

Murrumbidgee Valley National Park Yanga Precinct Fire Management Strategy 2014

Office of Environment & Heritage
NSW National Parks & Wildlife Service

Mapsheet 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. These data are not guaranteed to be free from error or omission. The NSW National Parks and Wildlife and its employees disclaim liability for any act done on the information in the data and any consequences of such acts or omissions. This document is copyright. Apart from any fair dealing for the purpose of study, research criticism or review, as permitted under the copyright Act, no part may be reproduced by any process without written permission. This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of Rural Fires Act 1997. The NSW National Parks and Wildlife Service is part of the Office of Environment and Heritage. Published by the Office of Environment and Heritage (NSW).

Contact: OEH PWG Regional Office, 200 Yambil St, Griffith NSW 2680 P.O. Box 1049 Griffith NSW 2680 Ph. 02 6966 8100

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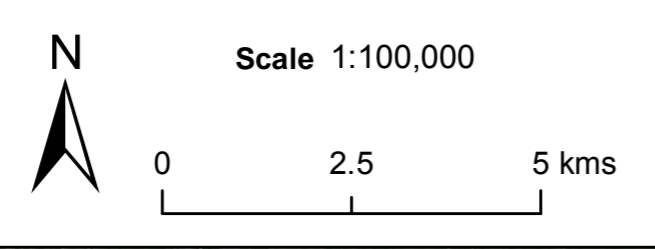
Map Details

Datum: Geocentric Datum of Australia (GDA) 1994
Projection: Australian Map Grid (AMG) Zone 54
Data: Spot Satellite Imagery, 2005.

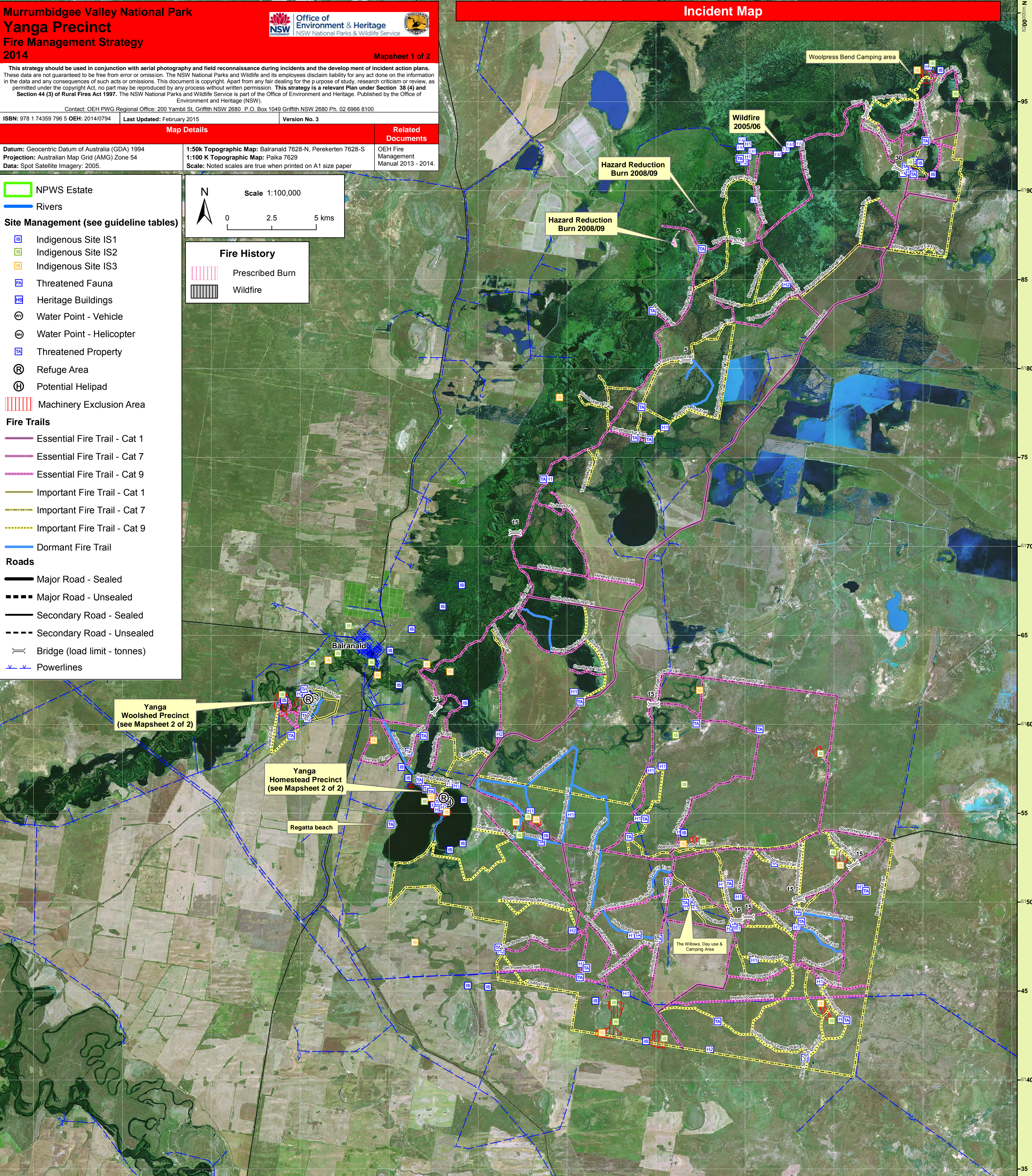
1:50k Topographic Map: Balranald 7628-N, Perekerten 7628-S
1:100 K Topographic Map: Paika 7629
Scale: Noted scales are true when printed on A1 size paper

Related Documents
OEH Fire Management Manual 2013 - 2014.

