemans Bay Hospital

Shoalhaven Hospital, Nowra

Overall Fire Response and Management Strategies

response arrangements across the Shoalhaven Fire District. This includes lookouts,

and use of fire.

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

arrangements within the Shoalhaven Fire District and across NSW.

Fire Suppression: As this reserve is surrounded by production forest and other natural

areas, most unplanned fire will require a prompt response aimed at assessing fire size,

areas will primarily consider immediate visitor and firefighter safety, minimising unnecessary disturbance and will have regard to constraints defined within reserve Plans

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

map (in red) to a trafficable standard for Category 9 fire tankers as indicated. At a

refer to operational guidelines.

Community Information: The NPWS will participate in cooperative community

information programs in the **Shoalhaven** Fire District. For this reserve these will focus on fire management works and biodiversity maintenance and the NPWS role in cooperative fire management and response in the reserve.

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 Shoalhaven District Bush Fire Management

Committee at the district RFS headquarters.

Other Fire Management Information and Strategies for specific Natural and Cultural values in Bimberamala National Park

Wildfires: Fire history indicates fires of greater intensity and control difficulty during late spring, summer and early autumn, though periods of drought may extend this period 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 push inland against predicted patterns though this effect diminishes further from the coast and may cause highly changeable conditions on the fireground. Likewise, the effects of southerly maritime changes is later and lesser than along coastal areas. Thunderstorm activity in the summer months may produce sudden changes in wind speed and direction with

possible lightning ignitions and highly variable rainfall.

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.

management works program is prepared. Other 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

minimum these will be reviewed prior to the fire season and when the annual fire

operational safety planning. All burning proposals for the coming season (July-June) are listed with the Shoalhaven Bush Fire Management Committee. For details or enquiries contact the NPWS Area (see Contacts) or Shoalhaven Fire Control.

Fire Management Access: The NPWS will maintain the fire tracks identified on the

surveillance flights, lightning detection and communications systems. During periods of

higher fire danger this reserve may be patrolled and restrictions placed on visitor access

Emergency Assistance No.

Bra dwood Police Station

Ulladulla Police Station

Ulladulla Headquarters

Nowra Headquarters

Shcalhaven Council

Eurobodalla Council

COMMUNITY CONTACTS

Milton Hospital

Wildlife Welfare

NANA

Nearest Hospital/s

Local Government

Batemans Bay

Braidwood

Hardwood Forests

South Coast Regional Office

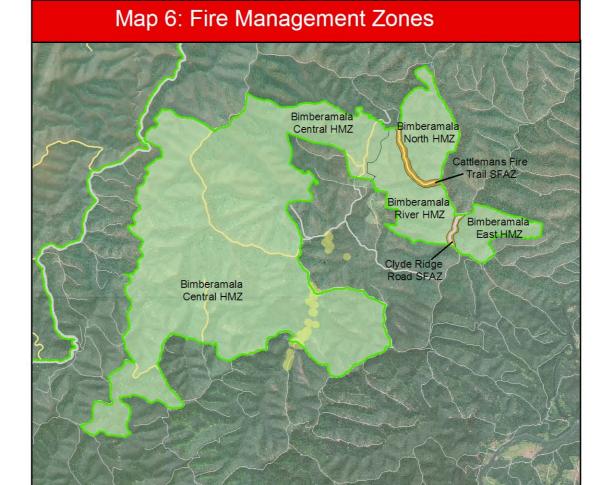
Emergency Contact

Rural Fire Service

NSW Fire Brigades

Forests NSW

Emergency Calls



MapID	Threatened Flora and Fauna Fire Management Strategies	Species	Common Name	Species status
Flora				
FL1	No fire more than once every 10 years.	Genoplesium vernale	Genoplesium	Vulnerable
	 No slashing, trittering or tree removal. 		vernale	
Fauna				
FA 1	 Mechanical hazard reduction ok, avoid Allocasuarina thickets. 	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable
	 No burning of Allocasuarina thickets. 		000	
FA 2	No slashing, trittering or tree removal at these sites.	Kerivoula papuensis	Golden-tipped Bat	Vulnerable
FA 3	No burning around known nesting sites at any time.	Tyto novaehollandiae	Masked Owl	Vulnerable
	 No slashing, trittering or tree removal at these sites. 			
FA 4	No burning around known nesting sites at any time.	Ninox strenua	Powerful Owl	Vulnerable
FA 5	No burning around known nesting sites at any time.	Tyto tenebricosa	Sooty Owl	Vulnerable
	 No slashing, trittering or tree removal at these sites. 			
FA 6	Specific Requirements undetermined*	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable
FA 7	No slashing, trittering or tree removal at these sites.	Petaurus australis	Yellow-bellied Glider	Vulnerable

of firefighting chemicals and heavy machinery use should be considered and minimised where possible.

