

### North Coast Region New England & Cunnawarra (part) National Parks, Jobs Mountain & Pee Dee Nature Reserves

#### Fire Management Strategy (Type 2) 2014 (external version) Sheet 3 of 4

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 58 (4) and Section 64 (1) of Rural Fires Act 1997.

#### Index & Locality

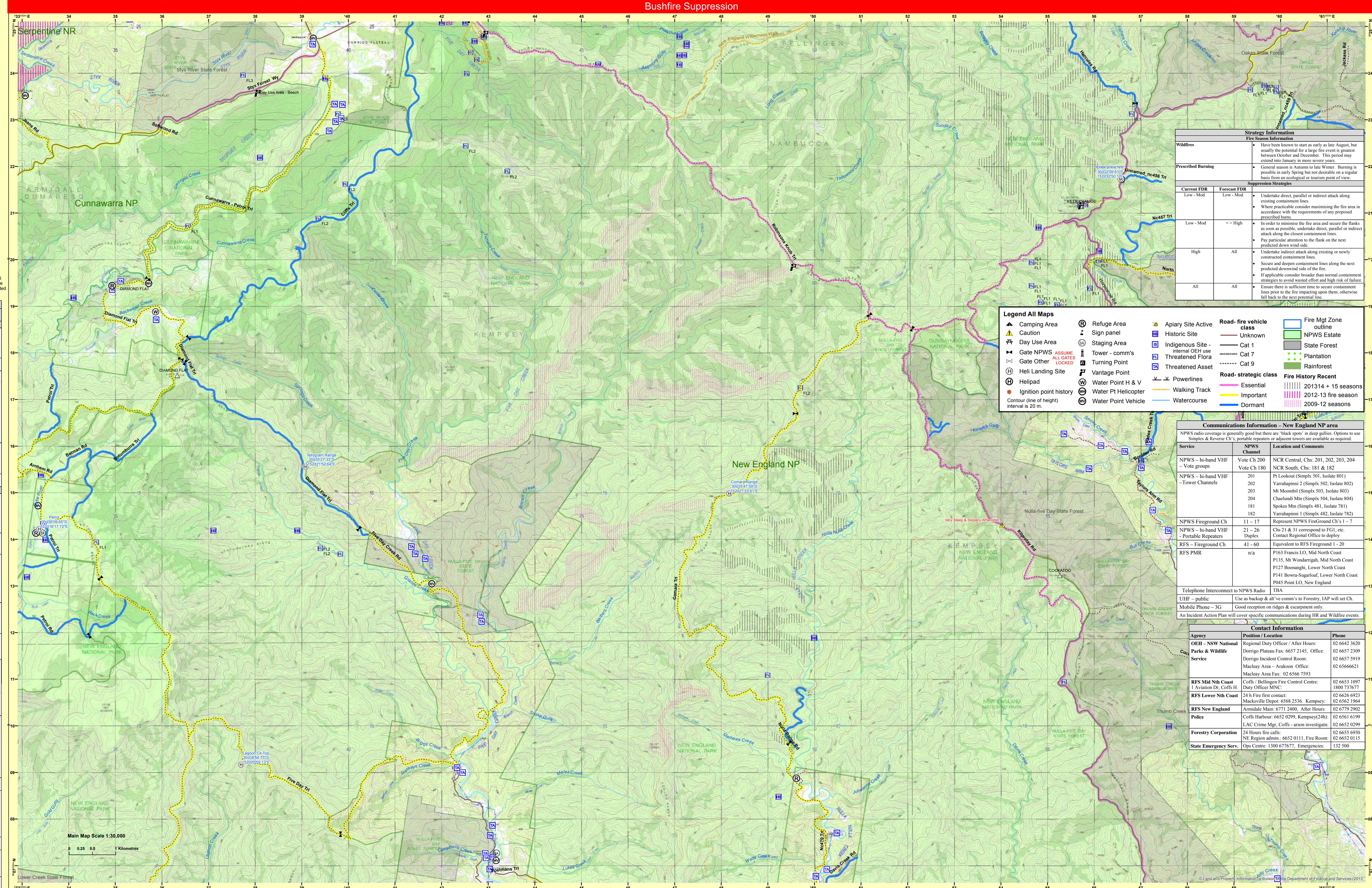
Datum: GDA04  
Projection: UTM  
Grid: MGA Zone 56  
North Scale is true when this map is printed on A0 size paper

