

Jerrawangala **National Park**

Fire Management Strategy

July 2006



This Map should be used in conjunction with topographic maps and ground reconnaissance during incidents and the development of incident action plans. Copyright 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 forward comments on this strategy to: sc.fireplans@environment.nsw.gov.au or NPWS Nowra Area Office, PO Box 707 Nowra NSW 2541.

Overall Fire Response and Management Strategies

Fire Detection: The NPWS maintains and contributes to cooperative fire detection and response arrangements across the Shoalhaven 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

Fire Suppression: Fire suppression tactics in all areas will primarily consider immediate

arrangements within the Shoalhaven Fire District and across NSW.

visitor and firefighter safety and minimising unnecessary disturbance.

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 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 map (in red) to a trafficable standard for Category 1 and/or Category 9 fire tankers as indicated. At a minimum these will be reviewed prior to the fire season and when the annual fire 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 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 the fire management works, biodiversity maintenance, property preparation and protection near the reserve. Fire Works Program

The works program arising from the above strategies is prepared and reviewed 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

Other Fire Management Information and Strategies for specific Natural and Cultural values in Jerrawangala National Park Fire Season information and weather patterns : 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 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 Prescribed Burning: Late summer / autumn / and winter are the preferred seasons for

Committee at the district RFS headquarters.

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.

Jerrawangala National Park					
Service	Channel	Location and Comments			
RADIO					
NPWS - VHF	31	Access to Red Rocks repeater.			
NPWS - VHF (Fireground Comms)	43-44	17-18 - 5 Watt Channels			
NPWS - VHF (Portable Repeater)	14	Stored at Nowra Area depot / transportable.			
NPWS / RFS (X-band Repeater)	14	Stored at Nowra / transportable. Full range of both simplex & duplex NPWS VHF & RFS PMR channel			
RFS - PMR - UHF	CH 74, CH 35				
RFS - GRN	NA				
CB - UHF	28	Forestry use			
Aircraft - VHF		As advised by State Ops			
PHONE					
Public Phones		Sussex Inlet, Conjola,			
Mobile Phone - CDMA		Fair Coverage available -Telstra			
Mobile Phone - GSM		Patchy Coverage across reserve			
Satellite Phone		Available for deployment ex Ulladulla and Nowra offices			

In order to maintain biodiversity within the reserve the following fire regimes are indicated for vegetation types that <u>may</u> be present. The aim is for a range of areas with differing times since fire within these intervals. Within APZs these thresholds may be exceeded where necessary for asset protection. Fire frequency in SFAZs may trend toward lower thresholds in order to provide a strategic advantage in containing wildfire. The below intervals are broad guidelines only and fire requirements for specific species may need to The vegetation types listed below are not all necessarily present within the area covered by this Fire Management Strategy. Map ID | Vegetation type Maximum fire A Coastal complex, Woodland, Grassy dry Grass forest, Riparian forest, Coastal Dune Scrub, Coastal Sands Open Forest, Dry Forest, Heathland Riparian Forest, Dry Forest, Swamp Forest Acacia Scrub, Shrubland, Grassland Moist Forest, Gorge/Gully Forest

Inset 7: Bushfire Behaviour Potential

Bushfire Fuel Types and comparative fire behaviour various vegetation types across the reserve and surrounding areas. It is intended a an operational guide to assist fire suppression and prescribed burning operations b 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 (De	pt.of Environment & Conservation
Emergency Contact	
Business Hours - 0830-1630 MonFri	. (02) 4423 2170
After Hours / All areas	1800 629 104
Local NPWS Area Office	
Nowra Office	(02) 4428 6300
South Coast Regional Office	(02) 4423 2170
55 Graham St. Nowra NSW 2541	
Rural Fire Service	
Shoalhaven Fire Control Centre	
Emergency calls	000
Business Calls	4424 4424
For Brigade Contact No.s - Contact Fire Co	ontrol
NSW Fire Brigades	
Nowra Fire Station	4 421 4 754
Ulladulla Fire Station	4455 1020
Forests NSW	
Hardwood Forests	
Batemans Bay office	4472 6211
Police	
Nowra Police Station	4421 9699
Sussex Inlet Police Station	4441 2665
Ulladulla Police Station	4455 1236
State Emergency Service (SES)	
Emergency Assistance No.	132 500
Shoalhaven Headquarters	4423 0081
Local Government	
Shoalhaven City Council	4429 3111
Shoalhaven City Council (After Hours)	4421 3100
COMMUNITY CONTACTS	
NANA	0418 427 214
Nearest Hospital/s	
Shoalhaven Hospital (Nowra)	4421 3111
NATIONAL DISTRIBUTION OF THE PROPERTY OF THE P	4455 4000

