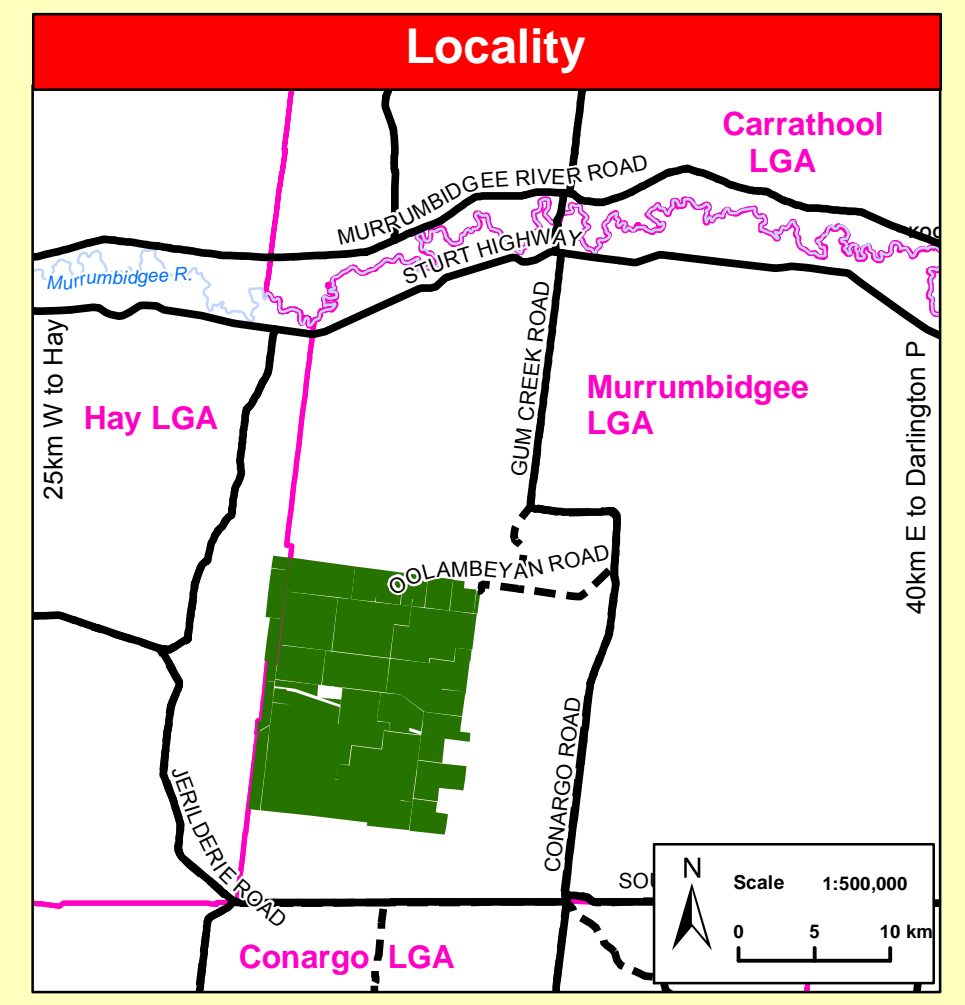
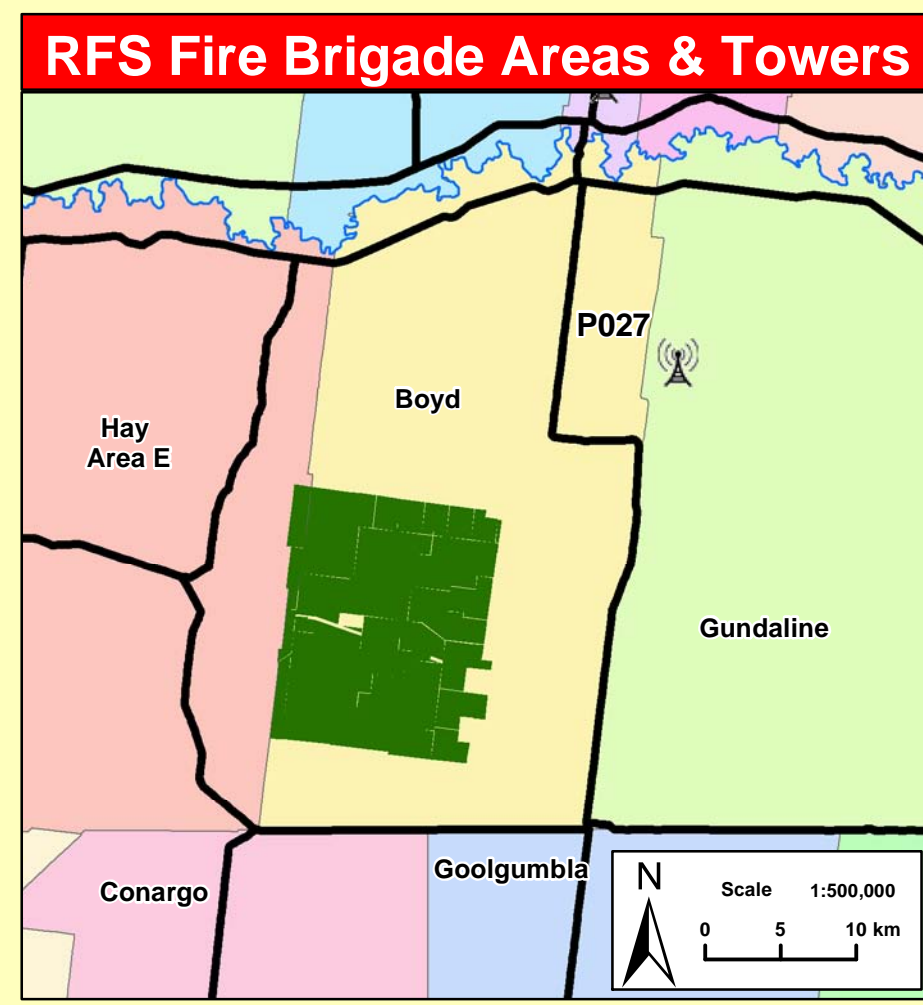


