

Mid North Coast Region

Khappinghat Nature Reserve & Talawahl Nature Reserve

Fire Management Strategy (Type 2)

2005

Sheet 1 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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Department of Environment and Conservation (NSW)

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

Endorsed by:

Director Northern, Parks & Wildlife Division

Date:

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Produced by MNC GIS

Datum: AGD66

Projection: UTM

Grid: AMG Zone 56

Noted scales are true when this map is printed on A0 paper

Locality

Index

Contact Information		
Agency	Position / Location	Phone
NPWS	Regional Duty Officer / After Hours Pager	016 301 1611
	Area Manager	6586 8300
	Fire Management Officer	6586 8300
	Regional Operations Coordinator	6586 8317
	Manning Area Office	0417 260 055
RFS	Fax	6552 4097
	Regional Office	6551 0575
	Operations Officer	6586 8300
	Emergency Taree Fire Control 24hr Number	6592 6990
	Team Manager	0427 229 131
NSW Fire Brigade	Emergency Taree Station	6558 9222
	Emergency Taree Unit	0427 260 383
SES	Emergency Taree Station	6552 4099
	Emergency Taree Unit	000
Police	Emergency Taree Station	6551 5246
	Emergency Taree Unit	000
Ambulance	Emergency Taree Station	6552 5866
	Emergency Taree Unit	000
Hospital	Emergency Taree Station	6552 0399
	Emergency Taree Unit	000
Forests NSW	Emergency Taree Station	13 1233
	Emergency Taree Unit	6592 9111
Council	Emergency Taree Station	6585 3744
	Emergency Taree Unit	6551 0074
Local Aboriginal Land Councils	Emergency Taree Station	6592 5399
	Emergency Taree Unit	0428 654 025
Bee Licensees	Emergency Taree Station	6552 4106
	Emergency Taree Unit	6555 5411
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Strategy Information				
Fire Season Information				
Wildfires	Have been known to start as early as late August, but usually the potential for a large fire event is greatest between October and December. This period may extend into January in more severe years.			
	General season is Autumn to late Winter. Burning is possible in early Spring but not desirable on a regular basis from an ecological point of view.			
Prescribed Burning (NPWS Fire Management Manual 4.7)				
Suppression Strategies				
Current FDR	Forecast FDR			
Low - Mod	Low - Mod	Under take direct, parallel or indirect attack along existing containment lines.		
Low - Mod	= > High	Where practicable consider maximising the fire area in accordance with the requirements of any proposed prescribed burns.		
Low - Mod	= > High	In order to minimise the fire area and secure the flanks as soon as possible, undertake direct, parallel or indirect attack along the closest containment lines.		
Low - Mod	= > High	Pay particular attention to the flank on the next predicted down wind side.		
High	All	Under take indirect attack along existing or newly constructed containment lines.		
High	All	Secure and deepen containment lines along the next predicted downwind side of the fire.		
High	All	If applicable consider broader than normal containment strategies to avoid wasted effort and high risk of failure.		
All	All	Ensure there is sufficient time to secure containment lines prior to the fire impacting upon them; otherwise fall back to the next potential line.		

Communications Information		
Service	Channel	Location and Comments
NPWS - VHF	7	Mt Marie Channel 9 as alternate
NPWS - VHF (Fireground Comms)	39	Channel 41 as alternate
NPWS - VHF (Portable Repeater)	13	Held at Hastings Depot in Port Macquarie.
RFS - PMR - UHF	34	Channel 19 as alternate
RFS - GRN		Not Available
SF - VHF	18	NPWS Channel 86
CB - UHF	23	
Aircraft - VHF		Not Available
Mobile Phone - CDMA	Yes	
Mobile Phone - GSM	Yes	

