

Mid North Coast Region
Fishermans Bend Nature Reserve
& State Conservation Area
Fire Management Strategy (Type 2)
2006
Sheet 1 of 1

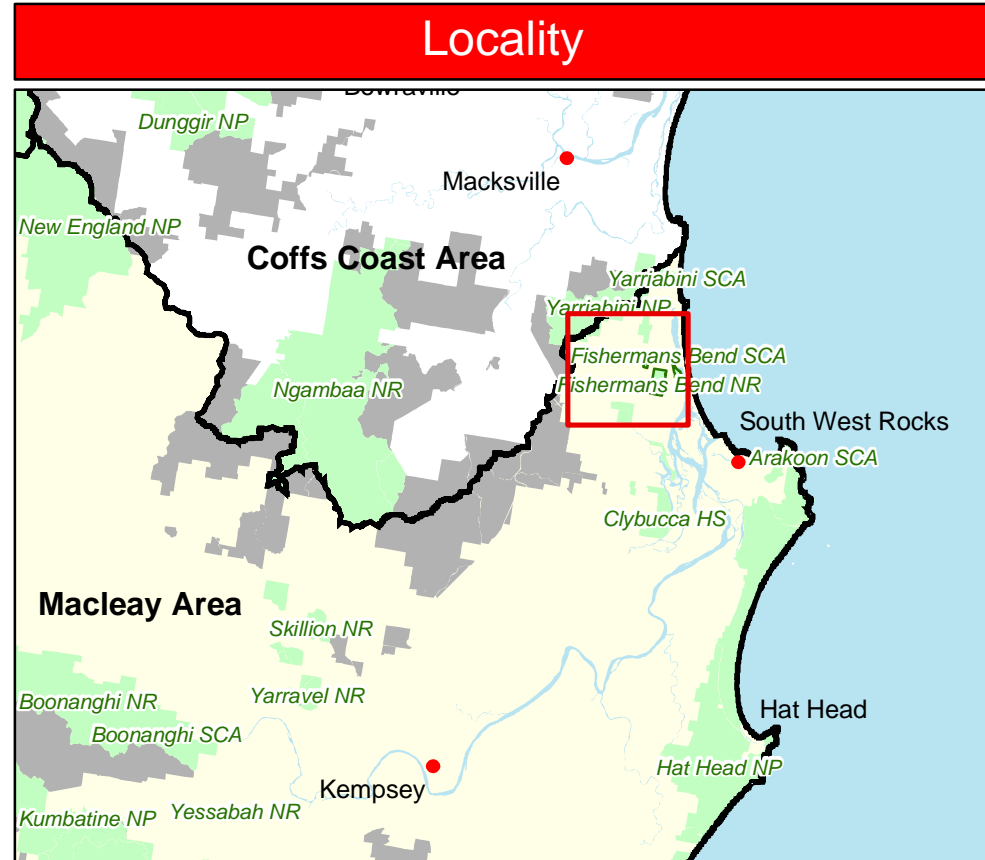
This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the development of incident action plans.

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This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of Rural Fires Act 1997.

