

Northern Rivers Region Billinudgel, Marshalls Creek, Jinangong, & Brunswick Heads (north) Nature Reserves Fire Management Strategy (Type 2) 2016



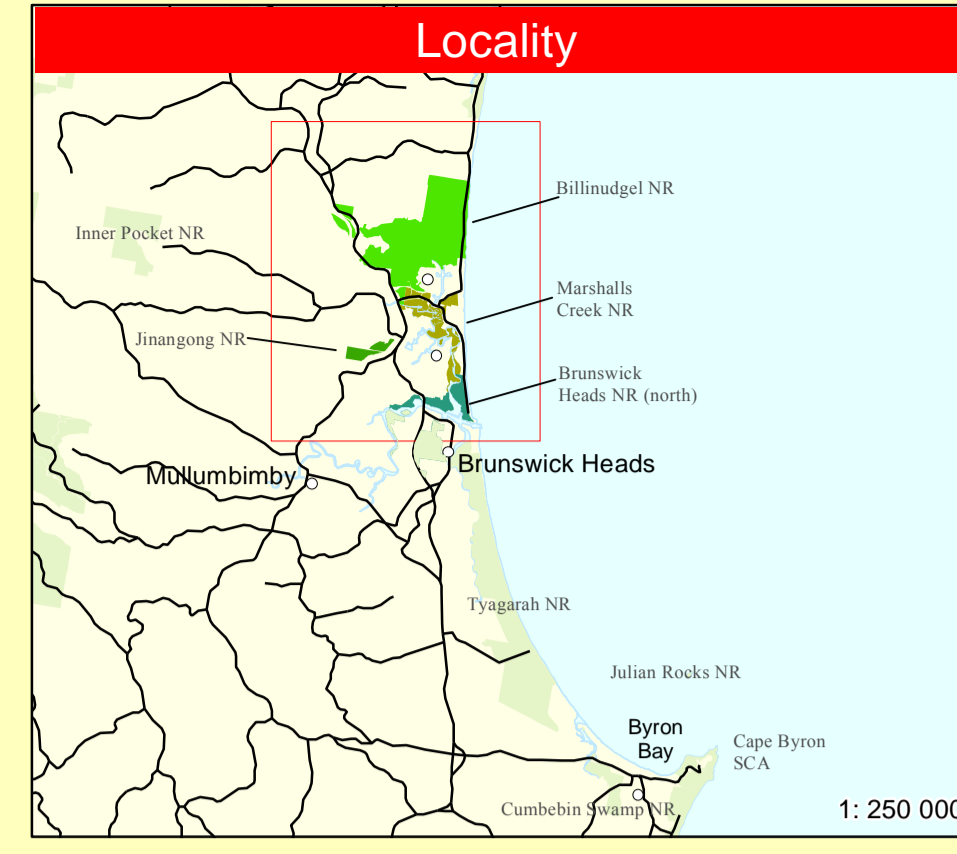
This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the development of incident action plans.