Milton/Ulladulla Hospital

Fire Management Strategy Information

management zones each with strategies to address fire management in the particular area. Other strategies apply to the whole reserve (eg fire access network) or address fire management for particular values found in the reserve (eg. threatened species, cultural sites) These strategies guide the fire management and related works within this reserve. Guidelines are also provided to assist with operational matters – see table. APZ Asset Protection Zones: Within these areas the focus is on protection of life and adjoining higher risk assets. Bush fire fuels are managed towards lower levels and fire may be more frequent than desirable to conserve biodiversity. SFAZ Strategic Fire Advantage Zones: These zones are strategically placed and managed to provide an advantage for fire fighters in containing and suppressing wildfires. Here, fire frequency may occur towards the lower 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 continue to aim at containing wildfires in these areas. For more information on the strategies and purposes of these zones refer to the NSW NPWS Strategy for the zone. Where these are outside the Reserve the owners / managers need to be contacted for details These zones will form part of the overall Bush Fire Risk Management Plan for Shoalhaven.

Fire Management Zones and strategies for Jerrawangala National Park Strategies to be used for Fire Management and Bushfire Suppression Asset Protection Zones & Strategies APZ

For fire management planning the reserve is divided into three main types of fire

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Assess APZ for bush fire fuel management and maintenance works annually, post fire season. Maintain slashed breaks where marked - as required Enable clear access for firefighters and limit available fire fuels by keeping zone clear of rubbish, gardening debris and property – as required.

Seek cooperation of local RFS brigades in the monitoring of APZ fuel

conditions, and the assistance of the community in watching for unauthorised use of the APZ that may lead to arson, rubbish dumping or compromise emergency vehicle access. Strategic Fire Advantage Zone Strategies SFAZ SFAZ Cottonwood Rd, Bunya1, Bunya2,Turpentine Rd East, Turpentine Rd West, Wandean Rd North, Wandean Rd South, Yerriyong. Review fire management works program for the zone - annually - post fire season. This assessment includes bushfire fuel, fire history, biodiversity maintenance and the condition of fire control facilities within the zone such as

fire access tracks, slashed areas, gates, information signs, identified water points etc. Fire related works for reserve declared and reported 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.

Maintain identified fire access tracks to indicated standard – as required. Assess and report condition of fire access tracks to emergency services – pre Maintain cooperative management and communication with adjoining landholders so that effective fire risk management is maintained across the zone and adjoining bushlands. Seek cooperation of local RFS brigades in the monitoring of SFAZ fuel and Heritage Management Zones – HMZ

HMZ Ballerang Creek, Blackwood Rd, Diorite Creek, Jerrawangala East. Review fire management works program for the zone - annually – post fire season. This assessment includes, fire history, biodiversity maintenance and the condition of fire control facilities within the zone such as fire access tracks, slashed areas, gates, information signs, identified water points etc. Undertake burning under prescribed conditions - where indicated by above assessment for biodiversity maintenance requirements – as required.