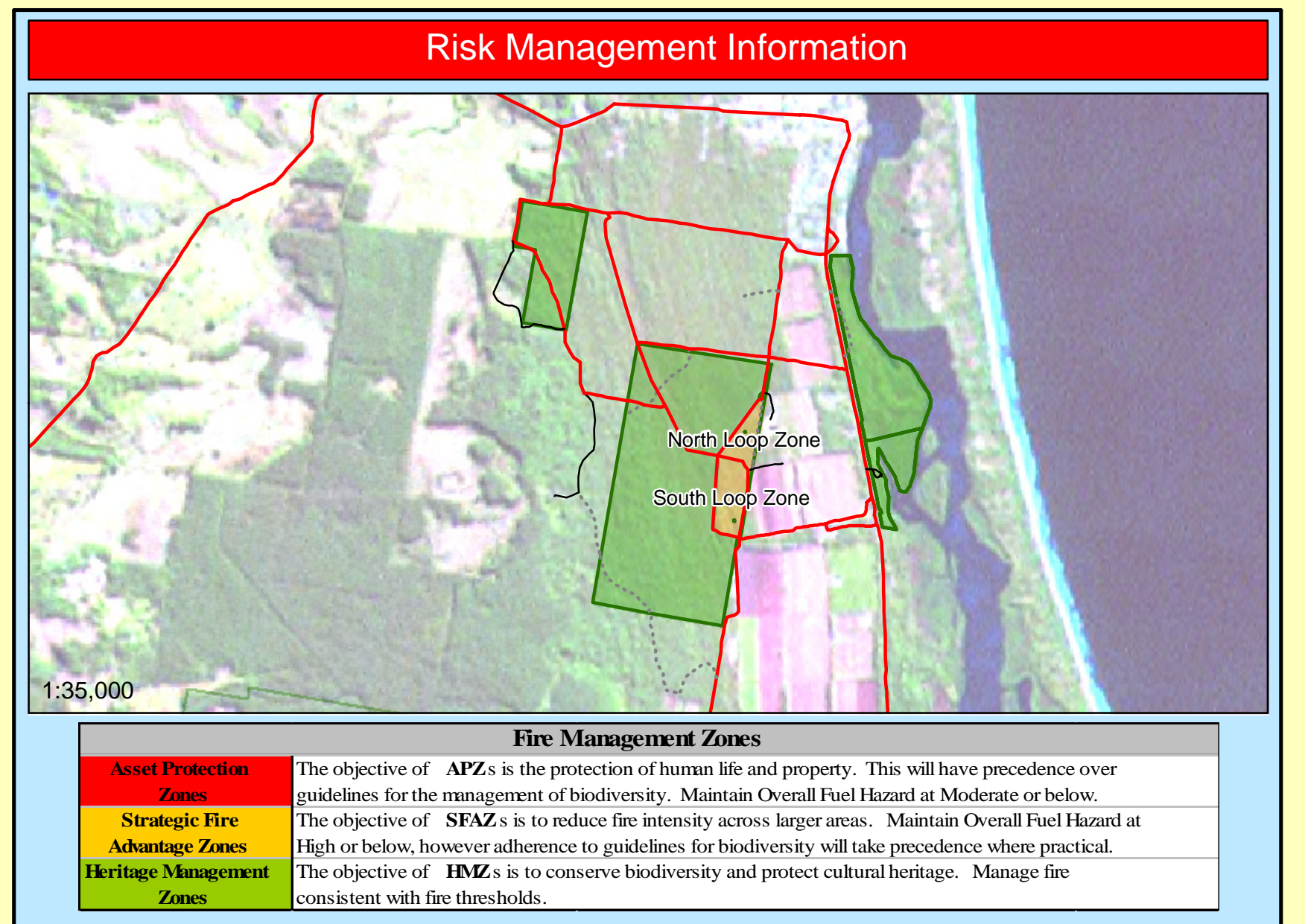
Department of Environment and Conservation (NSW)
Approved 12 April 2006
Director Northern, Parks & Wildlife Division