#### Operational Guidelines

Refer to Refer to NPWS Fire Management Manual

Brief all personnel involved in suppression operations on the following issues:

Resource	Guidelines
<b>Aboriginal Cultural Heritage Management</b> (NPWS IMM 4.11) Site points on internal version only.	<ul style="list-style-type: none"> <li>AH2 - As far as possible protect site from fire. Avoid all ground disturbance including the use of earthmoving machinery, handling construction and driving over sites. Avoid water bombing which may cause ground disturbance.</li> <li>AH3 - Avoid all ground disturbance. Avoid water bombing. Site may be burnt by bushfire, back-burn or prescribed burn without damage.</li> </ul>
<b>Historic Heritage Management</b> (NPWS IMM 4.10)	<ul style="list-style-type: none"> <li>Protect Site from fire and maintain an insect protection buffer. Avoid all ground disturbance, including water bombing.</li> </ul>
<b>Threatened Fauna Management</b> (NPWS IMM 4.12 & 3.2)	<ul style="list-style-type: none"> <li>Where practicable protect habitat areas and trees from the fire if the effects of the resulting fire frequency, season &amp; intensity will have a significant or unknown impact.</li> <li>Specific Fauna Prescriptions relevant to Dorrigo and Bellingen River NPs:</li> <li>FA3 Treatment: Exclude fire from habitat (rainforest / moist forest)</li> <li>FA4 Treatment: Mosaic burn to diversify understorey. Protect canopy stands.</li> <li>FA7 Treatment: As far as possible, protect large and hollow-bearing trees in locations where these type of species are known to occur.</li> <li>FA8 Treatment: Avoid frequent fire (greater &gt; 10 yrs apart) and mosaic burn pattern.</li> <li>FA9 Treatment: Protect habitat from disturbance with heavy machinery or chemicals.</li> <li>FA13 Treatment: Protect ground habitat (logs), drainage lines and hollow-bearing trees.</li> <li>For other Threatened Fauna sites, consult with a senior NPWS officer and the 'Threatened Species Prescriptions in the "Look-up Tables" folder in P:\Region\Other\Fire\FRMS.</li> </ul>
<b>Threatened Flora Management</b> (NPWS IMM 4.12)	<ul style="list-style-type: none"> <li>FL1 - Avoid inter-fire intervals of &lt;10 years in locations where these species are known to occur. Avoid the use of earth moving machinery and retardant in locations where these species are known to occur.</li> <li>FL2 - As far as possible, exclude fire and avoid the use of earth moving machinery or retardant from where these species are known to occur.</li> <li>Where practicable, keep property owners with assets at risk from a wildfire informed on the fire progress and ask for an assessment of their current asset protection preparation.</li> </ul>
<b>Threatened Property</b>	<ul style="list-style-type: none"> <li>Where practicable, keep property owners with assets at risk from a wildfire informed on the fire progress and ask for an assessment of their current asset protection preparation.</li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>The use of bombing aircraft should support containment operations by aggressively attacking between and above.</li> <li>The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances assessed in an Incident Action Plan.</li> <li>Where practicable foam should be used to increase the effectiveness of the water. Ground crews must be alerted to water bombing operations.</li> </ul>
<b>Aerial Ignition</b> (NPWS IMM 4.20, 4.4, NSW Fire Reserve 500 OC, NPWS Guidelines Effective Aircraft Mgt)	<ul style="list-style-type: none"> <li>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.</li> <li>Unless incinerators to rapidly progress back-burns down slope where required.</li> <li>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.</li> <li>Where practicable, clear a 1m radius around dead and fibrous barked trees adjacent to containment lines prior to backburning, or wet down these trees.</li> <li>Avoid ignition of backburns at the bottom of slopes where a long and intense up slope burn is likely.</li> </ul>
<b>Command &amp; Control</b> (NPWS IMM 4.2)	<ul style="list-style-type: none"> <li>The first combatant agency on site may assume control of the fire, but then ensure the relevant land management agency is notified promptly.</li> <li>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 IFMC Plan of Operations.</li> </ul>
<b>Containment Lines</b> (NPWS IMM 2.2, 3.9)	<ul style="list-style-type: none"> <li>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.</li> <li>Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.</li> </ul>
<b>Containment Lines</b> (NPWS IMM 2.2, 3.9)	<ul style="list-style-type: none"> <li>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.</li> <li>Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.</li> <li>All containment lines not required for other purposes should be closed at the cessation of the incident.</li> <li>All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location.</li> </ul>
<b>Earthmoving Equipment</b> (NPWS IMM 4.20, 4.3)	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species and Cultural Heritage Op's Guidelines, &amp; be surveyed, where possible, to identify unknown heritage sites.</li> <li>Earthmoving equipment should be washed down, where practicable, prior to entering NPWS estate.</li> </ul>
<b>Fire Advantage Recording</b>	<ul style="list-style-type: none"> <li>All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.</li> </ul>
<b>Fire Suppression Chemicals</b> (NPWS IMM 4.20, 4.5)	<ul style="list-style-type: none"> <li>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.</li> <li>Exclude the use of surfactants and retardants within 50m of rained, watercourses, dams and swamps.</li> <li>Areas where fire suppression chemical is used must be mapped &amp; then used. Record the Threatened Species Operational Guidelines are to be observed.</li> </ul>
<b>Rehabilitation</b> (NPWS IMM 5.1)	<ul style="list-style-type: none"> <li>Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.</li> </ul>
<b>Smoke Management</b> (NPWS IMM 5.2)	<ul style="list-style-type: none"> <li>The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations.</li> <li>If smoke becomes a hazard on public roads, notify the police and relevant media.</li> <li>Smoke management must be in accordance with relevant RTA traffic mgmt guidelines.</li> <li>The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.</li> </ul>
<b>Visitor Management</b> (NPWS IMM 3.6, 4.13)	