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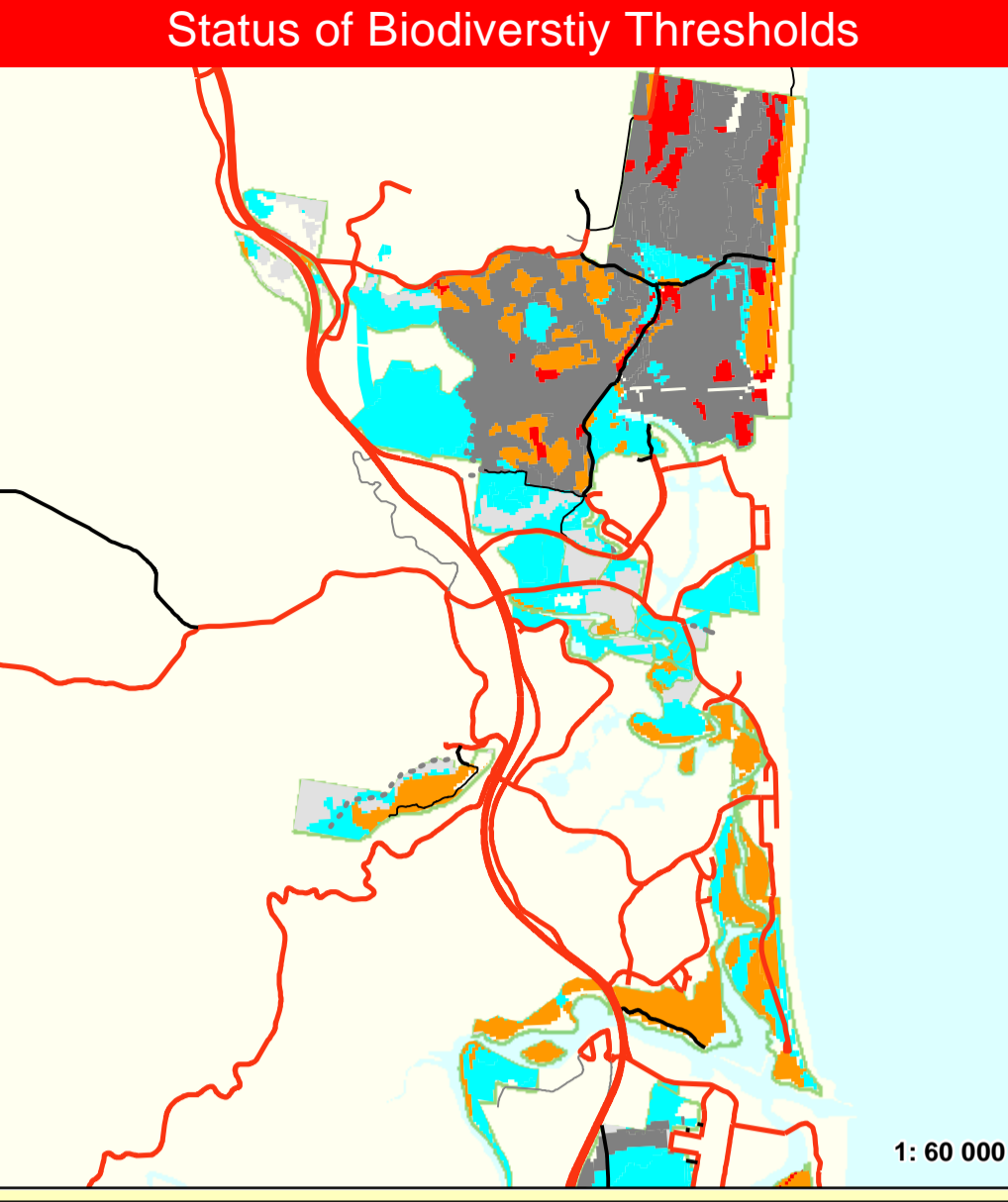
This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of Rural Fires Act 1997.