Operational Guidelines	
Refer to Strategy for Fire Management 2003 and Fire Management Manual 2004.	
Brief all personnel involved in suppression operations on the following issues:	
Resource	Guidelines
Aboriginal Cultural Heritage Site Management (NPWS FMM 4.11)	- AH1 - As far as possible protect site from fire. Do not cut down trees. - AH2 - 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. - AH3 - Avoid all ground disturbance. Avoid water bombing. Site may be burnt by bushfire, back-burn or prescribed burn without damage. - There are no historic sites within the reserves that are threatened by fire.
Historic Heritage Management (NPWS FMM 4.10)	- FA - Wildlife rescue program to be implemented when the IC declares it safe to undertake on-ground rescue operations. - If new sites are located consult with a senior NPWS officer.
Threatened Fauna Management (NPWS FMM 4.12 & 5.2)	- FA - Wildlife rescue program to be implemented when the IC declares it safe to undertake on-ground rescue operations. - If new sites are located consult with a senior NPWS officer.
Threatened Flora Management (NPWS FMM 4.12)	- FA - Wildlife rescue program to be implemented when the IC declares it safe to undertake on-ground rescue operations. - If new sites are located consult with a senior NPWS officer.
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. - Beeskeepers must be notified within the first four hours of a reported ignition. For their safety bee keepers are to be accompanied by a Cat 9 and crew, if the bee sites are either in the predicted path of the fire, on, or adjacent to, the fireground. Contact MNC Regional Office for telephone numbers of Beeskeepers. - License No. 1 - Bee Sites at: Taree Mapsheet GR E449400 N6462300, E450600 N6462400, E451800 N6463000, Cundleton Mapsheet GR E453400 N6461300 and Nabiac Mapsheet GR E442700 N6455800, E439900 N6454400, E442400 N6457400 & E444400 N6455300 - License No. 2 - CAN BE CONTACTED ON (02) 6559 2946. Bee sites at: Nabiac Mapsheet GR E445700 N 6455800 & E446100 N6456700 AND Taree Mapsheet GR E445700 N645600 & E446100 N645700. - License No. 3 - Bee sites at: Nabiac Mapsheet E441200 N6456700 AND Taree Mapsheet E447100 N645900. - License No. 4 - Bee site at: Tyaree Mapsheet E 444500 N6459700
General	- The use of bombing aircraft should support ground based suppression crews engaged in containment operations by aggressively attacking hotspots and spot-overs. - Where practicable foam should be used to increase the effectiveness of the water. - Ground crews must be alerted to water bombing operations.
Aerial Water Bombing (NPWS FMM 4.4 / NSW Fire Agencies Aviation SOPs O2 / NPWS Guidelines for Effective Aircraft Management)	- Aerial ignition may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of a senior NPWS officer. - Utilise incendiaries to rapidly progress back-burns down slope where required.
Aerial Ignition (NPWS FMM 4.2.20 & 4.4 / NSW Fire Agencies Aviation SOPs O2-4 / NPWS Guidelines for Effective Aircraft Management)	- 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, 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. - Avoid ignition of backburns at the bottom of slopes where a long and intense up slope burn is likely.
Backburning (NPWS FMM 4.8)	- 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.
Command & Control (NPWS FMM 4.2)	- 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.
Containment Lines (NPWS FMM 2.2 & 3.9)	- 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 this vehicle must be a firefighting vehicle. - Earthmoving equipment should be washed down, where practicable, prior to it entering NPWS estate.
Earthmoving Equipment (NPWS FMM 4.2.20 & 4.3)	- All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database. - Waiting 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 products name recorded. - The Threatened Species Operational Guidelines are to be observed. - Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Fire Advantage Recording	- 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. - The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.
Fire Suppression Chemicals (NPWS FMM 4.2.20 & 4.9)	- 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. - The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.
Rehabilitation (NPWS FMM 5.1)	- 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. - The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.
Smoke Management (NPWS FMM 3.4)	- 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. - The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.
Visitor Management (NPWS FMM 3.6 & 4.13)	- 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. - The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.