#### Strategy Information

Current FDR	Forecast FDR	Suppression Strategies
Low - Mod	Low - Mod	<ul style="list-style-type: none"> <li>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.</li> </ul>
Low - Mod	=> High	<ul style="list-style-type: none"> <li>General season is Autumn to late Winter. Burning is possible in early Spring but not desirable on a regular basis from an ecological or tourism point of view.</li> </ul>
High	All	<ul style="list-style-type: none"> <li>Undertake direct, parallel or indirect attack along existing containment lines.</li> <li>Where practicable consider maximising the fire area in accordance with the requirements of any proposed prescribed burn.</li> <li>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.</li> <li>Pay particular attention to the flank on the next predicted down wind side.</li> <li>Undertake indirect attack along existing or newly constructed containment lines.</li> <li>Secure and deepen containment lines along the next predicted down wind side of the fire.</li> <li>If applicable consider broader than normal containment strategies to avoid wasted effort and high risk of failure.</li> <li>Ensure there is sufficient time to secure containment lines prior to the fire impacting upon them, otherwise risk back to the next potential line.</li> </ul>
All	All	

#### Legend All Maps

	Camping Area		Refuge Area		Aplary Site Active		Road-fire vehicle class		Fire Mgt Zone outline
	Caution		Sign panel		Historic Site		Unknown		NPWS Estate
	Day Use Area		Staging Area		Indigenous Site - internal OEH use		Cat 1		State Forest
	Gate NPWS ASSUME ALL GATES ARE LOCKED		Tower - comm's		Threatened Asset		Cat 7		Plantation
	Gate Other		Turning Point		Threatened Asset		Cat 9		Rainforest
	Helicopter Landing Site		Vantage Point		Powerlines		Essential		Fire History Recent
	Helipad		Water Point H & V		Walking Track		Important		2013+ 15 seasons
	Ignition point history		Water Pt Helicopter		Watercourse		2012-13 fire season		2009-12 seasons
	Contour (line of height) interval is 20m		Water Point Vehicle						