- NPWS Estate
- Rivers
- Site Management (see guideline tables)**
- Indigenous Site IS1
- Indigenous Site IS2
- Indigenous Site IS3
- Threatened Fauna
- Heritage Buildings
- Water Point - Vehicle
- Water Point - Helicopter
- Threatened Property
- Refuge Area
- Potential Helipad
- Machinery Exclusion Area
- Fire Trails**
- Essential Fire Trail - Cat 1
- Essential Fire Trail - Cat 7
- Essential Fire Trail - Cat 9
- Important Fire Trail - Cat 1
- Important Fire Trail - Cat 7
- Important Fire Trail - Cat 9
- Dormant Fire Trail
- Roads**
- Major Road - Sealed
- Major Road - Unsealed
- Secondary Road - Sealed
- Secondary Road - Unsealed
- Bridge (load limit - tonnes)
- Powerlines



Incident Map



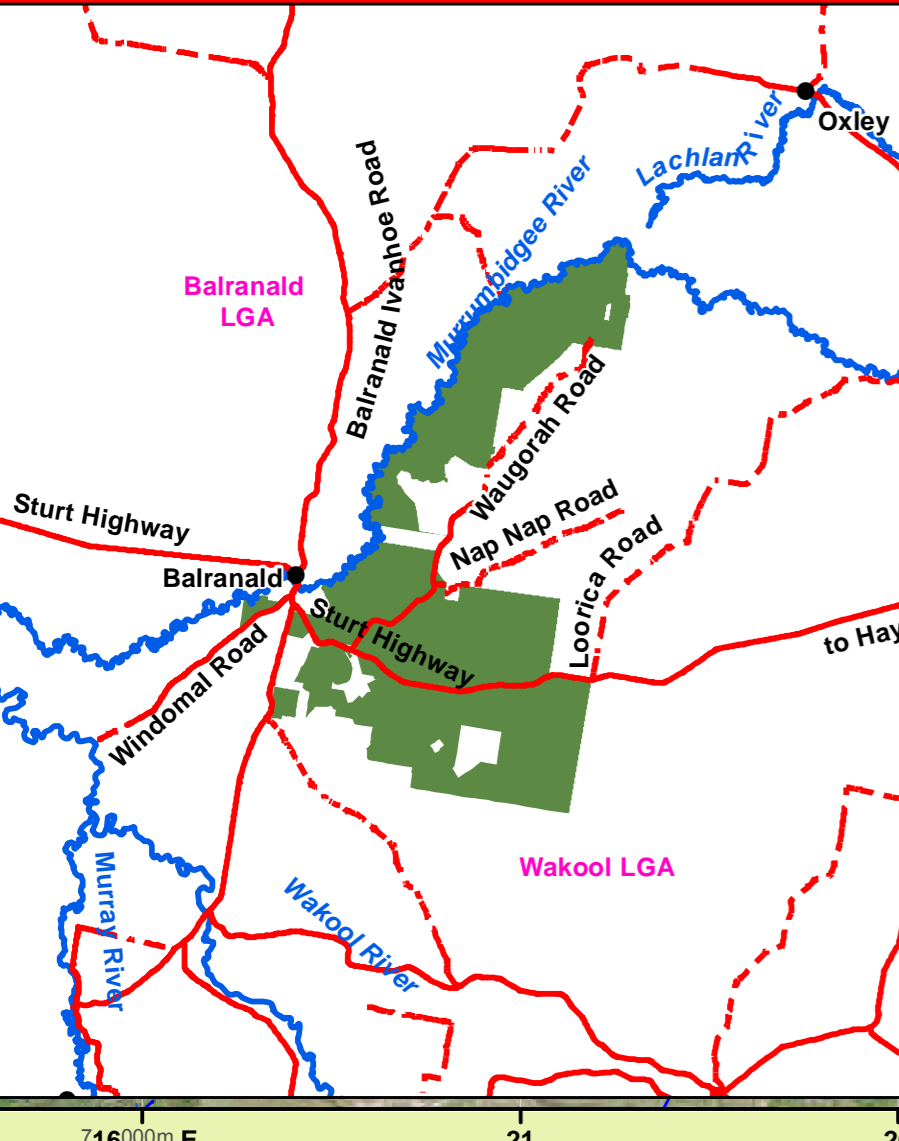
Yanga Woolshed Precinct (see Mapsheet 2 of 2)

Yanga Homestead Precinct (see Mapsheet 2 of 2)

Regatta beach

The Willows Day use & Camping Area

Locality



Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer	02 6332 6350
	Regional Office – 200 Yambil St, Griffith	02 6966 8100
	Yanga NP (bus. Hrs)	03 5020 1764
	Zone Manager - Steve Walker	0428 598 376
Lower Western Zone NSW Rural Fire Service	Dareton Fire Control Centre	03 5027 4422
MIA District NSW Rural Fire Service	Zone Manager – Kevin Adams	0428 285 582
Fire and Rescue NSW	Duty Officer (Griffith)	02 6966 7887
	Hay Fire Control Centre	02 6993 4213
State Forests Emergency Services	Balranald Fire Station	03 5020 1577
SES	Denilquin – Duty Mobile	0408 675 211
	Balranald Volunteer Units	13 2500 03 5020 0444 or 0417 200 444
Police Station (not open 24 hrs)	Balranald	03 5020 1404
Hospital	Balranald	03 5020 1606
	Duty Officer Murray	0417 351 668
Parks Victoria Council	Balranald Shire Council	03 5020 1300