Contour interval 10 metres

NPWS Roads

Primary (Cat 1)

Secondary (Cat 9)

Closed

Not classified

Walking Track

Slashed Trail

NPWS Estate

State Forest

State Forest Plantation

Fires 2004-2005

Fires 2003-2004

Fires 2001-2003

Aboriginal Sites

Control Centre

Endangered Fauna

Endangered Flora

Escape Route

Helipad

Potential Helipad

Historic Site

Refuge Area

Staging Area

Threatened Property

Water Point Helicopter

Water Point Vehicle

Caution

Gate - NPWS

Gate - non NPWS

Loading Ramp - Old

Sign

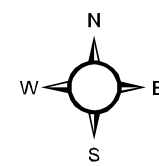
Turning Point

Vantage Point

Bee Sites

Assume all gates locked

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Talawahl Nature Reserve
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Sheet 2 of 2



Produced by MNC GIS

Datum: AGD66
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Grid: AMG Zone 56

Noted scales are true
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Department of
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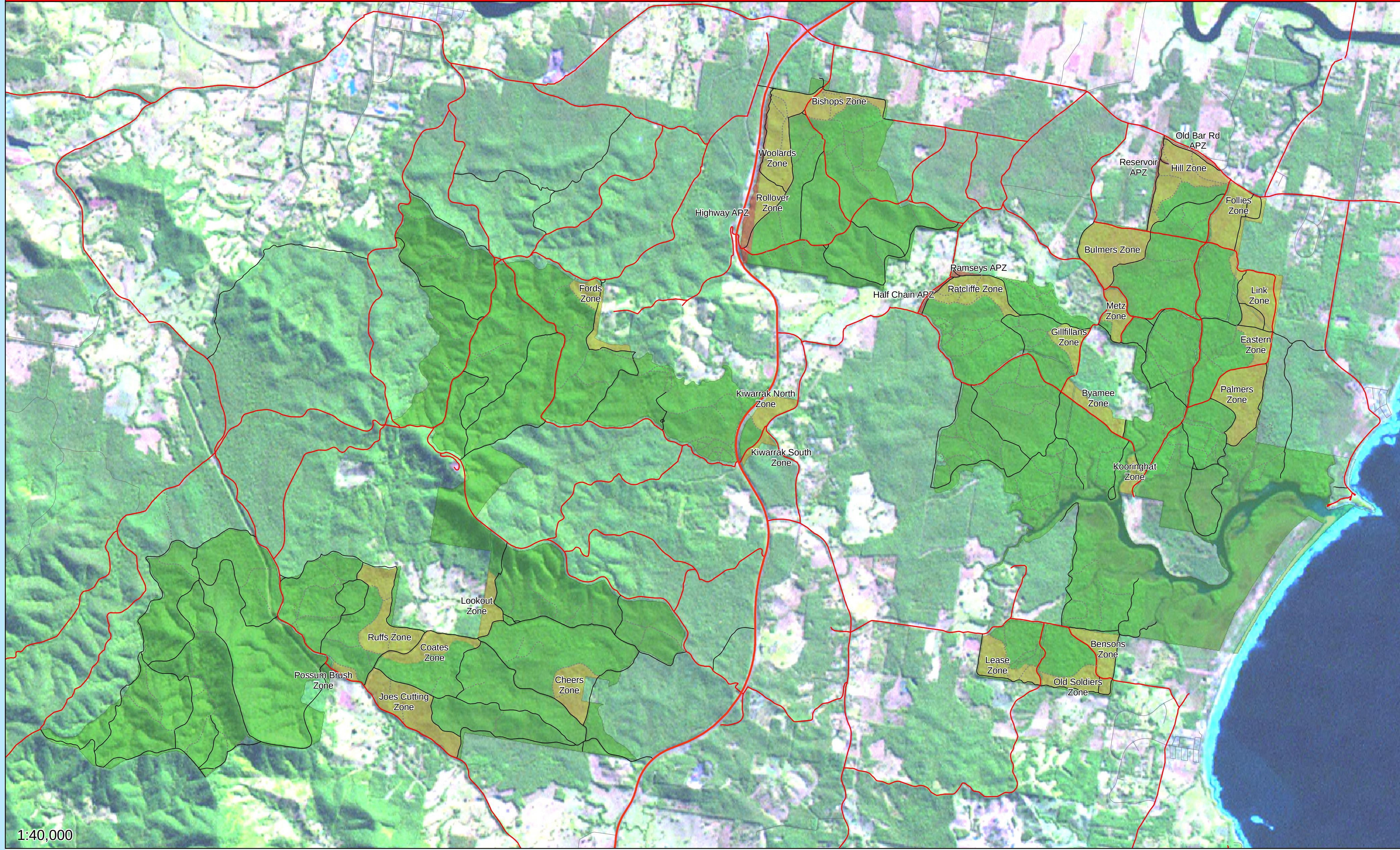
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Endorsed by: _____ Date: / /
Director Northern, Parks & Wildlife Division