Endorsed by: _____ Date: / /
Regional Manager, Parks & Wildlife Group



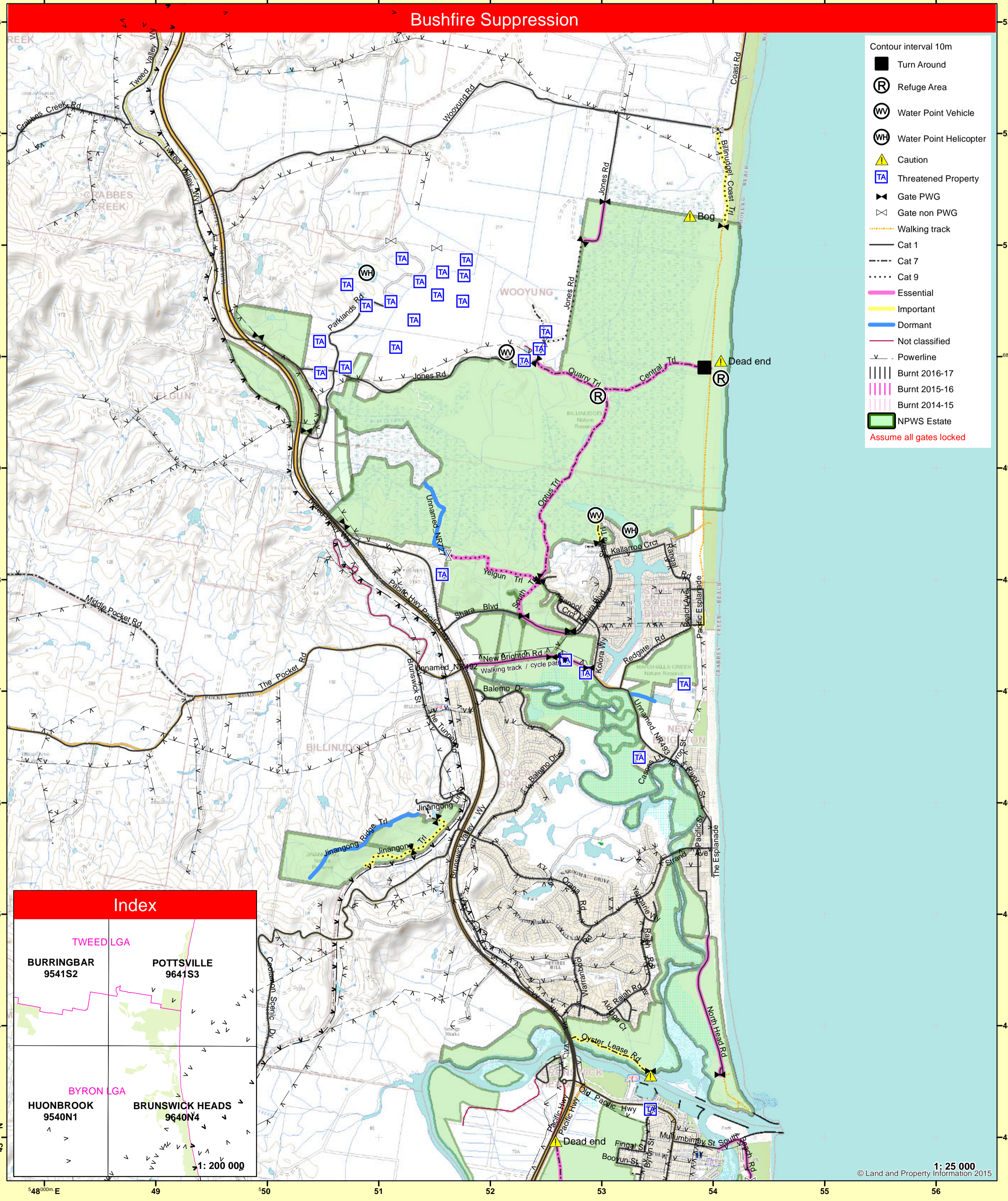
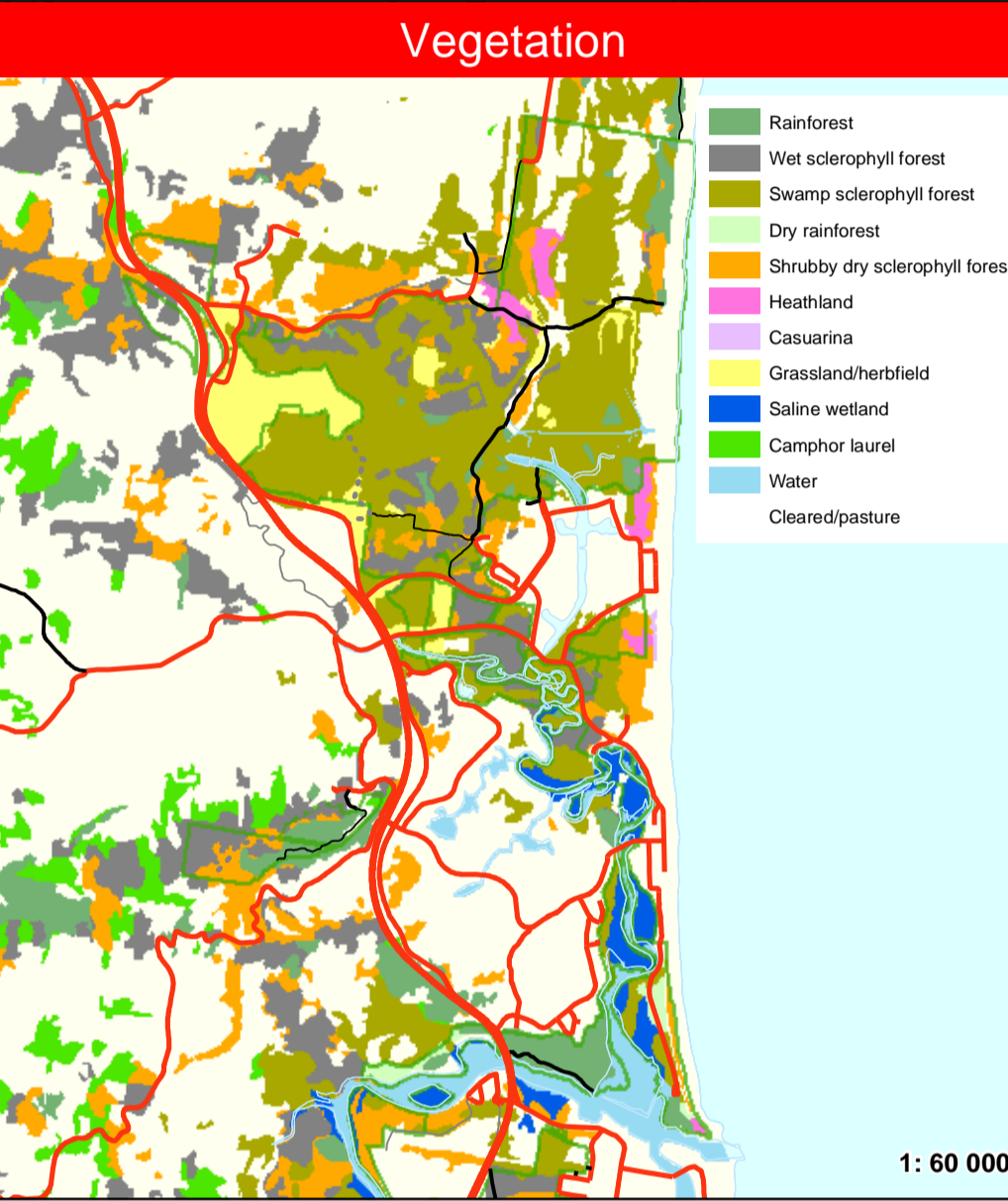
Strategy Information	
Fire Season Information	
Wildfires	<ul style="list-style-type: none"> Have been known to start as early as late August, but usually the potential for a large fire event is greatest between October and December. This period may extend into January in more severe years. During this period in dry seasons fires may exhibit high intensity behaviour under windy conditions.
Prescribed Burning (NPWS Fire Management Manual 4.7)	
Suppression Strategies	
Current FDR	Forecast FDR
Low - Mod	Low - Mod
Low - Mod	=> High
High	All
All	All