Fire Season Information

- Wildfires**
 - The critical wildfire season generally occurs during December to February. This period may extend into the first half of March.
 - Dry lightning storms frequently occur and typical fire weather conditions are winds from the west to the north, high day time temperatures and low humidity.
 - Particular care is required following periods of Winter rain and after periods of negative Southern Oscillation Indices.
- Prescribed Burning**
 - Prescribed burning should generally be undertaken before decreases in autumn temperatures occur.
 - Burning may also be undertaken during late winter and early Spring when ephemeral fuels pose a potential high fire threat.
 - Care should be taken to ensure a low intensity burn over most of the area treated.
 - An exception to these guidelines is burns targeting the thinning of artificially created dense stands of trees, which may require a higher intensity fire. Also the timing may occur in either Autumn or late Spring to achieve a higher intensity result.

Communications Information

Service	Channel	Location and Comments
RFS PMR	P035	Balranald
	P029	Moulamein
	P016	Lake Poon Boon (Murray Downs)
	P062	Lowbidgee
UHF - CB	2	Car and hand held radios
Mobile Phones		Do not rely on mobile phones, scattered coverage over whole reserve.

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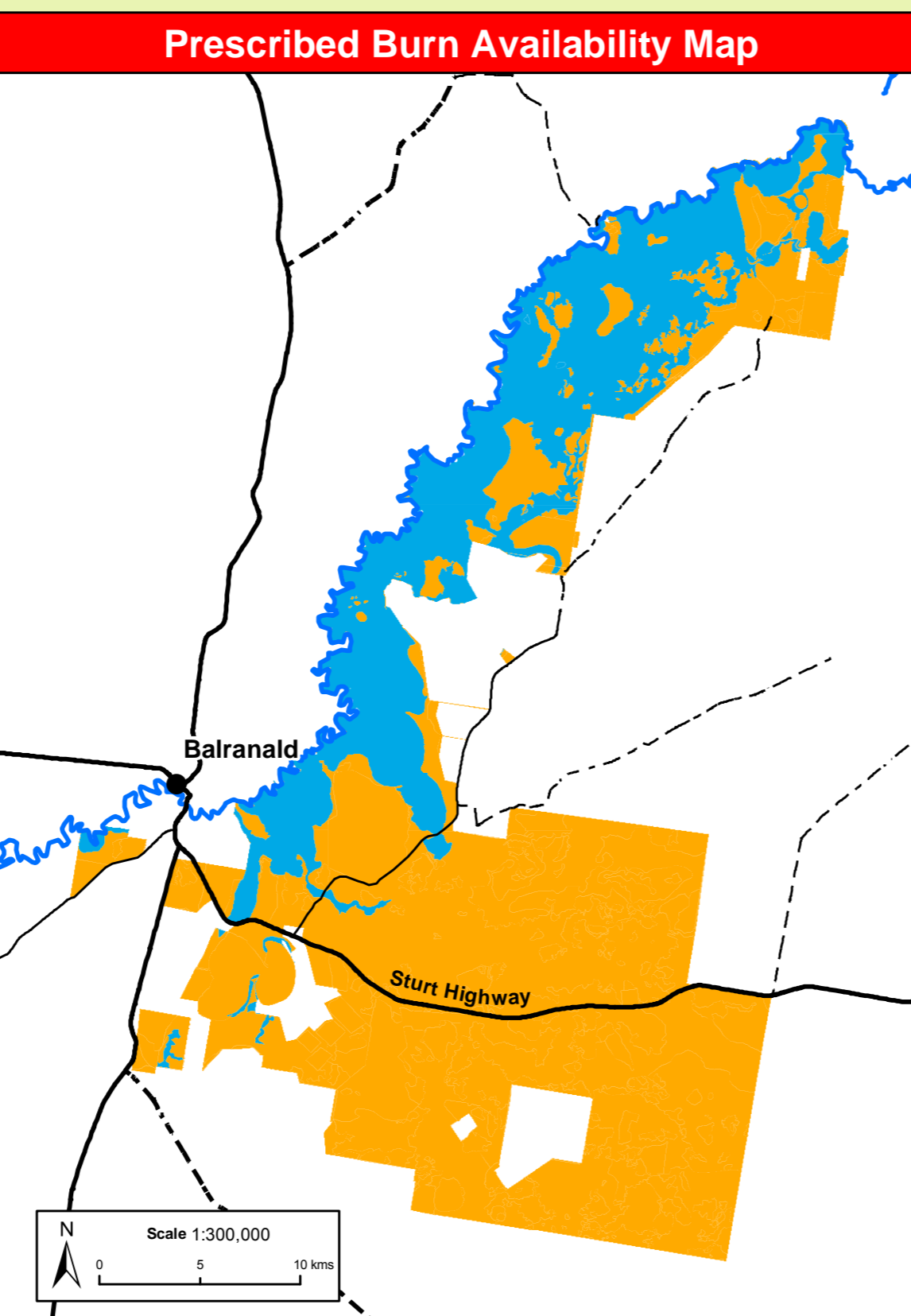
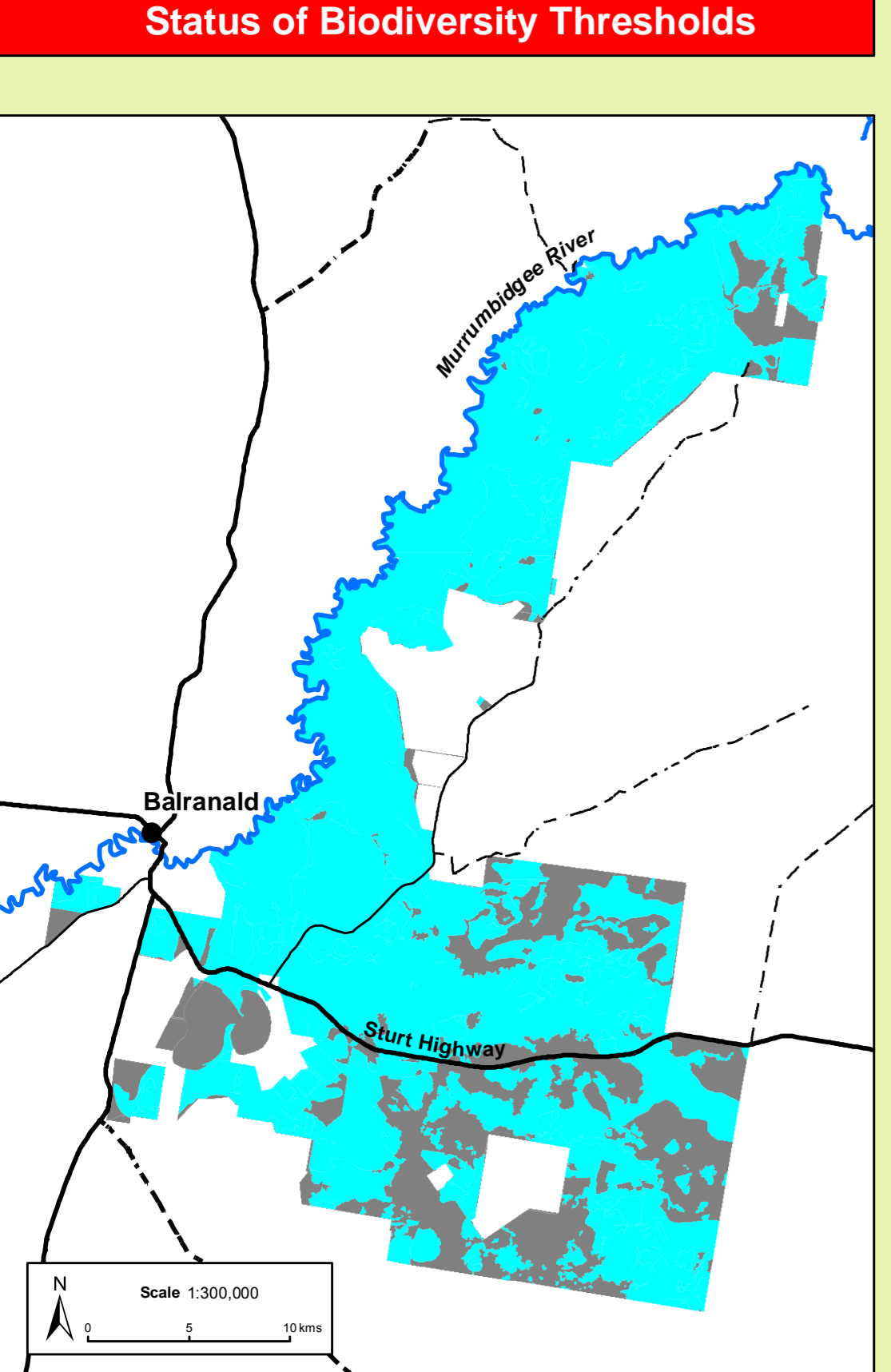
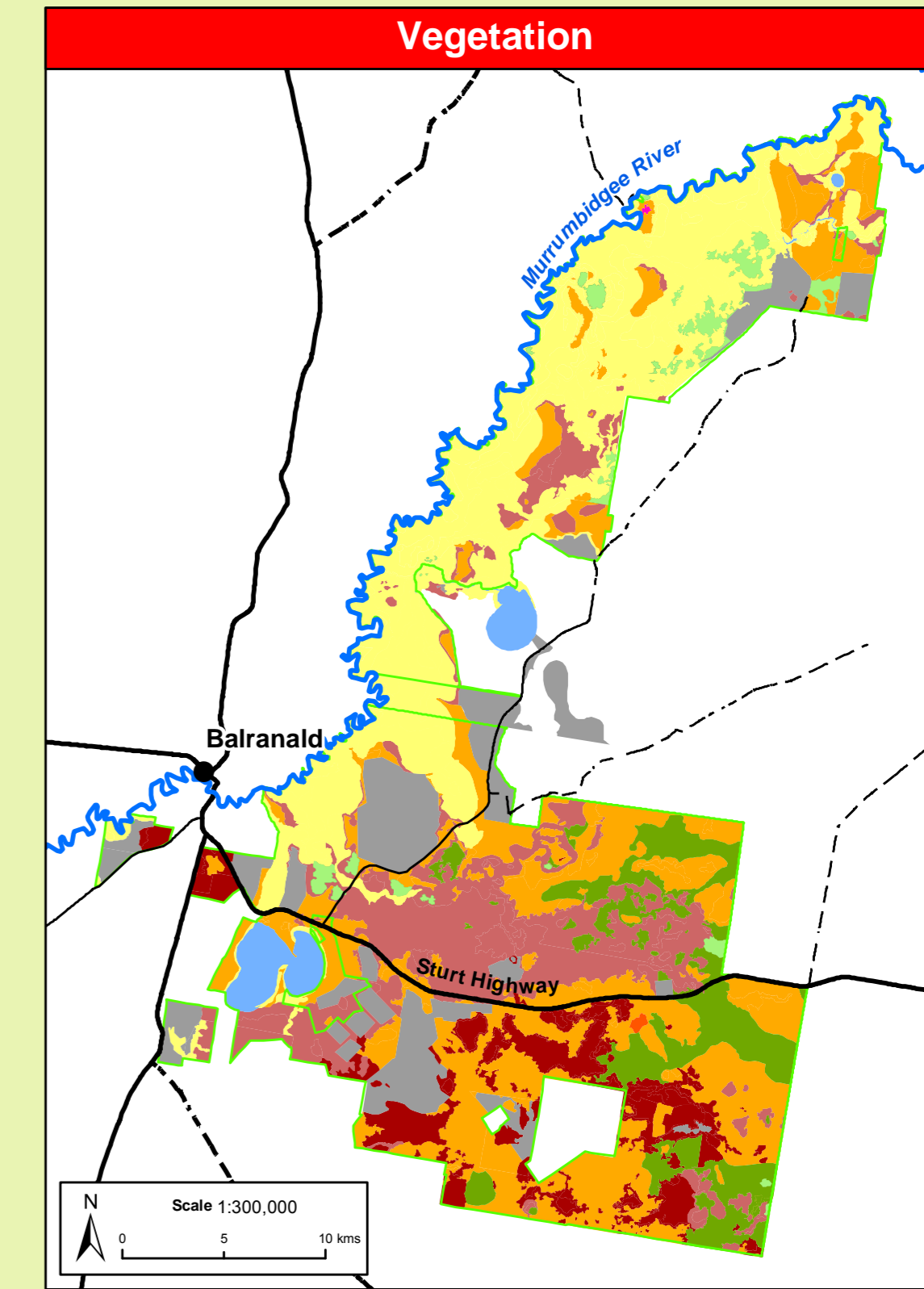
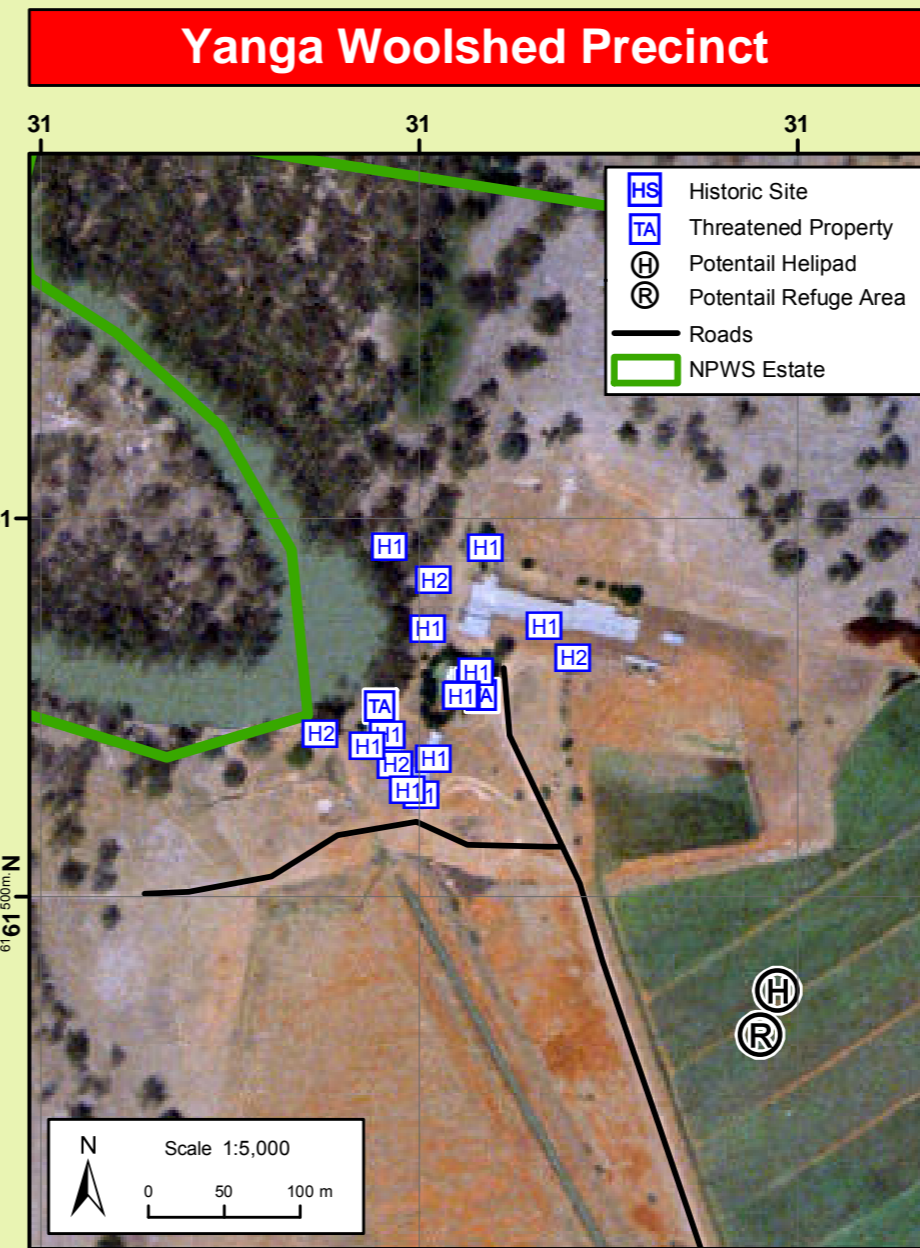
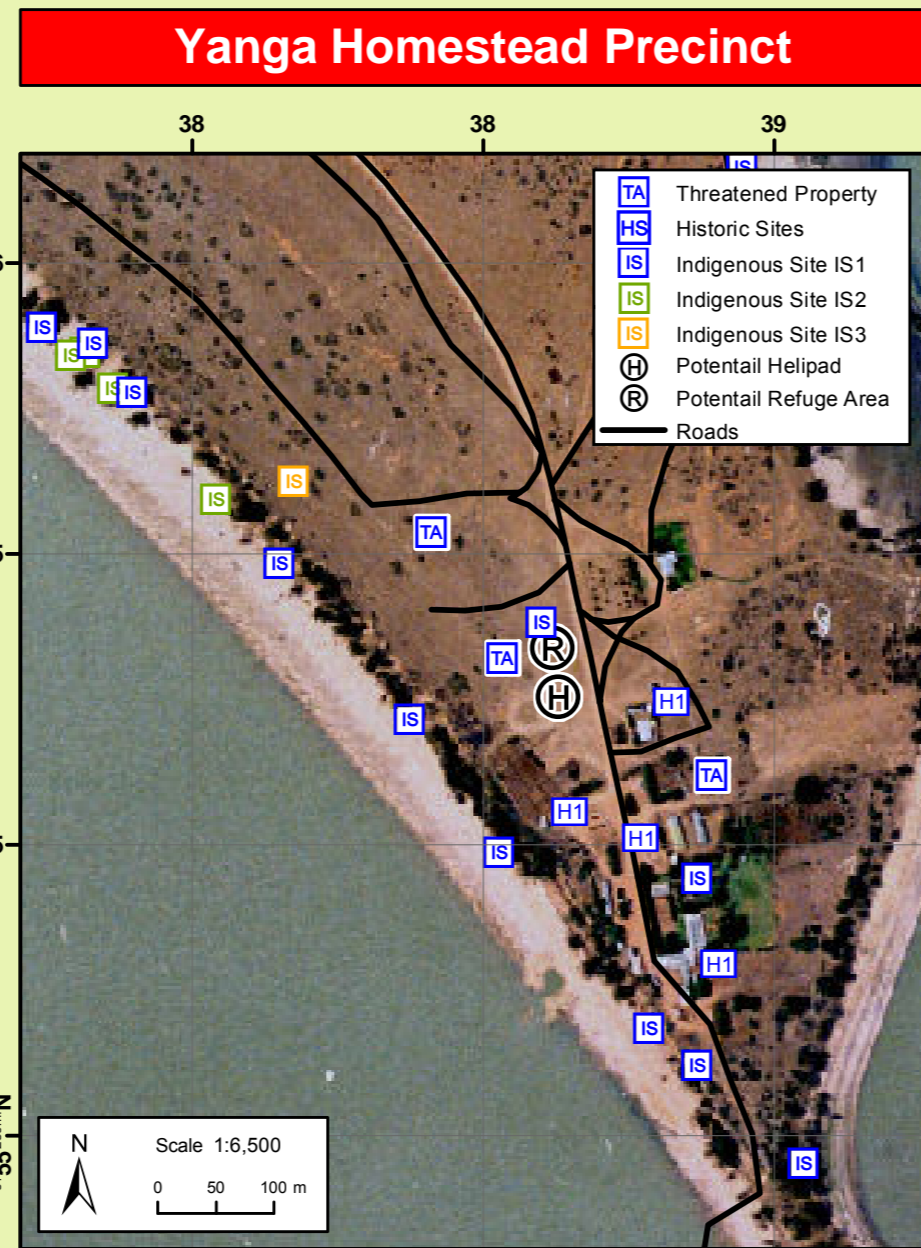
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Prescribed Burning Availability Map Legend

