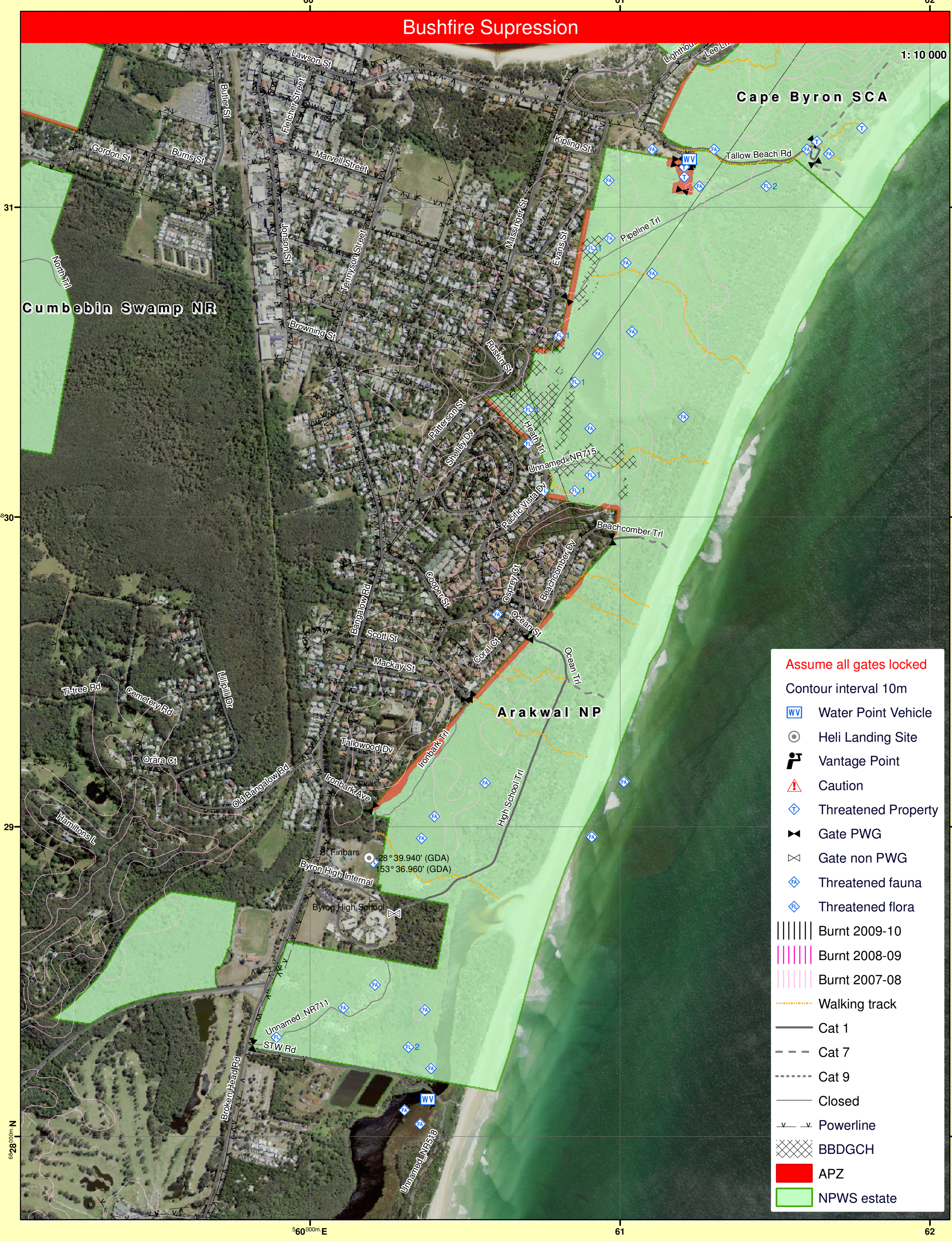




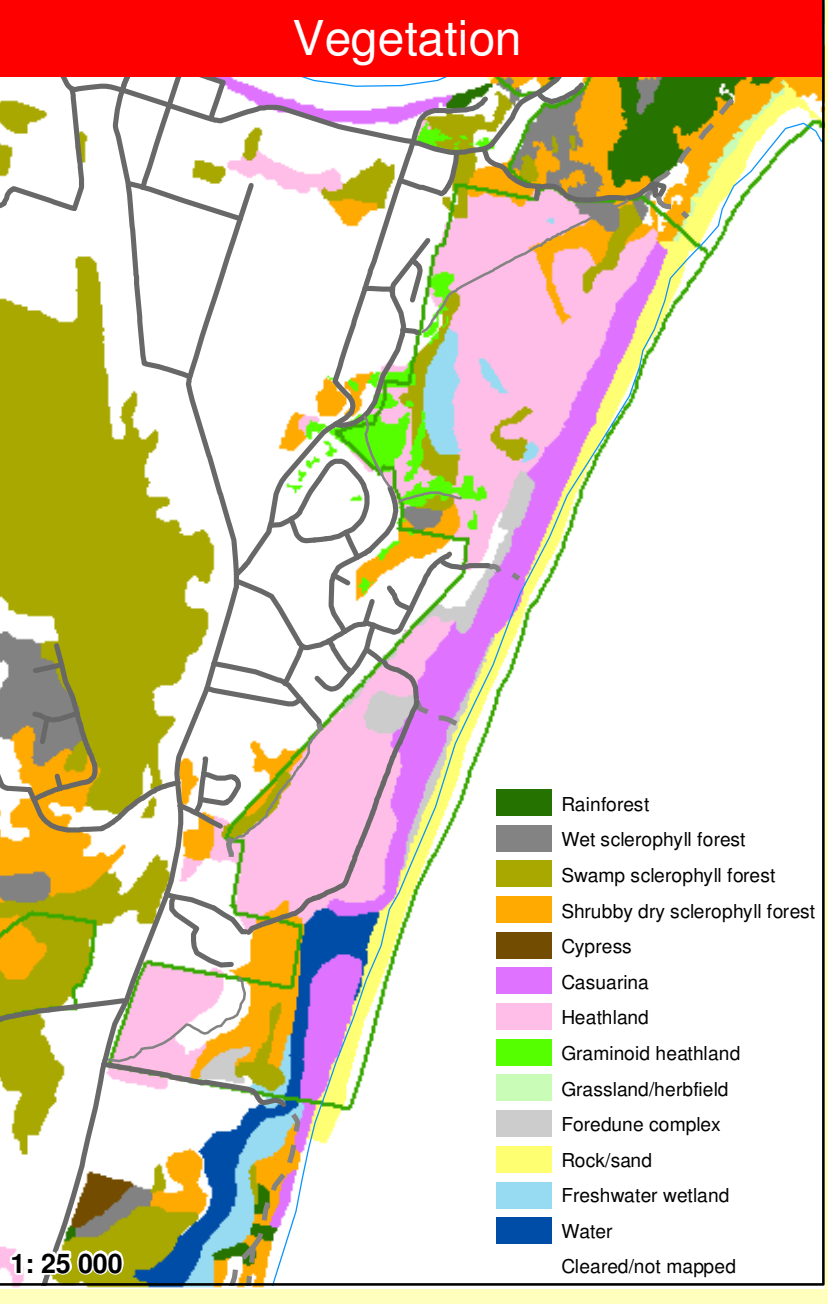
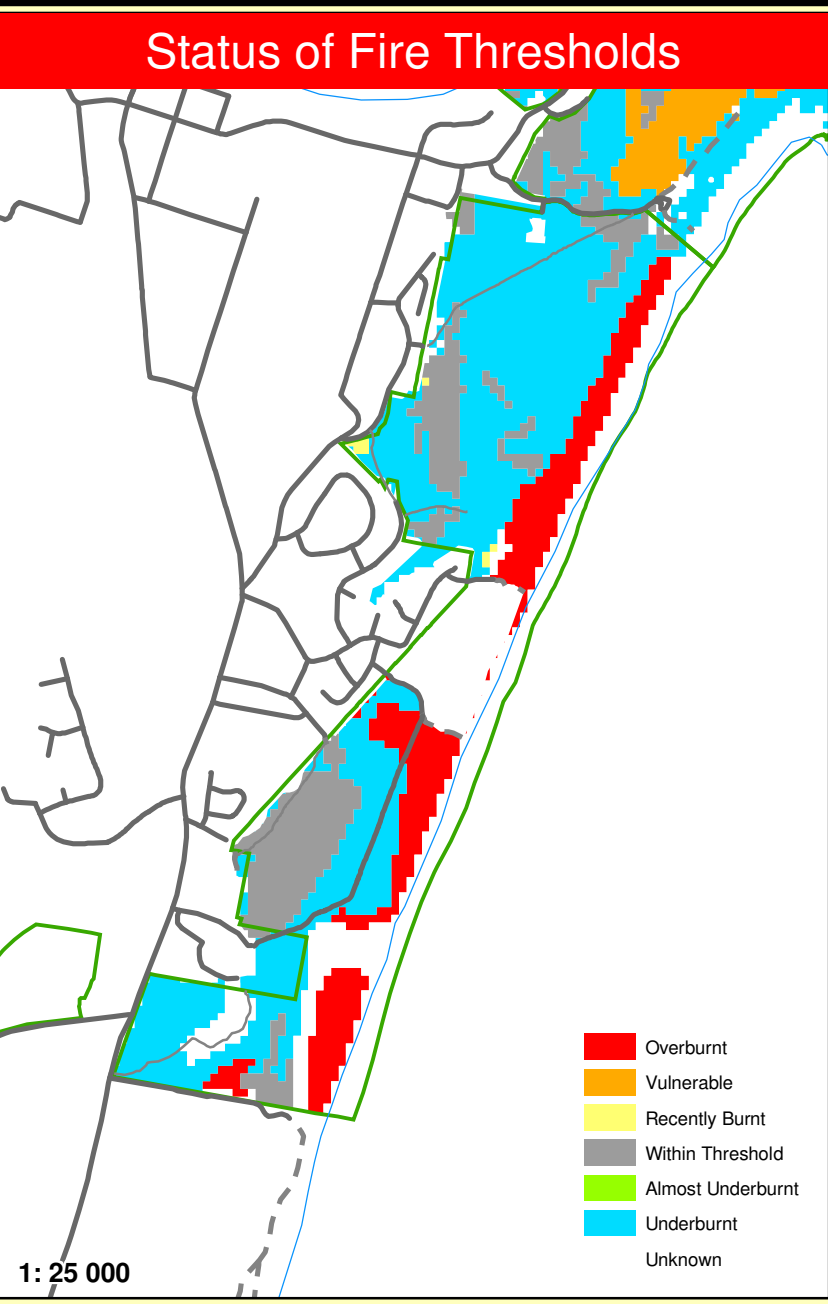
Projection: UTM Zone 56J
 Datum: GDA 1994
 Grid: MGA 94

Noted scale values are true on A1 paper



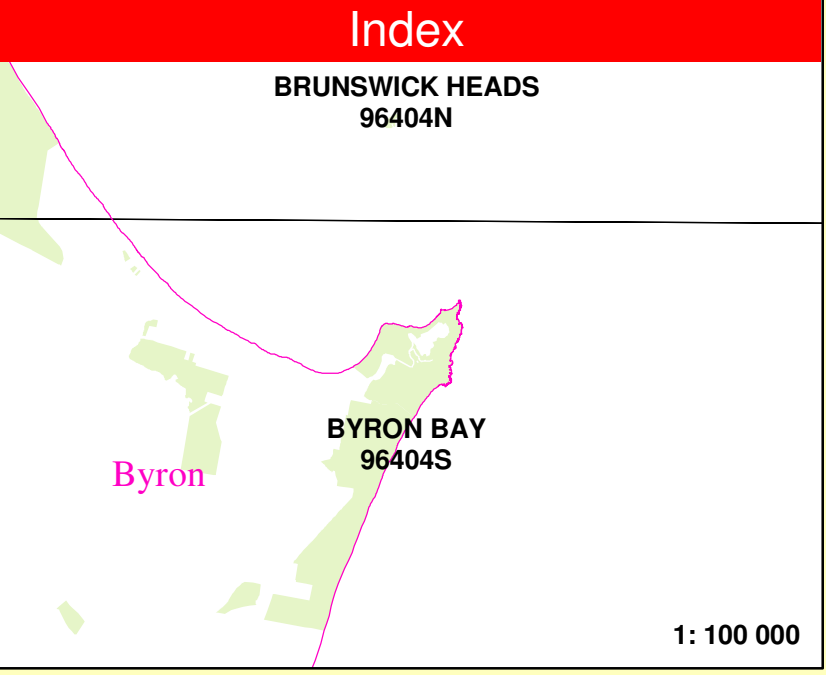
Operational Guidelines	
Resource	Guidelines
Aboriginal & Historic Heritage	<ul style="list-style-type: none"> The identified aboriginal sites on the Park are at risk from bushfire management operations. The location of the sites is indicated on the Operational map – NO ground disturbance including the use of earthmoving machinery to construct new trails, hand line construction, vehicles or water bombing in the vicinity of these sites. Maintain vigilance for unidentified heritage sites during operations.