Biodiversity thresholds for Land Management Zones	
Too frequently burnt	Fire thresholds have been exceeded. <i>Protect from fire as far as possible.</i>
Vulnerable to frequent fire	The area will be too frequently burnt if it burns this year. <i>Protect from fire as far as possible.</i>
Within threshold	Fire history is within the threshold for vegetation in this area. <i>A burn is neither required nor should one necessarily be avoided.</i>
Long unburnt	Fire frequency is below fire thresholds in the area. <i>A prescribed burn may be advantageous. Consider allowing unplanned fires to burn.</i>
Unknown	Insufficient data to determine fire threshold. <i>NB. Fire thresholds are defined for vegetation communities to conserve biodiversity</i>

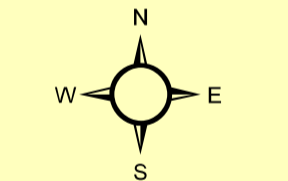


Operational Guidelines	
Refer to Fire Management Manual	
Brief all personnel involved in suppression operations on the following issues:	
Resource	Guidelines
Aboriginal Cultural Heritage Site Management	<ul style="list-style-type: none"> Aboriginal sites are not shown on this version. Vulnerable sites will be shown on the operational version of this strategy following consultation with the Aboriginal community. The "Sensitive Area Management System" identifies areas of sensitivity on Park roads. Green guide posts indicate where no disturbance by earthworks is to occur.
Historic Heritage Management	<ul style="list-style-type: none"> No known sites in Reserve. If new sites located consult with a senior NPWS officer.
Threatened Fauna Management	<ul style="list-style-type: none"> Avoid impact on wetlands, littoral rainforest and streams Protect large and hollow-bearing trees
Threatened Flora Management	<ul style="list-style-type: none"> Avoid impact on wetlands and littoral rainforest.
Threatened Property	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.
General	Guidelines
Aerial Water Bombing	<ul style="list-style-type: none"> Foams should be used to increase the effectiveness of water bombing.
Aerial Ignition (NSW Fire Agencies Aviation SOPs O2-4 / NPWS Guidelines for Effective Aircraft Management)	<ul style="list-style-type: none"> Due to reserve size and proximity to urban areas, aerial ignition is not proposed for fuel reduction and will not be permitted for back-burning operations.
Backburning	<ul style="list-style-type: none"> 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.
Command & Control	<ul style="list-style-type: none"> The first combatant agency on site may assume control of the fire, but then must ensure the NPWS 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.
Containment Lines	<ul style="list-style-type: none"> No new containment lines in wetlands. New containment lines require the prior consent of a senior NPWS officer. Containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Earthmoving Equipment	<ul style="list-style-type: none"> Earthmoving equipment may only be used with the prior consent of a senior NPWS officer. 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 prior to it entering NPWS estate.
Fire Advantage Recording	<ul style="list-style-type: none"> All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.
Fire Suppression Chemicals	<ul style="list-style-type: none"> 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.
Rehabilitation	<ul style="list-style-type: none"> Containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. All re opened and new containment lines not required for other purposes should be closed at the cessation of the incident.
Smoke Management	<ul style="list-style-type: none"> 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.
Visitor Management	<ul style="list-style-type: none"> The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.