#### Communications Information - New England NP area

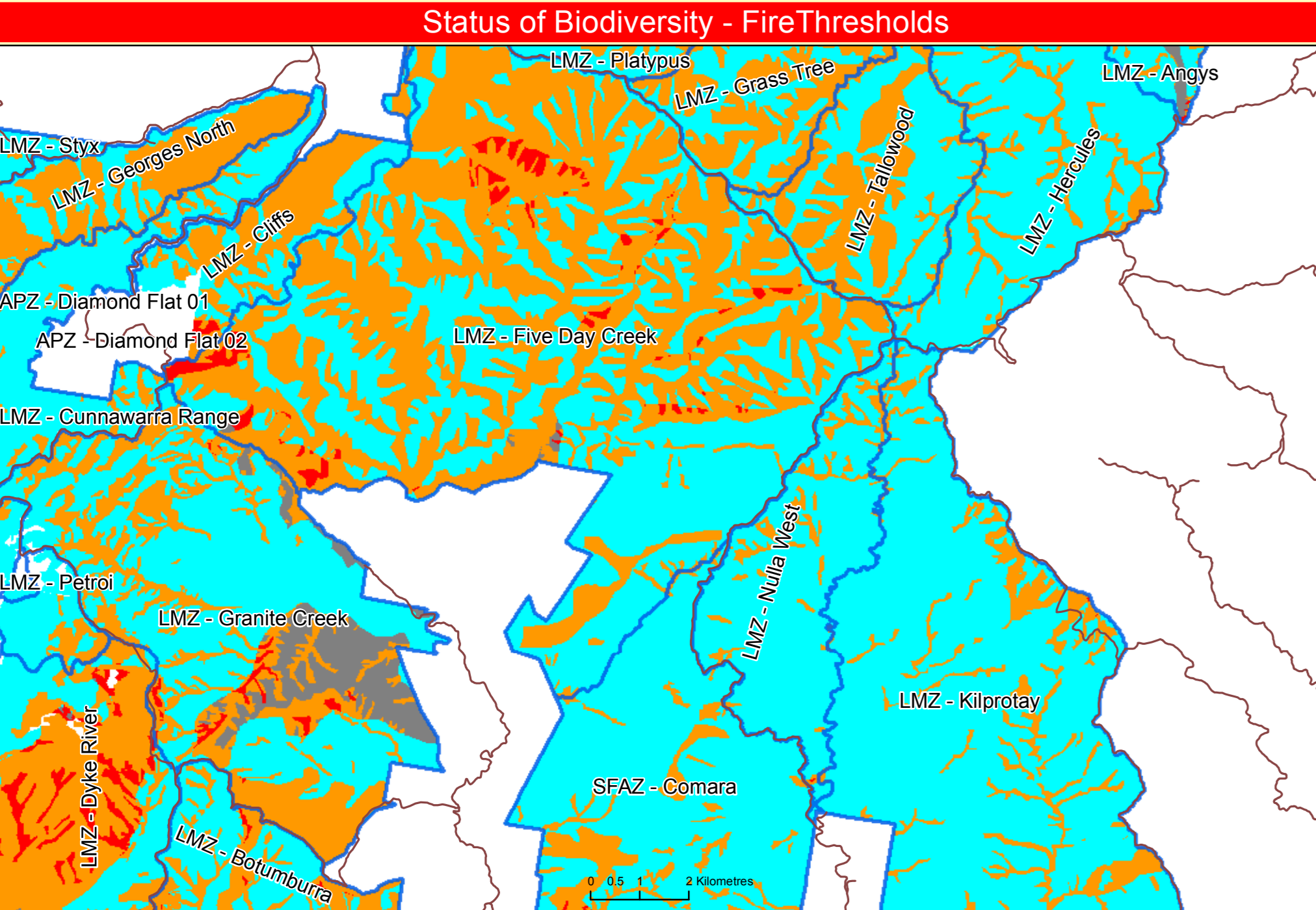
NPWS radio coverage is generally good but there are 'black spots' in deep gullies. Options to use Simplex & Reverse Ch's, portable repeaters or adjacent towers are available as required.