Source – Rural Fire Service, Threatened Species Guidelines for Hazard Reduction, as amended.

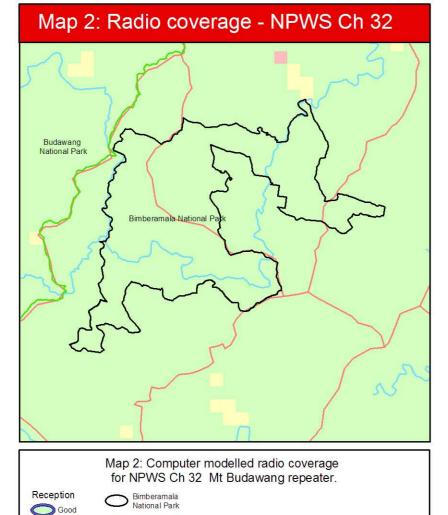
Zonos	
Zones HMZ	NPWS Fire Trail (Lighter Fire Vehicles)
	(Secondary - Cat 9)
SFAZ	NIDWO M

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Budawang	6	- Jan		
National Par	k 5	D.	7	
W. Car		4 7		
15	Bimberamala Na	tiona Park		
	11/16		当当	
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			200	
			建筑	
BBP Lower	Bimberamala National Park			
Lower	Other NPWS Reserve			

This map shows modelling of comparative fire behaviour that may be

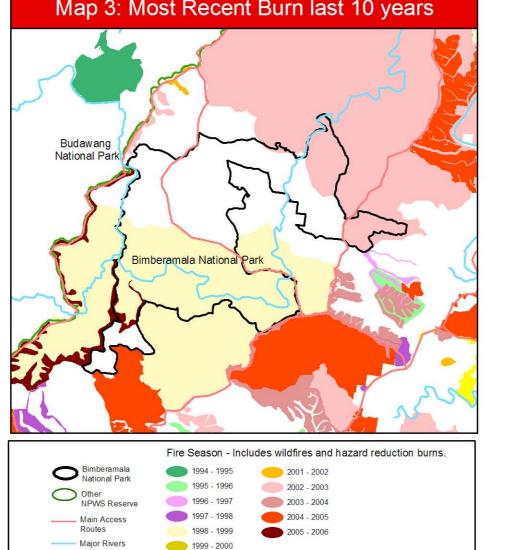
expected in the various vegetation types across the reserve and surrounding areas. It is intended as an operational guide to assist fire suppression and prescribed burning operations but does not replace constant surveillance of on-site fire behaviour, weather trends and local

terrain effects.

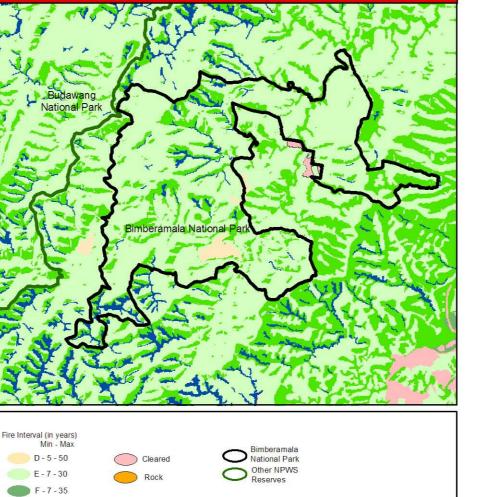


Main Access
Routes

---- Major Rivers

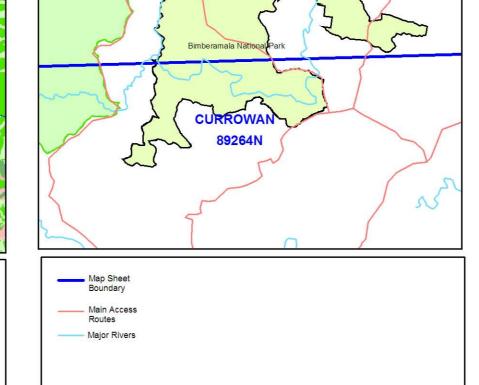


2000 - 2001



H - 25 - 200

I - Exclude fire where possible



NPWS Management Trail Other Roads - Public/Private