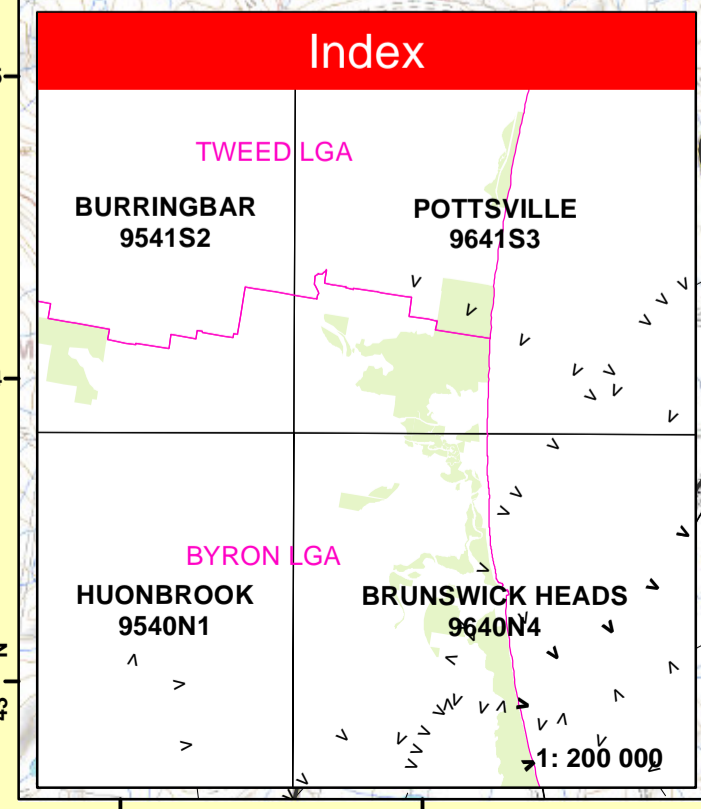
Contact Numbers	
NPWS	
Regional Office - Alstonville 24 hrs	6627 0200
Tweed Area Office	6670 8600
Tweed Area Depot	6672 8153
Aboriginal Heritage Management Officer	6627 0200
NSW Rural Fire Service Fire Reports	000
Far North Coast office	6671 5500
NSW Fire Brigade - Fire Reports	000
	9469 3111
	9318 4355
Byron Shire Council	6626 7000
	6622 7022 (ab)
Tweed Shire Council	6670 2400
	1800 818 326 (ab)
Police	000
State Emergency Services (Mullumbimby)	6684 3444
Emergencies	132 500
Ambulance - Emergency	000
Bookings	131 233
Country Energy	132 080 / 132 356
Essential Energy	132 391
Interruptions	132 080



Communications Information		
Service	Channel	Location and Comments
NPWS - VHF Vote Group	210	Radio selects strongest tower
NPWS - VHF	214	Mt Nardi
NPWS - VHF	217	Mt Springbrook
NPWS - VHF fireground	514 517	Tower chat channel (monitors tower traffic)
NPWS - VHF fireground	11 - 17	Confirm on the day.
NPWS - VHF (Portable Repeater)	26	Portable repeater 6 stored at NPWS Tweed Depot.
RFS - PMR - UHF	6	Confirm with RFS on the day.
RFS - GRN	-	No service available.
CB - UHF	-	To be confirmed on the day.
Aircraft - VHF	214	Or as directed by Incident Controller
Mobile Phone - NextG		Coverage is generally good.