Operational Guidelines – Jerrawangala National Park

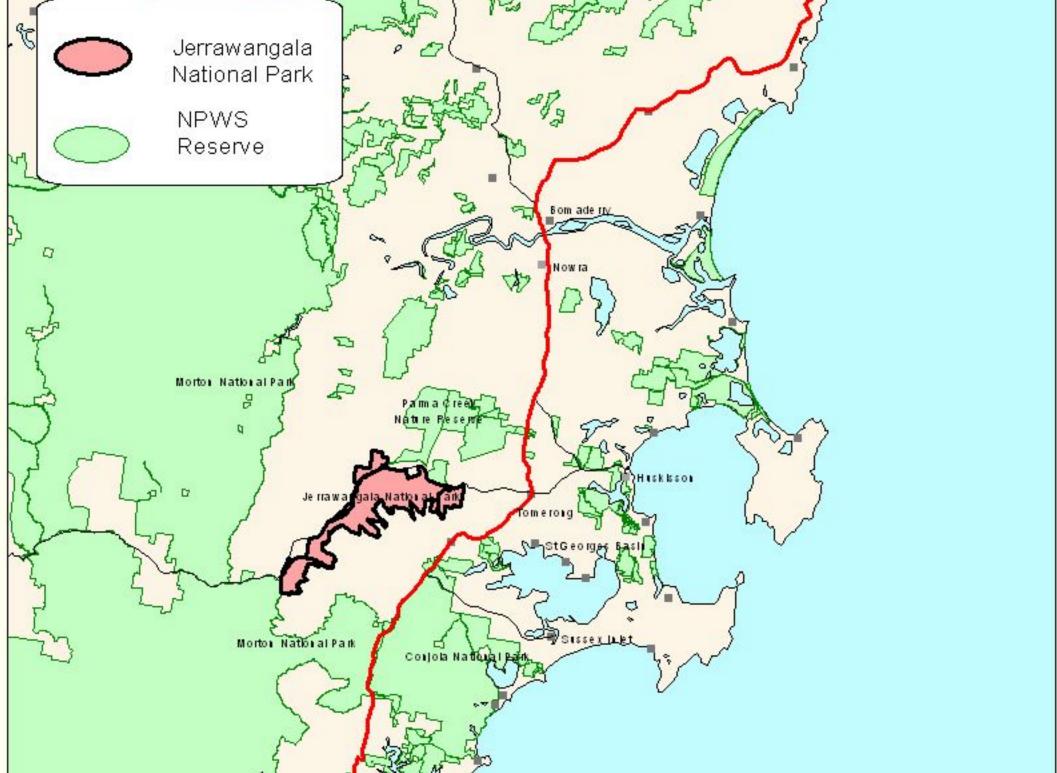
These guidelines are provided to assist fire management activities within the reserve. They are framed by current cooperative arrangements with other fire authorities, NPWS strategies for fire management, reserve management plans, neighbours and other sitespecific issues that need to be considered. Feedback on these matters is always appreciated and should be directed to NPWS Nowra Area, P.O. Box 707, Nowra NSW Command and Control: The NPWS is responsible for fire management within the reserve. Any fire authority may initiate size-up and attack <u>with advice to the NPWS</u> 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, ie 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 brushing up existing tracks. Sufficient trails exist to break reserve into compartments. If extreme fire conditions prevail - fall back to property protection of adjacent urban areas. Earthmoving Equipment: Except for immediate initial attack, the use of earthmoving equipment for fire suppression within the reserve requires NPWS consent. There are significant natural and cultural values at unnecessary risk from unplanned use of earthmoving equipment. Contact 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, rainforests, wetlands 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: 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. This area is within a controlled airspace advise Nowra Military (HMAS Albatross) of likely scope of operations required. 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 smoke 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 Locked Gates: Any NPWS locked gates within 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 - but not locked. 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

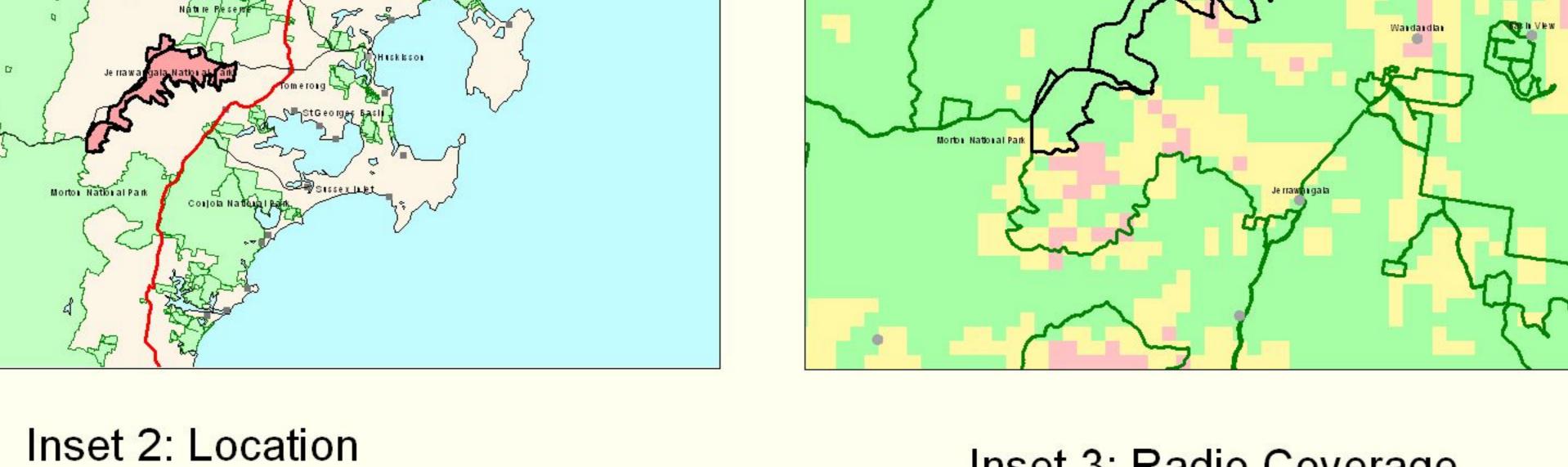
Special site considerations Wildlife: Where possible, protect hollow trees adjacent to control lines during fire suppression operations. Prepare control lines to avoid introducing fire to these "habitat" trees during prescribed burning activities (also saves considerable "mop-up" effort). Report all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