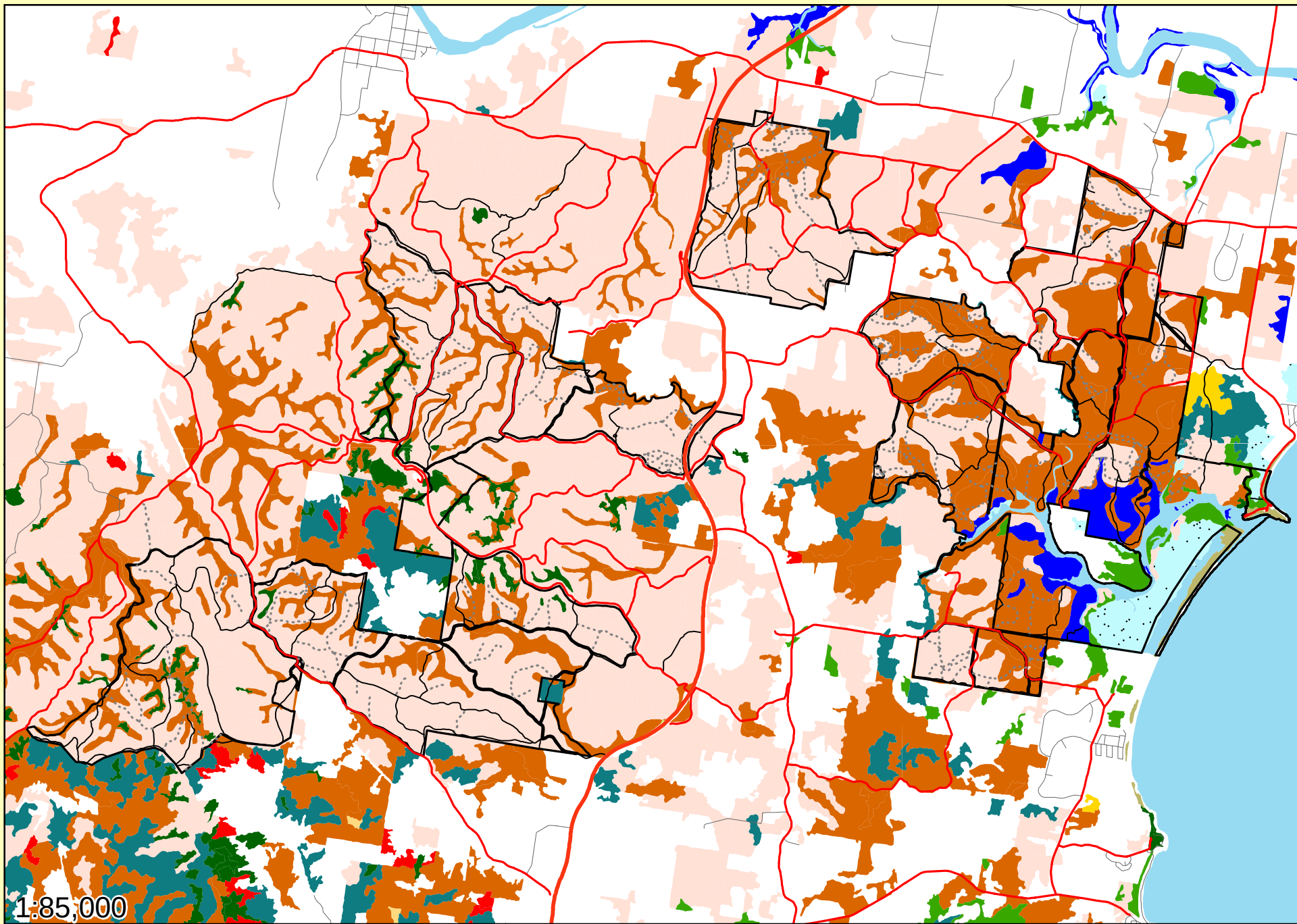
Fire Management Zones

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.	
Zone	Action	
Old Bar APZ	Prescribed burn on 3-5 year intervals	
Reservoir APZ	Prescribed burn on 3-5 year intervals	
Highway APZ	Prescribed burn on 3-5 year intervals	
Half Chain APZ	Prescribed burn on 3-5 year intervals	
Ramseys APZ	Prescribed burn on 3-5 year intervals	
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.	
Zone	Action	
Hill SWZ	Prescribed burn when lower threshold is reached	
Follies Road SWZ	Prescribed burn when lower threshold is reached	
Link SWZ	Prescribed burn when lower threshold is reached	
Eastern SWZ	Prescribed burn when lower threshold is reached	
Palmer SWZ	Prescribed burn when lower threshold is reached	
Bulmers SWZ	Prescribed burn when lower threshold is reached	
Metz SWZ	Prescribed burn when lower threshold is reached	
Ramseys East SWZ	Prescribed burn when lower threshold is reached	
Byamsee SWZ	Prescribed burn when lower threshold is reached	
Koorringhat SWZ	Prescribed burn when lower threshold is reached	
Ratcliff SWZ	Prescribed burn when lower threshold is reached	
Benson's SWZ	Prescribed burn when lower threshold is reached	