Assets	<ul style="list-style-type: none"> Flora and fauna, in particular, wetlands, Threatened Species and the Endangered Ecological Communities in the Park and adjoining lands: Byron Bay Dwarf Graminoid Clay Heath (BBDGCH) and Littoral Rainforest. Cape Byron SRA and associated visitor facilities adjoin the Park at the north. The Town of Byron Bay adjoins Arakwal NP at the northwest and west. A NPWS field service centre is located at the north end of the Park off Tallow Beach Road. There is a continuous urban interface adjoining the western boundary of the Park, other Crown Land and BSC managed lands. This interface includes about seventy homes and a number of tourism facilities. Byron Bay High School and St Finbars School Annex adjoin the Park at the south east. A BSC sewerage treatment plant adjoins the Park to the south. Further south are a camping area, tourism resort and the urban area of Suffolk Park.
Threatened Property	<ul style="list-style-type: none"> Known threatened properties are identified on the operations map. Asset Protection Zones on Park are identified on Fire Management Zone Map and Operations Map. Known contact information for threatened properties is listed in Contacts table. Property owners with assets threatened by bushfire events should be: <ol style="list-style-type: none"> Kept informed regarding the progress of the fire; and Asked for an assessment of their current level of asset protection preparedness.
Threatened Fauna	<ul style="list-style-type: none"> A large number of fauna species that are listed as threatened are recorded from Arakwal NP. These utilise a wide range of habitats in the Park. Bushfire control operations should aim to: <ol style="list-style-type: none"> minimise area affected by wildfire; utilise the identified primary and secondary trails for containment; avoid the construction of new control lines; and minimise impact of control operations on wetlands, rainforest and streams – NO new control lines to be established in these communities – see "containment lines" below.
Threatened Flora	<ul style="list-style-type: none"> BBDGCH is an Endangered Ecological Community – NO DOZERS. Littoral Rainforest is an Endangered Ecological Community – NO DOZERS. f1 – NO DOZERS, avoid burning July to Feb, prescribe burn late March to April only. f2 – NO DOZERS, exclude fire where possible. f3 – NO DOZERS, avoid burning March to July, prescribe burn February to early March only. As for "Threatened Fauna" above.
Aerial Ignition	<ul style="list-style-type: none"> Aerial ignition may be used during hazard reduction and wildfire control operations where practicable, with the prior consent of the senior NPWS officer.
Aerial Water Bombing	<ul style="list-style-type: none"> The use of water bombing aircraft should support on ground containment operations by aggressively attacking hotspots and spotters. Where practicable foam should be used to increase the effectiveness of water use. Avoid the use of foam when water bombing in wetlands or streams.
Access	<ul style="list-style-type: none"> Most boundary and internal gates in the Park have a NPWS lock fitted – keys provided to local RFS. Contact details for key adjoining landholders are included in this strategy.
Water Sources	<ul style="list-style-type: none"> Water points are identified on the Bushfire Suppression map. During summer months and under drought conditions natural water points may be dry. Consider the use of water tankers and buoywalls.
Backburning	<ul style="list-style-type: none"> Backburning from identified Cat 1 and Cat 7 trails is the recommended main tactic for containing bushfire where direct attack is not appropriate. Where possible clear 1m radius around dead, hollow bearing and fibrous barked trees adjacent to control line before backburning.
Containment Lines	<ul style="list-style-type: none"> In the first instance utilise the identified Cat 1 and Cat 7 trails and existing cleared areas (including apz at urban interface) as containment lines. Reopen identified closed trails ONLY where essential to minimise impact of fire on identified assets and there is a high likelihood of success. Establish temporary containment lines ONLY as part of a tactic of quick containment of ignitions with a high likelihood of success and minimal earth disturbance required. Close and rehabilitate all re-opened or temporary trails not required for other purposes during or immediately after the incident. No earthmoving machinery to be used in BBDGCH (rubber tyred tractor and slasher may be used). No new control lines will be constructed in wetlands, rainforest or watercourses.