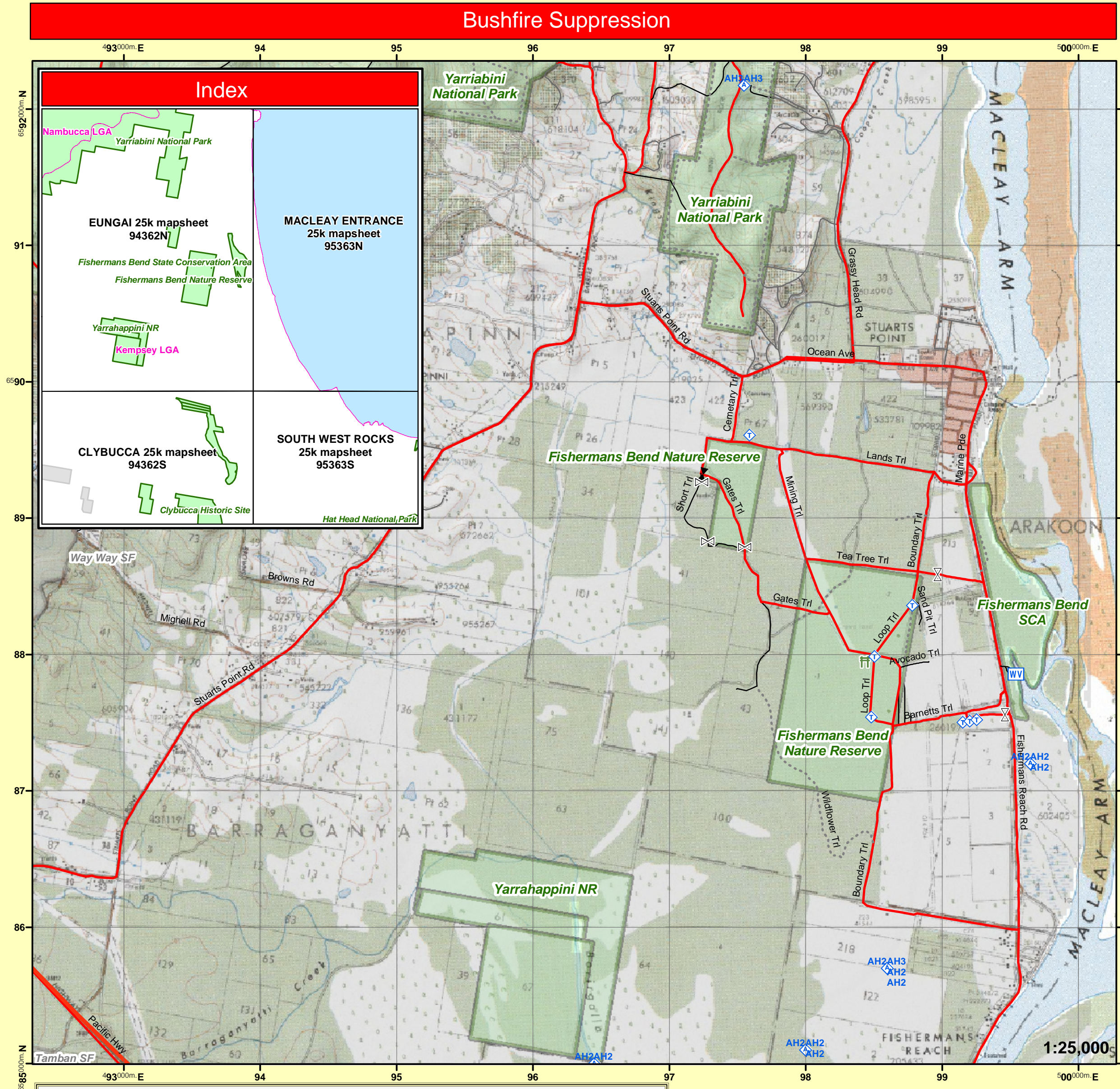
Datum: AGD66
Projection: UTM
Grid: AMG Zone 56

Noted scales are true when this map is reproduced on A1 paper

Produced by MNC GIS



Fire Management Zones	
Asset Protection Zones	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 Moderate or below.
Strategic Fire Advantage Zones	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.
Heritage Management Zones	The objective of HMZs is to conserve biodiversity and protect cultural heritage. Manage fire consistent with fire thresholds.