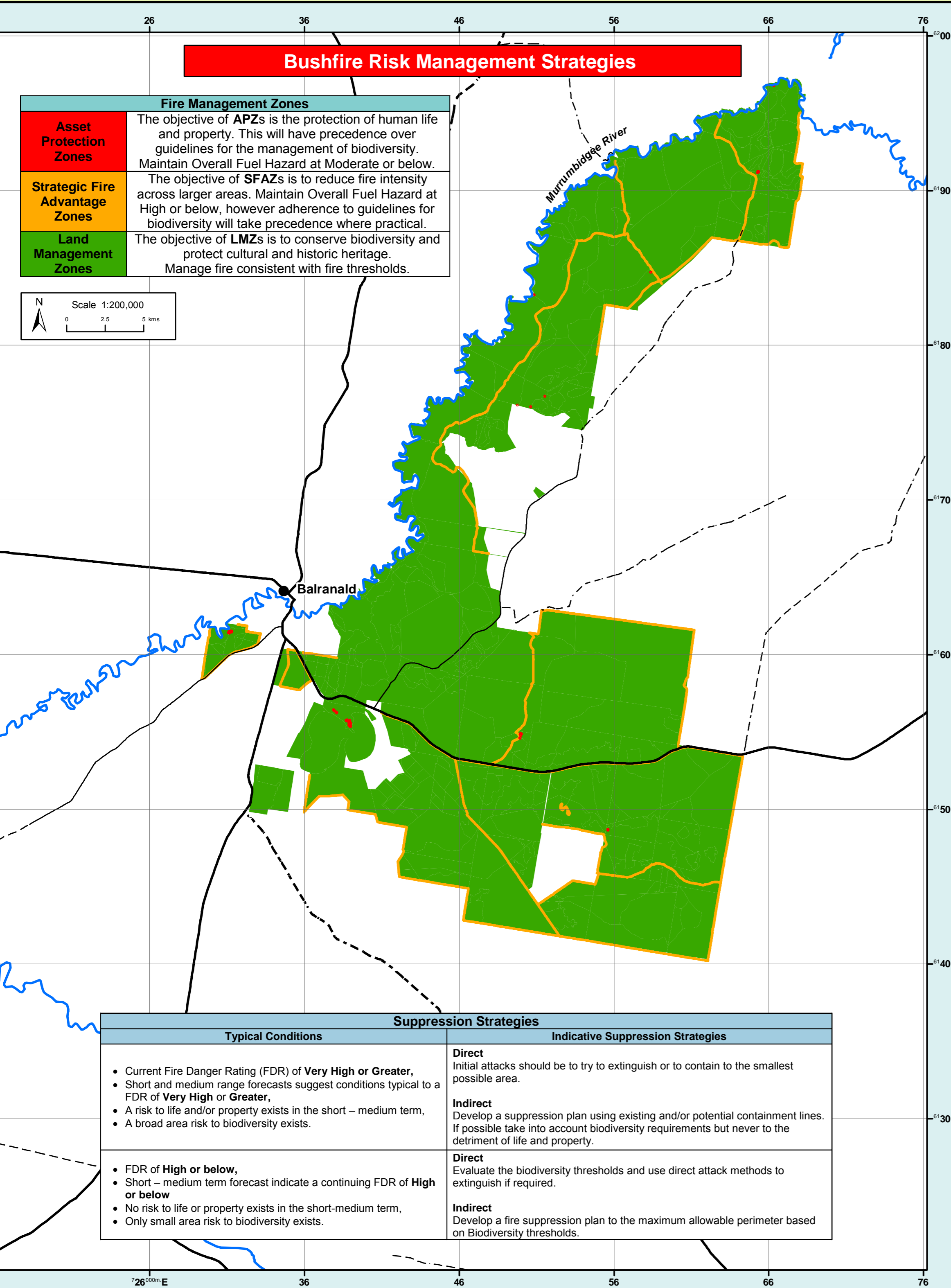
Available	This area is available for prescribed burning, subject to fuel levels and ecological thresholds.
Available in Ephemeral Conditions	This area generally has NIL or LOW OFH, except during seasons producing continuous ground cover.