Projection: UTM
Datum: GDA 94
Grid: MGA Zone 56J
Noted scale values are true on A1 paper



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 (OFH) at moderate or below.																		
	<table border="1"> <thead> <tr> <th>Zone</th> <th>Action</th> <th>Responsibility</th> </tr> </thead> <tbody> <tr> <td>Jones Rd APZ (A1) 50m x 5m</td> <td rowspan="11">Establish and or maintain APZs adjacent to adjoining capital assets. Mechanical treatment as per RFS Bush Fire Environmental Assessment Code. Recommendations: 1. Reduce ground fuels and suspended fuels to near nil by raking, mowing, pruning and leaf blowing. 2. Remove sclerophyll trees and shrubs less than 3m in height 3. Remove trees within 5m of buildings. 4. Retain mesic trees and shrubs. 5. Retain smooth barked trees where possible.</td> <td rowspan="11">Joint responsibility - private landholders and NPWS according to tenure.</td> </tr> <tr> <td>Hardy Av APZ (A2) 85m x 10m</td> </tr> <tr> <td>Mia Cr APZ (A3) 500m x 30m</td> </tr> <tr> <td>Flinders Way APZ (A4) 80m x 10m</td> </tr> <tr> <td>Banool Cr APZ (A5) 575m x 10m</td> </tr> <tr> <td>Kalera Way APZ (A6) 15m x 285m</td> </tr> <tr> <td>Old New Brighton APZ (A7) 160m x 5m</td> </tr> <tr> <td>South Golden Beach APZ (A8) 40m x 5m</td> </tr> <tr> <td>Balemo APZ (A9) 50m x 25m 100m x 5m</td> </tr> <tr> <td>River Street APZ (A10) 5m x 25m</td> </tr> <tr> <td>Rajah APZ (A11) 250m x 10m</td> </tr> <tr> <td>Tunnel Road (A12) 70m x 40m</td> <td>1. Heavy machinery use is prohibited here by the Bushfire Environmental Assessment Code due to slope (mass movement). 2. Reduce soil erosion by retaining 90% of ground cover and placing logs with a diameter of >200 mm across the slope. 3. First 5m from dwelling completely clear of vegetation apart from fire resistant ground covers. 4. Lop any branches within 5m of dwelling. 5. Selectively remove or prune trees for a further 10m downslope. Brush box to be gradually removed due to bark hazard without compromising slope. 6. Retain mesic trees, shrubs and smooth barked trees between 5m and 40m from the dwelling. 7. Reduce suspended fuels by raking, pruning and leaf blowing over the whole APZ. 8. Remove sclerophyll trees and shrubs less than 3m in height over the whole APZ.</td> </tr> </tbody> </table>	Zone	Action	Responsibility	Jones Rd APZ (A1) 50m x 5m	Establish and or maintain APZs adjacent to adjoining capital assets. Mechanical treatment as per RFS Bush Fire Environmental Assessment Code. Recommendations: 1. Reduce ground fuels and suspended fuels to near nil by raking, mowing, pruning and leaf blowing. 2. Remove sclerophyll trees and shrubs less than 3m in height 3. Remove trees within 5m of buildings. 4. Retain mesic trees and shrubs. 5. Retain smooth barked trees where possible.	Joint responsibility - private landholders and NPWS according to tenure.	Hardy Av APZ (A2) 85m x 10m	Mia Cr APZ (A3) 500m x 30m	Flinders Way APZ (A4) 80m x 10m	Banool Cr APZ (A5) 575m x 10m	Kalera Way APZ (A6) 15m x 285m	Old New Brighton APZ (A7) 160m x 5m	South Golden Beach APZ (A8) 40m x 5m	Balemo APZ (A9) 50m x 25m 100m x 5m	River Street APZ (A10) 5m x 25m	Rajah APZ (A11) 250m x 10m	Tunnel Road (A12) 70m x 40m	1. Heavy machinery use is prohibited here by the Bushfire Environmental Assessment Code due to slope (mass movement). 2. Reduce soil erosion by retaining 90% of ground cover and placing logs with a diameter of >200 mm across the slope. 3. First 5m from dwelling completely clear of vegetation apart from fire resistant ground covers. 4. Lop any branches within 5m of dwelling. 5. Selectively remove or prune trees for a further 10m downslope. Brush box to be gradually removed due to bark hazard without compromising slope. 6. Retain mesic trees, shrubs and smooth barked trees between 5m and 40m from the dwelling. 7. Reduce suspended fuels by raking, pruning and leaf blowing over the whole APZ. 8. Remove sclerophyll trees and shrubs less than 3m in height over the whole APZ.
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Strategic Fire Advantage Zones	The objective of SFAZs is to reduce fire intensity across larger areas. Maintain OFH 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.																		



All insets are at 1:7 500