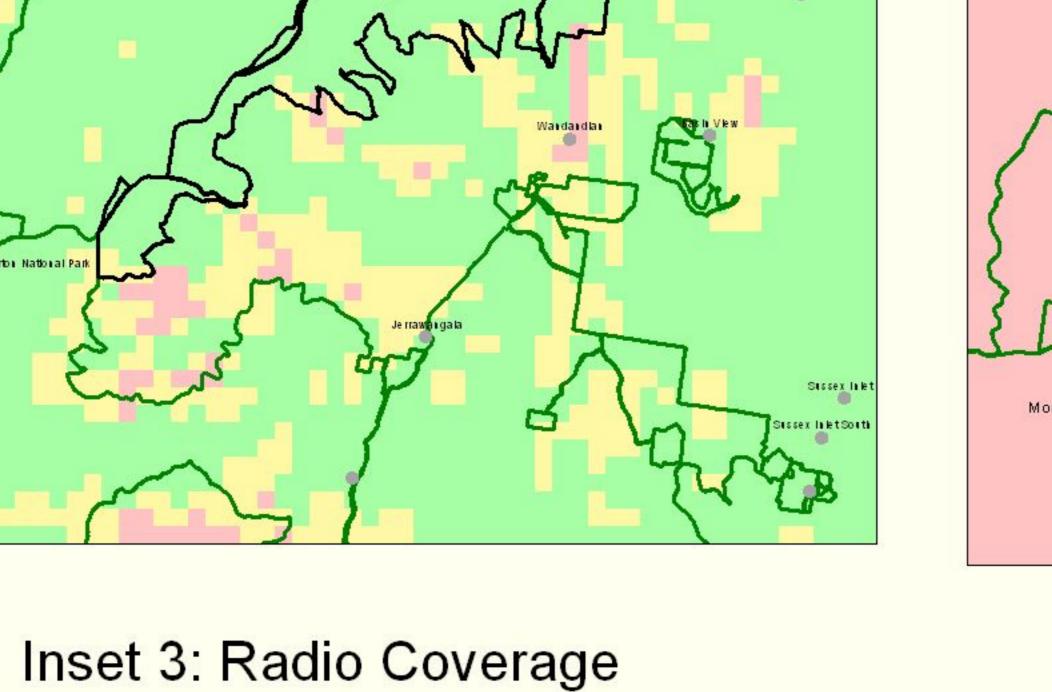
reference of a point approximately 200m to the *northeast* of the position shown on this

Aborig	jinal Heritage Sites	
AH-A	 As far as possible – protect site from fire Do not cut down trees Use of foams, wetting agents and retardants is acceptable 	Sites affected by fire itself eg possible artefacts of flammable materials such as scarred or carved trees.
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.

MapID	Fire Management Strategies – Threatenened Species	Species	Common Name	Species Statu
Flora				
FL1	No fire more than once every 10 years. No slashing, trittering or tree removal.	Eucalyptus langleyi	Eucalyptus langleyi	Vulnerable
FL2	No fire more than once every 10 years. No slashing, trittering or tree removal.	Eucalyptus sturgissiana	Eucalyptus sturgissiana	Vulnerable
Fauna	134			
FA1	No burning within 200 metres of known locations. No slashing, trittering or tree removal.	Litoria littlejohni	Littlejohn's Tree Frog	Vulnerable
FA2	Requirements undetermined.	Varanus rosenbergi	Rosenberg's Goanna	Vulnerable
FA3	No slashing, trittering or tree removal.	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable