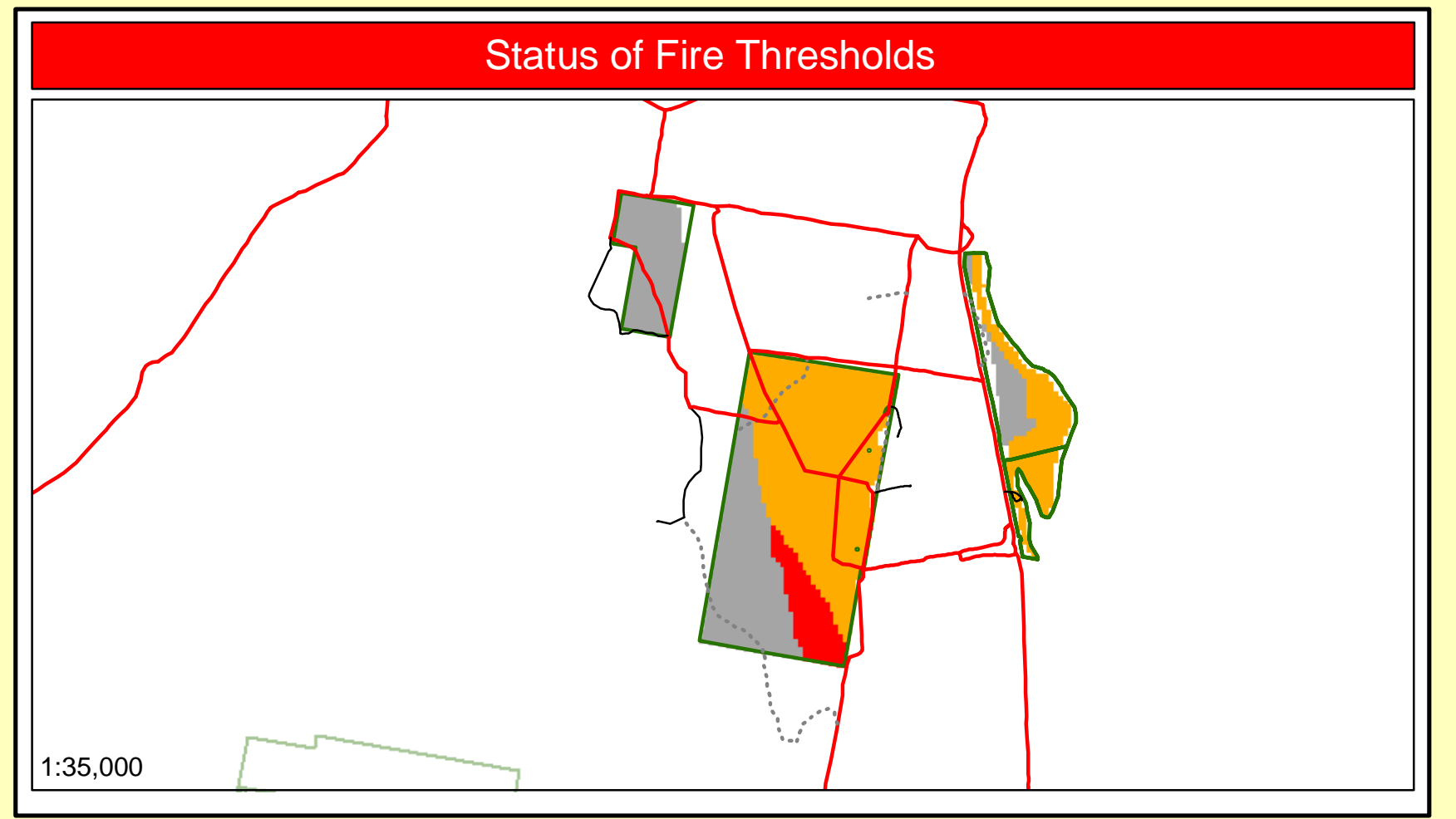
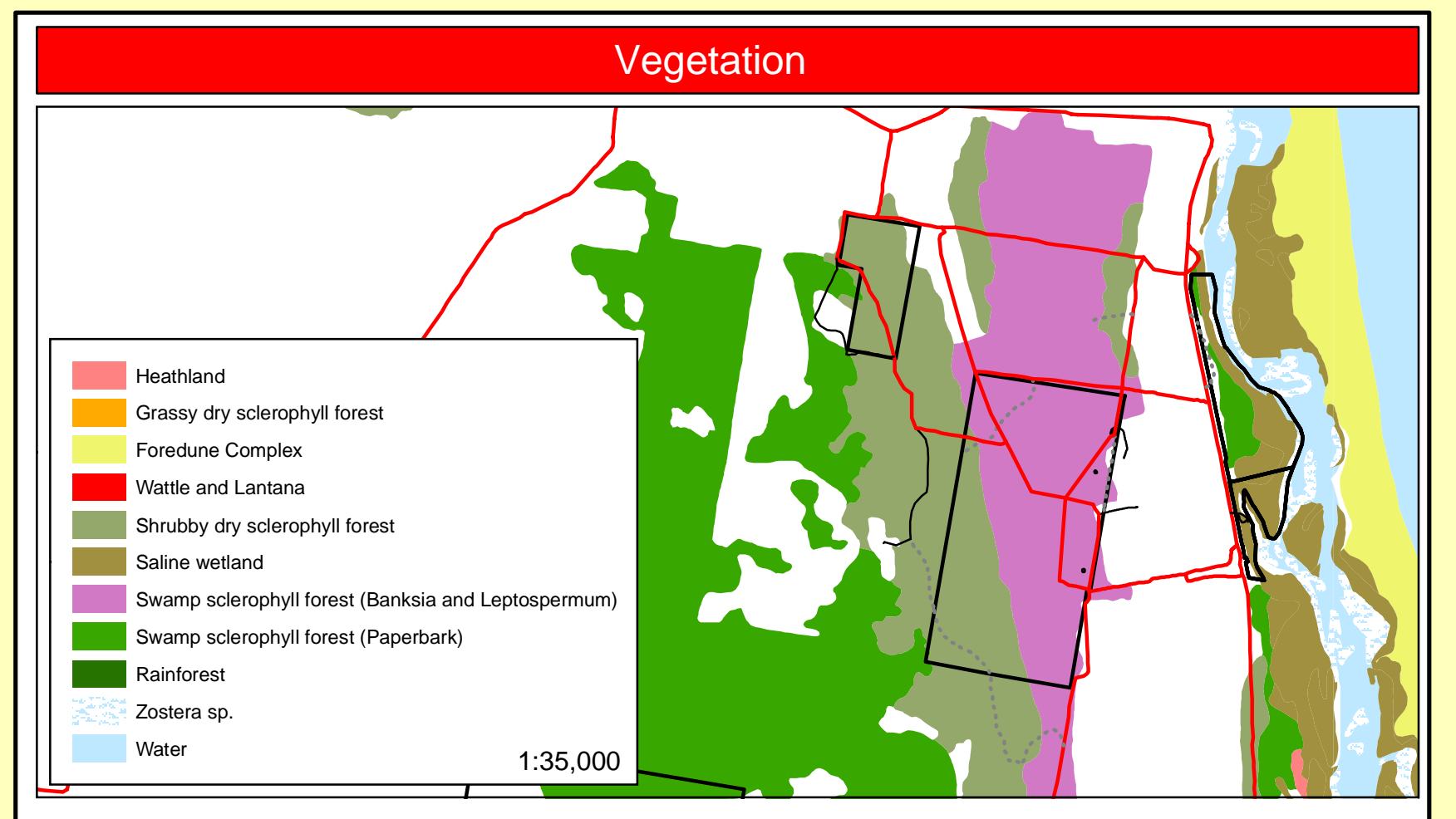