Oolambeyan National Park
Fire Management Strategy 2014
Mapsheet 1 of 2



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

ISBN 978 1 74293 744 1	OEH 2012/0610	Date: July 2014	Version No: 2
Map Details		Related Documents	
Datum: Geocentric Datum of Australia (GDA) 1994		1:50k Topographic Map: Oolambeyan 7928 - N and (AGD -1966)	
Projection: Map Grid of Australia (MGA) Zone 55		Scale: Noted scales are true when printed on A1 size paper	
Data: Spot Satellite Imagery: 2005.		OEH Fire Management Manual 2013 - 2014	

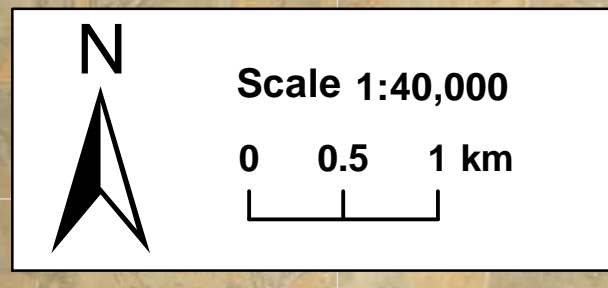
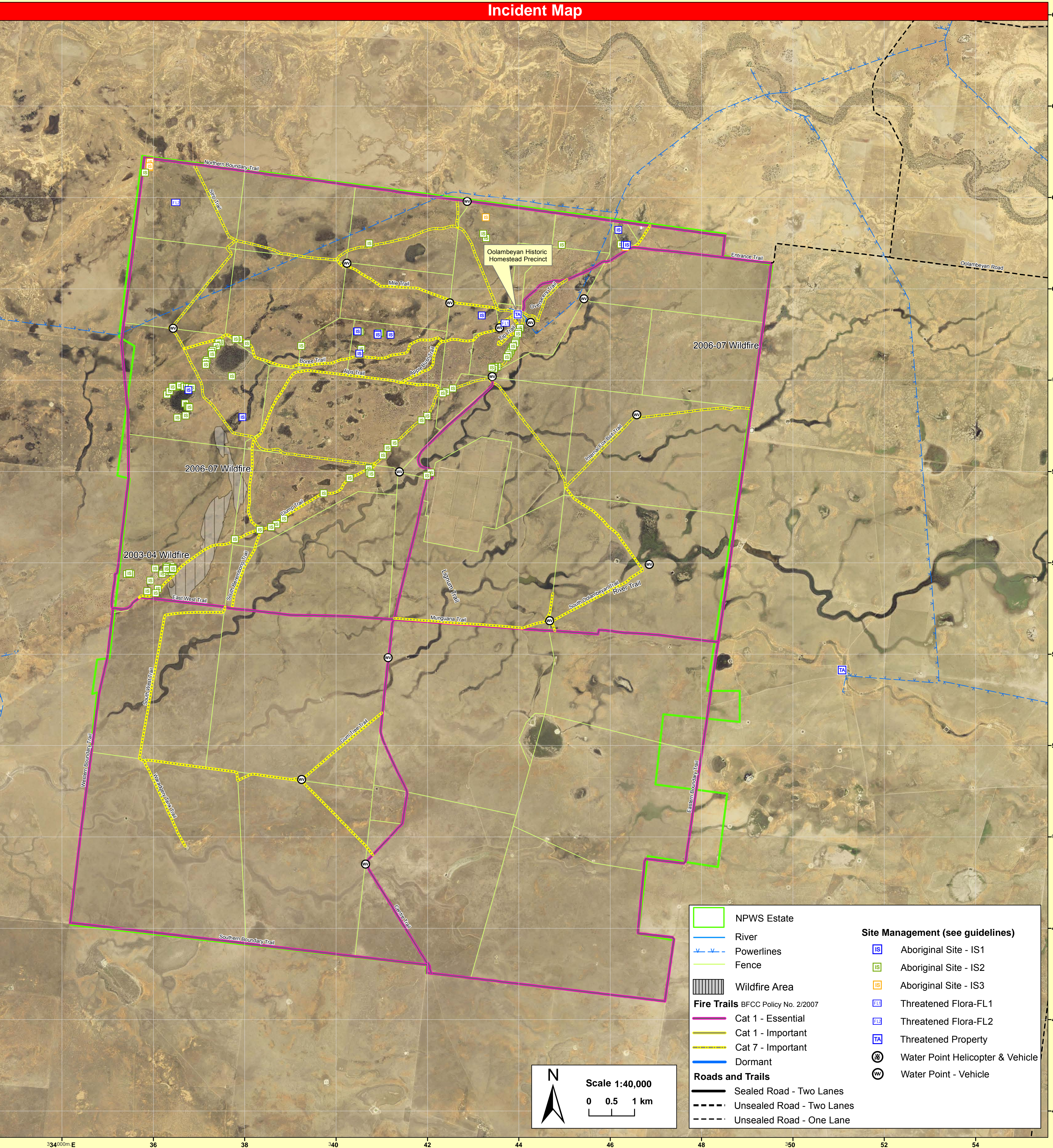


Contact Information					
Agency	Position / Location	Phone	Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer	02 6332 6350	Emergency Services		000
	Mid West Area & Regional Office - 200 Yambil St Griffith	02 6966 8100	SES		13 2500
NSW Rural Fire Service MIA District	Fire Control Centre	02 6966 7800	Police Station (not open 24 hrs)	Hillston	02 6967 2544