Broad Vegetation Class	Vegetation Type	Biodiversity Thresholds	Fire Behaviour
Arid and Semi-arid Shrublands	Chenopod Shrublands	Fire should be avoided.	These vegetation communities will generally not carry fire unless there are high ephemeral fuel loads, which generally occur after flooding events. In favourable years the River Red Gum forests can be scattered with 2m high reed beds, which can result in isolated areas of very high to extreme fire behaviour. In years of high ephemeral fuels, landscape fires are possible as fire potential will be very high to extreme, characterised by spotting from Black Box and River Red Gum communities and fast moving fires in other communities.
Freshwater Wetlands	Chenopod Shrublands	Fire should be avoided.	
Semi-arid Woodlands (Grassy sub-formation)	Black Box Woodlands	An interval between fire events less than 10 years and greater than 40 years should be avoided. There was insufficient data to give definite intervals. Fire should be avoided where Chenopod species occur. Two fires in the same area in a period of less than 10 years apart may remove younger Black Box trees.	
Arid and Semi-arid Shrublands	Prickly Wattle (<i>Acacia victoriae</i>) Woodlands	An interval between fire events less than 6 years and greater than 40 years should be avoided. There was insufficient data to give definite intervals.	
Sclerophyll Grassy Woodlands	Myall (<i>Acacia pendula</i>) Woodlands	An interval between fire events less than 5 years and greater than 40 years should be avoided.	
Water Body	Chenopod Shrublands in Yanga Lake	Fire should be avoided in Yanga Lake.	
Forested Wetlands	River Red Gum Forests	An interval between fire events less than 7 years and greater than 35 years should be avoided. River Red Gums will only tolerate low intensity fires. Individual trees may survive canopy scorch if they are not under stress and are in older age classes. Younger trees will not survive moderate to high intensity fires. Two fires occurring in the same area in a period of less than 20 years apart may reduce the extent of River Red Gum Forests. Fire should be avoided where Chenopod species occur.	
Semi-arid Woodlands (Stubby sub-formation)	Belah / Rosewood Woodlands Yarran (<i>Acacia melvillei</i>) Woodlands Red Mallee (<i>Eucalyptus oleosa</i>) Woodlands	An interval between fire events less than 6 years and greater than 40 years should be avoided. There was insufficient data to give definite intervals.	
Freshwater Wetlands	Spike-rush Sedgelands Lignum Shrublands	An interval between fire events less than 6 years and greater than 35 years should be avoided.	
Cleared Land	Grasslands consisting of previously cropped land and improved pastures	An interval between fire events less than 2 years and greater than 10 years should be avoided.	
Fire History	The fire history data is incomplete. Wildfires generally occur due to lightning ignitions. Accidental fires in the River Red Gum Forests, periodic burning of Yanga Lake bed and yearly prescribed burning of reed bed areas were undertaken prior to NPWS acquisition in 2005. There is no verbal or recorded history of large scale fires occurring across the reserve areas.		
Ephemeral Conditions	Ephemeral fuel conditions occur after consecutive years of effective rainfall. This in turn leads to the growth and build up of fine surface fuels such as grasses and herbs, which can create a continuous fuel load across all of the above vegetation communities.		
Drought Conditions	During drought conditions and when vegetation communities are visibly stressed or experiencing dieback no prescribed burning will be permitted and wildfires areas will be minimised.		