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EUNGAI 25k mapsheet 94362N
MACLEAY ENTRANCE 25k mapsheet 95363N
YARRAHAPPINI NR
Kempsey LGA
CLYBUCCA 25k mapsheet 94362S
SOUTH WEST ROCKS 25k mapsheet 95363S
Hat Head National Park

Symbol/Line Style	Description
Red dashed line	Pacific Highway
Blue dashed line	Primary (Cat 1)
Green dashed line	Secondary (Cat 9)
Black dashed line	Closed
Blue dashed line	Not classified
Orange dashed line	Walking Track
Green square	NPWS Estate
Grey square	SFNSW Estate
Blue circle	Control Centre
Blue square	Endangered Fauna
Blue circle with slash	Endangered Flora
Blue triangle	Escape Route
Blue circle with X	Helipad
Blue circle with dot	Potential Helipad
Blue circle with H	Historic Site
Blue circle with A	Refuge Area
Blue circle with P	Control Centre
Blue circle with S	Staging Area
Blue circle with W	Water Point Helicopter
Blue circle with V	Water Point Vehicle
Blue circle with H & V	Water Point - H & V
Blue circle with G	Gate - NPWS
Blue circle with non-NPWS	Gate - non NPWS
Green tree	Sign
Black arrow	Turning Point
Black square	Vantage Point
Blue circle with A	Aboriginal Sites
Blue circle with B	Bee Sites
Red triangle	Caution
Red triangle with X	Assume all gates locked

Service	Channel	Location and Comments
NPWS - VHF	2	Mount Yarrahappini
NPWS - VHF (Fireground Comms)	34	
NPWS - VHF (Portable Repeater)	13	Stored at Hastings Depot.
Forests NSW	6	NPWS Channel 82 Coffs
RFS - PMR - UHF	72	Mount Boonanghi
CB - UHF	See Note	Incident Controller to advise channel
Mobile Phone - CDMA	Yes	Ridgetops Only
Mobile Phone - GSM	Yes	Poor Coverage



Fire Threshold Status	Description
Overburnt	Fire thresholds have been exceeded. Protect from fire as far as possible.
Vulnerable	The area will be Overburnt if it burns this year. Protect from fire as far as possible.
Recently Burnt	Time since fire is less than the optimum interval, but before that it was within threshold. Avoid fires if possible.
Within Threshold	Fire history is within the threshold for vegetation in this area. A burn is neither required nor should one necessarily be avoided.
Almost Underburnt	The area is close to its threshold and may become underburnt with the absence of fire. A prescribed burn may be advantageous. Consider allowing unplanned fires to burn.
Underburnt	Fire frequency is below fire thresholds in the area. A prescribed burn may be advantageous. Consider allowing unplanned fires to burn.
Unknown	Insufficient data to determine fire threshold. NB. Fire thresholds are defined for vegetation communities to conserve biodiversity.