Old Soldiers SWZ	Prescribed burn when lower threshold is reached	
Lease SWZ	Prescribed burn when lower threshold is reached	
Bishops SWZ	Prescribed burn when lower threshold is reached	
Woolards SWZ	Prescribed burn when lower threshold is reached	
Rollover SWZ	Prescribed burn when lower threshold is reached	
Kiwarak North SWZ	Prescribed burn when lower threshold is reached	
Kiwarak South SWZ	Prescribed burn when lower threshold is reached	
Fords SWZ	Possum Bush SWZ	Prescribed burn when lower threshold is reached
Lookout SWZ	Lookout SWZ	Prescribed burn when lower threshold is reached
Ruffs SWZ	Ruffs Zone	Prescribed burn when lower threshold is reached
Coates SWZ	Coates Zone	Prescribed burn when lower threshold is reached
Cheers SWZ	Cheers Zone	Prescribed burn when lower threshold is reached
Possum Bush SWZ	Possum Bush Zone	Prescribed burn when lower threshold is reached
Joes Cutting SWZ	Joes Cutting Zone	Prescribed burn when lower threshold is reached
Heritage Management Zones	The objective of HMZs is to conserve biodiversity and protect cultural heritage. Manage fire consistent with fire thresholds.	
Zone	Action	
All	Prescribed burn after upper threshold is reached	