Service	NPWS class	Location and Comments
NPWS - bi-band VHF - Voice groups	Vote Ch 200 Vote Ch 180	NCR Central, Chs: 201, 202, 203, 204 NCR South, Chs: 181 & 182
NPWS - bi-band VHF - Tower Channels	201 202 203 204	P1 Lookout (Simplex 50), Isolate 801 Yarrabahinni 2 (Simplex 502, Isolate 802) Mt Moombi (Simplex 503, Isolate 803) Chaulundi Mt (Simplex 504, Isolate 804)
NPWS Fireground Ch	181 182	Yarrabahinni 1 (Simplex 482, Isolate 782) Spikes Mt (Simplex 481, Isolate 781)
NPWS - bi-band VHF - Portable Repeaters	11 - 17	Represent NPWS Fireground Ch's 1 - 7
NPWS - bi-band VHF - Duplex	21 - 26	Chs 21 & 31 correspond to FGI, etc Contact Regional Office to deploy
RFS - Fireground Ch	41 - 60	Equivalent to RFS Fireground 1 - 20
RFS PMR	n/a	P163 Francis LO, Mid North Coast P135 Mt Wondarrigah, Mid North Coast P123 Bawangah, Lower North Coast P141 Bowna-Sugarloaf, Lower North Coast P945 Point LO, New England
Telephone Interconnect to NPWS Radio	TBA	
UHF - public		Use as backup & all've comm's to forestry. IAP will set Ch.
Mobile Phone - 3G		Good reception on ridges & escarpment only.

An Incident Action Plan will cover specific communications during HR and Wildfire events.

#### Contact Information

Agency	Position / Location	Phone
OEH - NSW National Parks & Wildlife Service	Regional Duty Officer / After Hours: Dorrigo Plateau Fax: 6657 2145, Office: Dorrigo Incident Control Room: Midday Area - Ambrose Office: Macleay Area Fax: 02 6566 7593	02 6642 3620 02 6657 2309 02 6657 5919 02 6566 6621
RFS Mid Nth Coast	1 Aviation Dr, Coffs H.	02 6653 1097 1800 737677
RFS Lower Nth Coast	24 h Fire first contact: Macksville Depot: 6568 2536, Kempsey: Armadale Main: 6771 2040, After Hours:	02 6626 6923 02 6562 1064 02 6779 2902
Police	Coffs Harbour: 6652 0299, Kempsey: 24h LAC Crime Mgr, Coffs - arson investigators	02 6561 6199 02 6652 0299
Forestry Corporation	24 hours fire calls: NE Region admin: 6652 0111, Fire Rooms: Gps Centre: 1300 677677, Emergencies:	02 6655 6950 02 6652 0115 132 500
State Emergency Serv.		



#### Fire Regime Group

Fire Regime Group	Preferred fire interval years	CONDITIONS	VEGETATION
Rainforest	9999	Exclude fire	Rainforest - mixed types
Wet sclerophyll forest	25	60	Avoid crown fires at lower and interval range
Semi-mesic sclerophyll forest	10	50	Avoid recurrent low intensity fires
Swamp sclerophyll forest	7	35	Some intervals > 20 yrs may be desirable
Shrubby dry sclerophyll forest	5	50	Occasional intervals > 25 yrs may be desirable
Grassy sclerophyll woodland	5	40	Other forest near oak
Heathland	7	30	Occasional intervals > 20 yrs may be desirable
Grassland	2	10	Max interval is estimate
Freshwater wetland	6	35	Occasional intervals > 20 yrs may be desirable
Reference: Keny B, Sutherland E, Tasker E, Thompson R. 2004. Guidelines for Ecologically Sustainable Fire Management - NSW Biodiversity Strategy, NSW NPWS			