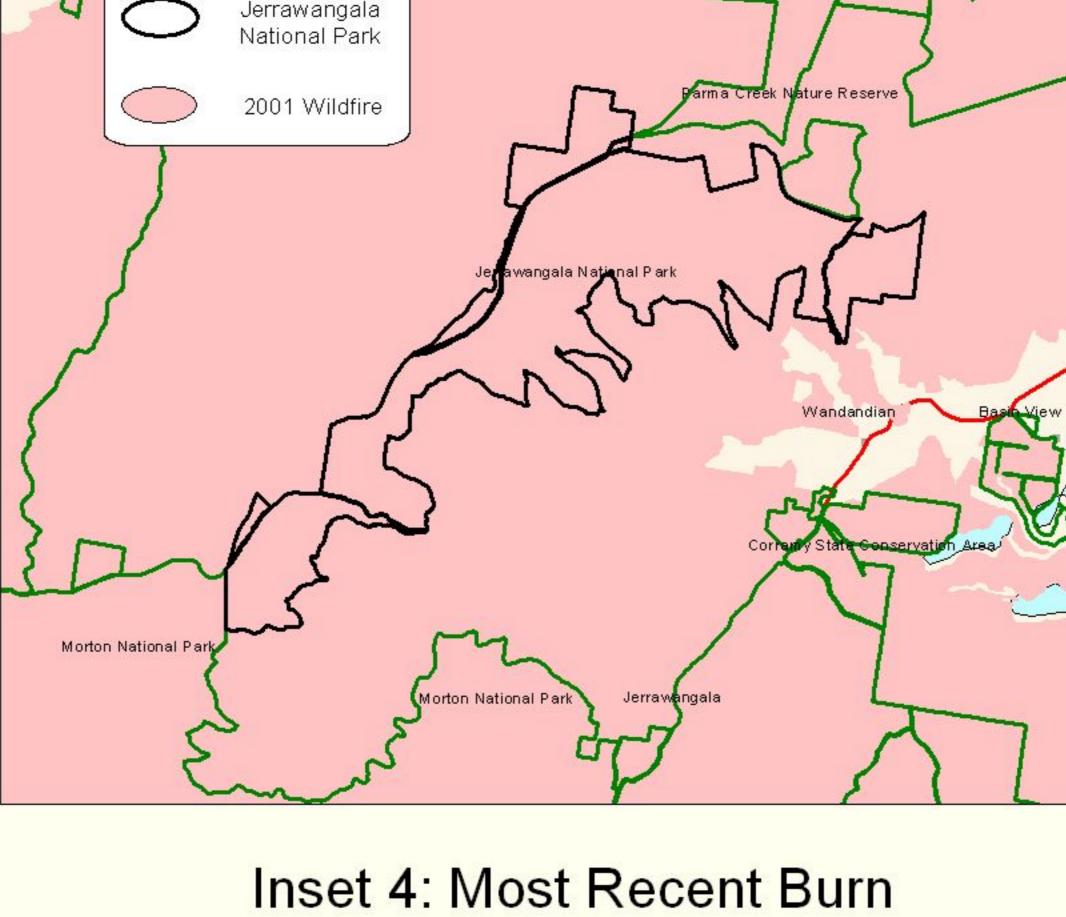




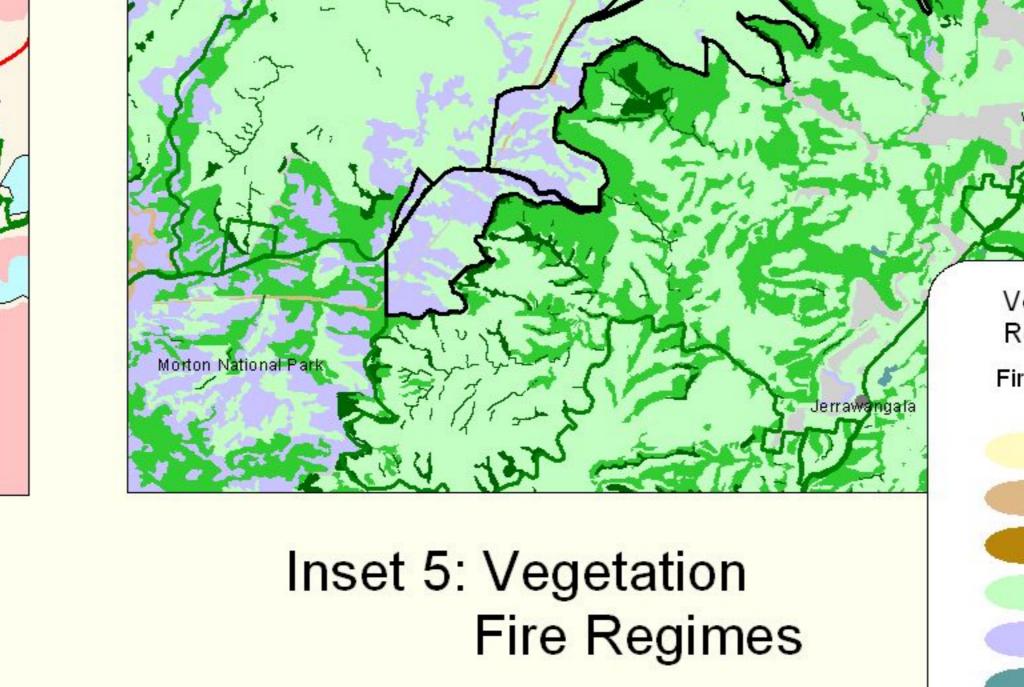


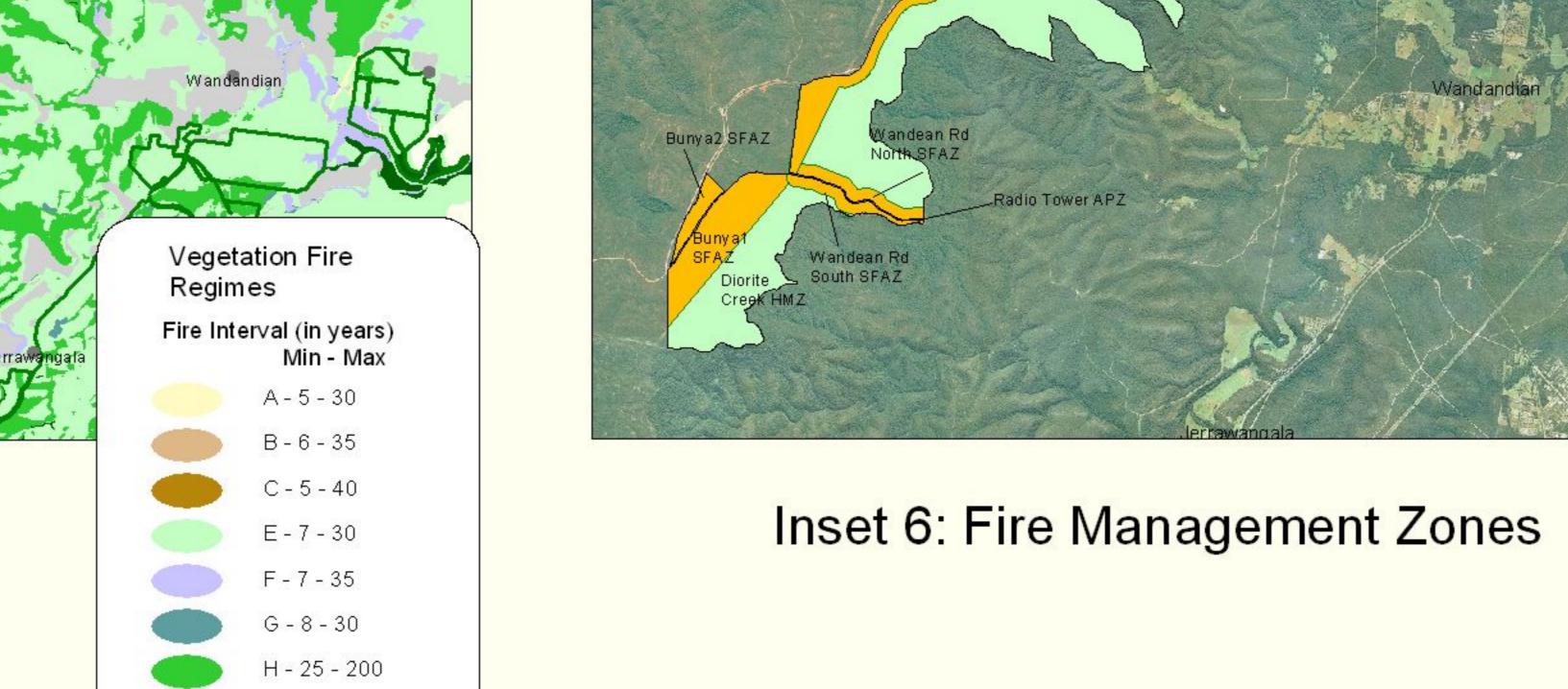
CH 31 - Red Rocks

Repeater Cambewarra



Last 10 Years.





I - Exclude fire where possible. Urban, Rural, Waterbodies