Evaluation of Biodiversity Thresholds

Within Threshold	Within the threshold for vegetation in this area. Species have had sufficient time to mature and reproduce, and for habitats to develop. • A fire event is neither required nor should one necessarily be avoided.
Long Unburnt	Underburnt, excessive time since last fire, species may become extinct. • A fire event may be ecologically advantageous. Consider allowing unplanned fires to burn.

NB. Fire thresholds are defined for vegetation communities to conserve biodiversity. Threshold Analysis map needs to be considered with Prescribed burning Activity map to be considered when determining wildfire and prescribed burning outcomes.



Operational Guidelines

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

General	Guidelines
Aerial Water Bombing	<ul style="list-style-type: none"> The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spot-overs. The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances. Where practicable foam should be used to increase the effectiveness of the water. Ground crews must be alerted to water bombing operations.
Aerial Ignition	<ul style="list-style-type: none"> Aerial ignition may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Senior Officer. Section 44 delegate or as prescribed in an operational burn plan. The use of aerial ignition as a fire suppression tool should be specified in the IAP or within the prescribed burn plan. Aerial ignition will only be undertaken by qualified and competent navigators and bombardiers. Utilise aerial ignition to rapidly burn out large areas.
Back-burning	<ul style="list-style-type: none"> 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, back-burning should commence when the humidity begins to rise in the late afternoon or early evening, with a lower FDI back-burning may be safely undertaken during the day. Where practicable, clear a 1m radius around dead and hollow bearing trees adjacent to containment lines prior to back-burning, or wet down these trees as part of the back-burn ignition. Use parallel containment lines when applicable. All personnel must be fully briefed before back-burning operations begin.
Command & Control	<ul style="list-style-type: none"> Standard Incident Management Systems are to be applied. 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 Incident Controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations, and be consistent with BFCC Policy 2-2006.
Containment Lines	<ul style="list-style-type: none"> 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 (AM or RM). Use parallel containment lines when applicable. All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location. Containment line construction using earthmoving equipment must be in accordance with the earthmoving guidelines contained within the RFMS.
Earthmoving Equipment	<ul style="list-style-type: none"> 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 always be guided and supervised by an appropriately experienced person, and accompanied by a support vehicle. When engaged in direct or parallel attack this vehicle must be a fire fighting vehicle. Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species and Cultural Heritage Operational Guidelines, and be surveyed, where possible, to identify unknown cultural heritage sites. Earthmoving equipment must not leave tracks or create new tracks in Machinery Exclusion areas as marked on the Incident Map of a RFMS. Earthmoving equipment must be washed down, where practicable, prior to it entering NPWS estate and again on exiting NPWS estate. Where multiple items of earthmoving equipment are being used, the IMT should consider the establishment of a Plant Operations Manager. Machinery must be excluded from all machinery exclusion zones including the Yanga Woolshed and Yanga Homestead Precincts. This is due to the many Indigenous sites that are present across the reserve.
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"> Use of wetting and foaming agents (surfactants) is permitted on the reserve. The use of fire retardants are 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 watercourses, dams and swamps. Areas where fire suppression chemicals are used must be mapped and the used product's name recorded. The Threatened Species Operational Guidelines are to be observed.
Rehabilitation	<ul style="list-style-type: none"> Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Smoke Management	<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. Smoke management must be in accordance with relevant RTA traffic management guidelines.
Structural Fire Fighting	<ul style="list-style-type: none"> OEH personnel are not trained in structural fire fighting and must not enter a structure in order to undertake structural fire fighting. Fire suppression activities may be undertaken from outside a structure in accordance with the policies in the NPWS FFM, in order to protect a built asset.
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.
WARNINGS	<ul style="list-style-type: none"> Beware of overhead powerlines. Beware of any gas bottles on the reserve and any dangerous goods storage areas. Reserve prone to flooding and only some trails will be trafficable after flood events or rainfall.

Threatened Sites Guidelines

Site	Guidelines
Aboriginal Cultural Heritage Site Management	
IS1	<ul style="list-style-type: none"> Do not cut down trees As far as possible protect the site from fire Use of foams, wetting agents & retardant is acceptable.
IS2	<ul style="list-style-type: none"> Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites Sites may be burnt by bushfire, backburn or prescribed burn without damage.
IS3	<ul style="list-style-type: none"> 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 Environment Officer and Aboriginal community.
Historic Heritage Site Management	
H1	<ul style="list-style-type: none"> As far as possible protect the 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 Use of foams, wetting agents & retardant is acceptable.
H2	<ul style="list-style-type: none"> As far as possible protect the site from fire Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites Water bombing, use of foams, wetting agents & retardant is acceptable.
Threatened Fauna Management	
FA7	<ul style="list-style-type: none"> Exclude fire from habitat and avoid the use of machinery and chemicals.

Although not shown on the Incident map some vulnerable species of birds are known to frequent the reserve. Ensure that threatened species registers and local knowledge are used when completing burn planning for prescribed burns.