Resource	Guidelines
Aboriginal & Historic Heritage	<ul style="list-style-type: none">brief all personnel involved in control line construction on the location of sites and required control line route, check for unknown sites during operationsAH1 - Do not cut down trees. Use of fumes, wetting agents and retardants is acceptableAH2 - 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 burnt by bushfire, backburn or prescribed burn without damageAH3 - Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites. Avoid water bombing which may cause ground disturbance. Permission required from Aboriginal Heritage Environmental Officer and Aboriginal community.
Threatened Property (NPWS FMM 4.11)	<ul style="list-style-type: none">All property owners with assets at possible risk from a wildfire event will be:<ul style="list-style-type: none">Kept informed regarding the progress of the fire; andAsked for an assessment of their current level of asset protection preparedness.
Threatened Fauna (NPWS FMM 4.13 & 5.2)	<ul style="list-style-type: none">Brief all personnel involved in control line preparation or in vehicle based fire suppression on the location of sites.If possible, protect habitat area from burn if the effects of the resulting fire frequency, season and/or intensity will have a significant impact or are unknownCheck for unknown locations of threatened fauna during operationsWetting agents, foams and retardants are not to be used within 50 metres of waterways or water bodiesAvoid fire in the spring due to ground nesting birdsAvoid depletion of fire ground water suppliesWildfire rescue program to be implemented when IC declares it safe to undertake on-ground rescue operations
Threatened Flora (NPWS FMM 4.13)	<ul style="list-style-type: none">If possible, protect populations or individuals from burn area if the fire frequency thresholds are exceeded or the fire response category of the species is either an obligate re-seeder or unknown.Check for unknown locations of threatened flora during operationsClear 1m radius around stags, habitat and feed trees, on-ground hollows and timber forest bridges, adjacent to control linesAvoid high intensity fire, where possible do not allow flame height to exceed one third of tree height
Fire Fighting Activity	Guidelines
Command & Control (NPWS FMM 4.2)	<ul style="list-style-type: none">The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly.On the arrival of other combatant agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations.
Crew shifts and Changeovers. (NPWS FMM 6.2)	<ul style="list-style-type: none">Crew shift should be no longer than 12 hrs within a 24-hr period with a min 8-hr break.Max of 3 days on fire ground and/or IMT.Changeovers in the field should preferably take place during daylightChangeovers of field and IMT personnel should be staggered when possible so that outgoing IMT staff brief incoming field staff before going off shift, and the outgoing Div Comms can brief the incoming IMT staff
Visitor Control (NPWS FMM 4.13)	<ul style="list-style-type: none">The park may be closed to the public when it is considered necessary due to conditions, which create an extreme fire danger, or during fire fighting operations.
Fire Advantage Recording (NPWS FMM 4.15)	<ul style="list-style-type: none">All fire advantages used during wildfire suppression operations must be mapped and added to the GIS database.
Fire Investigation (NPWS FMM 5.3)	<ul style="list-style-type: none">Where possible point of origin to be protected by crews undertaking suppression operationsNPWS Fire Investigators will be made available to investigate fire. As close as possible to the time of ignition, preferably within 24 hoursNote: All evidence relating to the circumstances surrounding fires of a suspicious origin must be brought immediately to the attention of the NSW Police
Aerial Water Bombing (NPWS FMM 4.4 / NSW Fire Agencies Aviation SOPs O2 / NPWS Guidelines for Effective Aircraft Management)	<ul style="list-style-type: none">The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spotovers.The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstancesWhere practicable foam should be used to increase the effectiveness of the water.Ground crews must be alerted to water bombing operations.Fixed wing bombing aircraft must operate out of the closest airfield practicable.