Risk Management Information

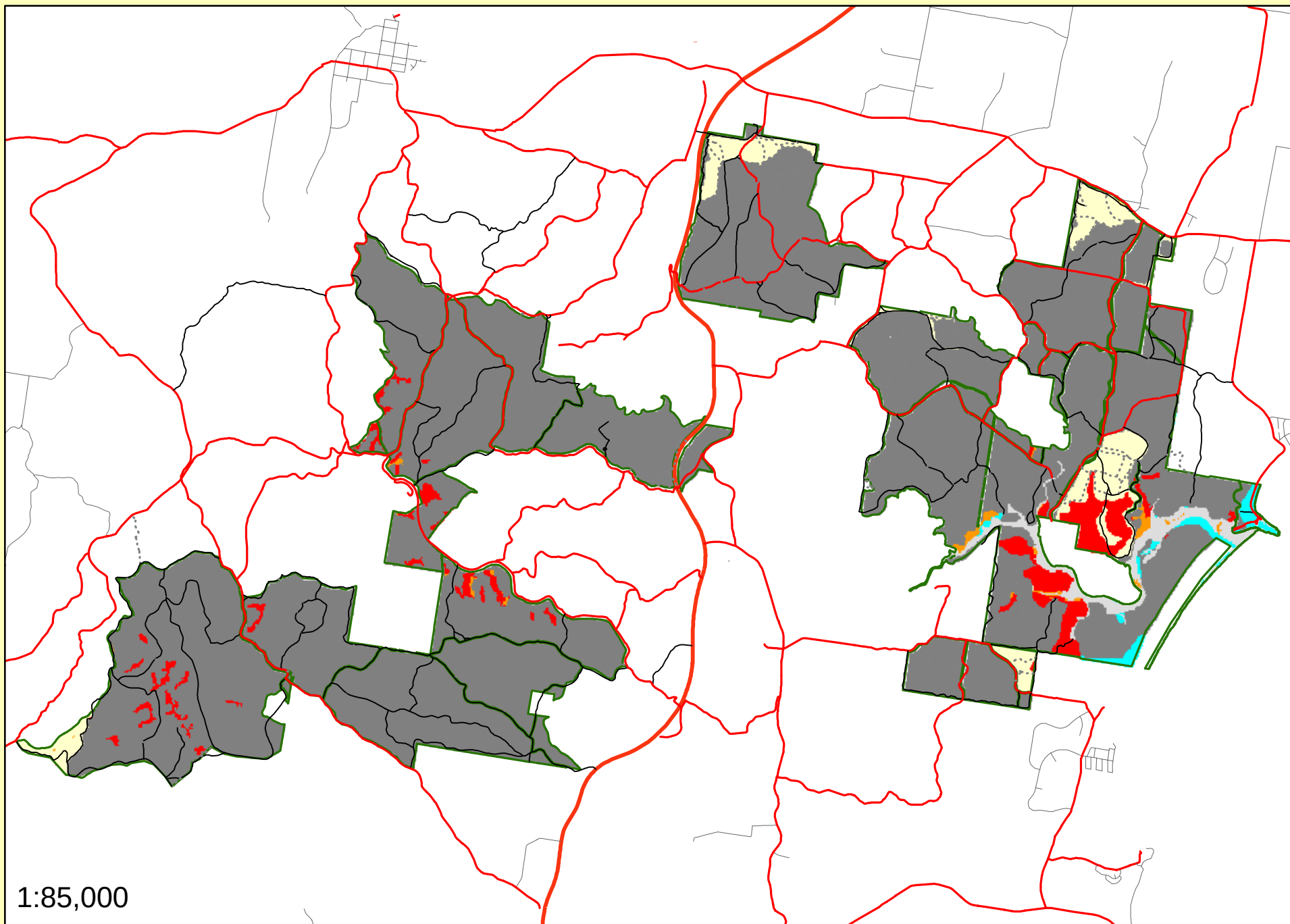


Vegetation



- Arid & semi-arid shrubland
- Freshwater wetland
- Freshwater wetland / Swamp sclerophyll forest
- Grassland
- Grassy dry sclerophyll forest
- Rainforest
- Saline wetland
- Semi-mesic grassy forest
- Shrubby dry sclerophyll forest
- Shrubby dry sclerophyll forest &/or Heathland
- Swamp sclerophyll forest
- Wet sclerophyll forest
- Water
- Not Applicable
- Cleared (<20% CCP)

Status of Fire Thresholds



Fire Thresholds	
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