Earthmoving Equipment	<ul style="list-style-type: none"> Earthmoving equipment must be washed down prior to it entering NPWS estate. Earthmoving equipment must be always guided and supervised by an experienced NPWS officer, and accompanied by a support vehicle. When engaged in direct or parallel attack this vehicle must be a firefighting vehicle.
Fire Fighting Chemicals	<ul style="list-style-type: none"> Wetting / foaming agents are permitted for use in bushfire control. Avoid the use of wetting / foaming agents within 50m of watercourses, dams and swamps.
Smoke Management	<ul style="list-style-type: none"> If smoke becomes a hazard on local roads or highways, appropriate warnings will be provided and the police, RTA and relevant media will be notified. Appropriate signage should be used.
Visitor Management	<ul style="list-style-type: none"> Arakwal National Park may be closed to the public if considered necessary – consult with senior NPWS officer.

Strategy Information	
Fire Season Information	
Wildfires	<ul style="list-style-type: none"> 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.
Prescribed Burning (DECC FMM 4.2.6 & 4.2.7)	<ul style="list-style-type: none"> 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.
Suppression Strategies	
Current FDR	Forecast FDR
Low - Mod	Low - Mod
Low - Mod	= > High
High	All
All	All



Fire Management Zones			
Asset Protection Zones	Zone	Action	Responsibility
	Ironbark Ave to Scott St (A1) Scott St to Ocean St (A2) Ocean St and Beachcomber Dv (A3) Beachcomber Cul de Sac (A4) Shelley Dve (A5) Paterson, Milne and Evans (A6) Arakwal Field Service Centre (A7)	Mechanical treatment when overall fuel hazard exceeds moderate.	NPWS
Strategic Fire Advantage Zones	Zone	Action	Responsibility
	Beachcomber (S1) 11.8 ha. Tallow (S2) 10.8 ha	Prescribed burn when overall fuel hazard exceeds high.	NPWS
Land Management Zones	Zone	Action	Responsibility
	Northern (L1) 64 ha Honeysuckle Hill (L2) 2.3 ha Western (L3) 25.5 ha Southern (L4) 21 ha Eastern (L5) 6 ha Beach and Water (L6) 30 ha Bangalow Rd (L7) 12.3 ha	Refer to fire thresholds map and table as part of decision making process regarding suppressing or applying fire.	NPWS/Incident controllers

Current vegetation status (status of vegetation under recorded fire regime)	
Overburnt	Two consecutive inter-fire intervals have been too short to maintain biodiversity. (Burnt rainforest will fall into this category)
Vulnerable	Will be overburnt if it burns this year. (All unburnt rainforest will fall into this category)
Recently Burnt	Time since fire is less than the optimum interval, but before that it was within thresholds; if it burns this year it will become vulnerable.
Within Thresholds	The fire history is within the thresholds for the vegetation of the area. A burn is neither required nor necessarily to be avoided.
Almost Underburnt	Possible biodiversity declines due to insufficient burning. If no fire occurs this year it will fall into the underburnt category.
Underburnt	Possible biodiversity declines due to insufficient burning.
Unknown	The fire history is too short to determine whether the area is underburnt or overburnt.



Communications Information		
Service	Channel	Location and Comments
NPWS - VHF	8	Mount Nardi
NPWS - VHF (Fireground Comms)	40	Fireground chat channel (single frequency) monitors channel 8
NPWS - VHF (Portable Repeater)	15	Green Code. Stored at Tweed Depot / transportable.
NPWS - VHF (Portable Repeater)	13	Blue Code. Stored at Kyogle Depot / transportable.
RFS - PMR - UHF	50	Mount Nardi
RFS - GRN	-	No service available.
CB - UHF	-	To be serviced with RFS brigade captain on the day.
Aircraft - VHF	125.45 MHz	Or as directed by Incident Controller or Air Operations.
Mobile phone - 3G	Partial	Generally good coverage.

Fire Interval Guidelines			
Vegetation type	Min. (years)	Max. (years)	Notes
Rainforest	n/a	n/a	Fire should be avoided
Saline wetland	n/a	n/a	Fire should be avoided
Wet sclerophyll forest	25	60	Crown fires should be avoided in the lower end of the interval range
Swamp sclerophyll forest	7	35	
Shrubby dry sclerophyll forest	7	30	
Heathland	7	30	
Grassland	2	10*	Some intervals greater than 7 years should be included in coastal areas; available evidence indicates maximum intervals should be approximately 10 years.
Freshwater wetland	6	35	