Fire Fighting Activity	Guidelines
Aerial Ignition (NPWS FMM 4.2.16 & 4.4 / NSW Fire Agencies Aviation SOPs O2-4 / NPWS Guidelines for Effective Aircraft Management)	<ul style="list-style-type: none">All is practicable and may be used in Fishermans Bend NR, but only with the prior consent of the senior NPWS officer.
Backburning (NPWS FMM 4.8)	<ul style="list-style-type: none">Temperature and humidity trends must be monitored carefully to determine the safest times to implement backburns. 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, clear a 1m radius around dead and fibrous barked trees adjacent to containment lines prior to backburning, or wet down these trees as part of the backburn ignition.Brief all involved personnel on the location of cultural sites and threatened species prior to backburning, and adhere to the above guidelines.
Containment Lines (NPWS FMM 2.3 & 3.9)	<ul style="list-style-type: none">No new control lines will be constructed within the reserve.Only existing or previous trail or control line routes will be used.In consultation with Planning Officers, Divisional Commanders, Section Commanders and Crew Leaders, prioritize the roads and trails needed for control lines requiring works.Close all tracks not required for other purposes immediately after the incident.Incorporate remedial works for erosion control in control line works where possible.Use of rainforest communities as part of a fire control line is only to be used under exceptional circumstances associated with wildfire. Once KBDI exceeds 125 rainforest can be expected to burn and ground fires may become an issue.Brief all personnel involved in control line construction / maintenance on the location of Aboriginal or historic sites and threatened speciesAll heavy equipment used to clear or establish control lines will be accompanied a Cat9 and crew for comms and safety
Earthmoving Equipment (NPWS FMM 4.2.16 & 4.3)	<ul style="list-style-type: none">Earthmoving equipment may only be used with the prior consent of the senior NPWS officer, and then only if the probability of its success is high.Earthmoving equipment must be washed down prior to it entering NPWS estate.As far as possible, restrict its use to previously used containment lines.Earthmoving equipment must be always guided and supervised by an experienced NPWS officer, and accompanied by a support vehicle. This vehicle must be a firefighting vehicle.Containment lines constructed by earthmoving equipment should be at least 50 m from depression lines in order to avoid erosion problems.Observe the Threatened Species and Cultural Heritage Operational Guidelines.Proposed containment lines to be constructed with earthmoving equipment should be surveyed to identify unknown cultural heritage sites.
Fire Suppression Chemicals (NPWS FMM 4.2.16 & 4.10)	<ul style="list-style-type: none">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 50 m of rainforest, watercourses, dams and swamps.Areas where fire suppression chemicals are used must be mapped and the used product s name recorded.Observe the Threatened Species Operational Guidelines.
Rehabilitation (NPWS FMM 5.1)	<ul style="list-style-type: none">Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Smoke Management (NPWS FMM 3.4)	<ul style="list-style-type: none">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.

Strategy Information	
Wildfires	<ul style="list-style-type: none">Moderate condition - Containment Strategies<ul style="list-style-type: none">Severe or dry unstable weather conditions forecast:<ul style="list-style-type: none">Direct and indirect (parallel) attacks with fire units to minimise fire area and secure flanks as soon as possible on the closest control line.Moist weather forecast<ul style="list-style-type: none">Direct and parallel attacks with fire units to minimise fire area and secure flanks as soon as possible on the closest control line.Extreme condition - Containment Strategies<ul style="list-style-type: none">All weather forecasts<ul style="list-style-type: none">Fallback to existing trails and roads and recently burnt areas.Undertake reconnaissance and prepare control lines, primary and fallback, during the day.Target backburning operations for when humidity rises in late afternoon and early evening in order to backburn the area between the control line and the fire during the night.NOTE: In Heathlands wind speed in excess of 12 kph constitutes extreme conditions, no matter the temperature
Prescribed Burning (NPWS Fire Management Manual 4.7)	<ul style="list-style-type: none">Autumn and Winter. HR burns may be undertaken in Spring, but only in Asset Protection Zones

Agency	Position / Location	Phone
NPWS	MNC Regional Office	6586 8300 Fax 6584 9402 016 301161
	MNC Regional Duty Officer	
	Macleay Area Office	6566 6621 Fax 6566 6507
Rural Fire Service	Kempsey Depot	6562 2376 Fax 6562 2391
	Ranger - Cath Ireland	6566 7589
	Senior Field Supervisor - Peter Greenuip	6566 7293
	Macleay Fire Control Centre (24 hours)	6651 9490 Fax 6562 2566
NSW Fire Brigade	Nambucca Fire Control Centre (24 hours)	6568 2536 Fax 6568 3386
	Emergency	000
SES	Kempsey Station	6562 4442
	South West Rocks Station	6566 6052
	Emergency	000
Police	Kempsey Unit	6562 2228
	Gladstone Unit	6567 4369
Ambulance	Emergency	000
	Bookings	131233
Forests NSW	Wauchupo	6585 3744 Fax 65852392
		6562 6077 Fax 6562 8902
Local Government	Kempsey Council	