	Duty Officer	02 6966 7887	Police - Local Area Command	Griffith	02 6969 4310
NSW Fire Brigades	Hillston Fire Station	02 6967 2610	Hospital	Hillston	02 6967 2502
State Forests	Forbes - Duty Mobile	0428 696 678	Murrumbidgee Shire Council		02 6960 5500
LALC	Griffith	02 6962 6711	Hay Shire Council		02 6990 1100

Communications Information		
Service	Channel	Location and Comments
NPWS	11	•VHF Fireground 1
	10	•UHF
RFS Carrathool	P011	•Mt Bootheragandra
RFS All Brigades	20	•UHF

Mobile phone coverage unlikely to be reliable throughout whole reserve area.

Fire Season Information	
Wildfires	<ul style="list-style-type: none"> The critical wildfire season generally occurs from October/November to March/April. 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	<ul style="list-style-type: none"> Prescribed burning should generally be undertaken during winter or early Spring Care should be taken to ensure a low intensity burn over most of the area treated.

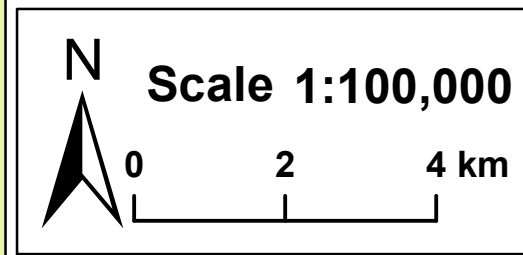
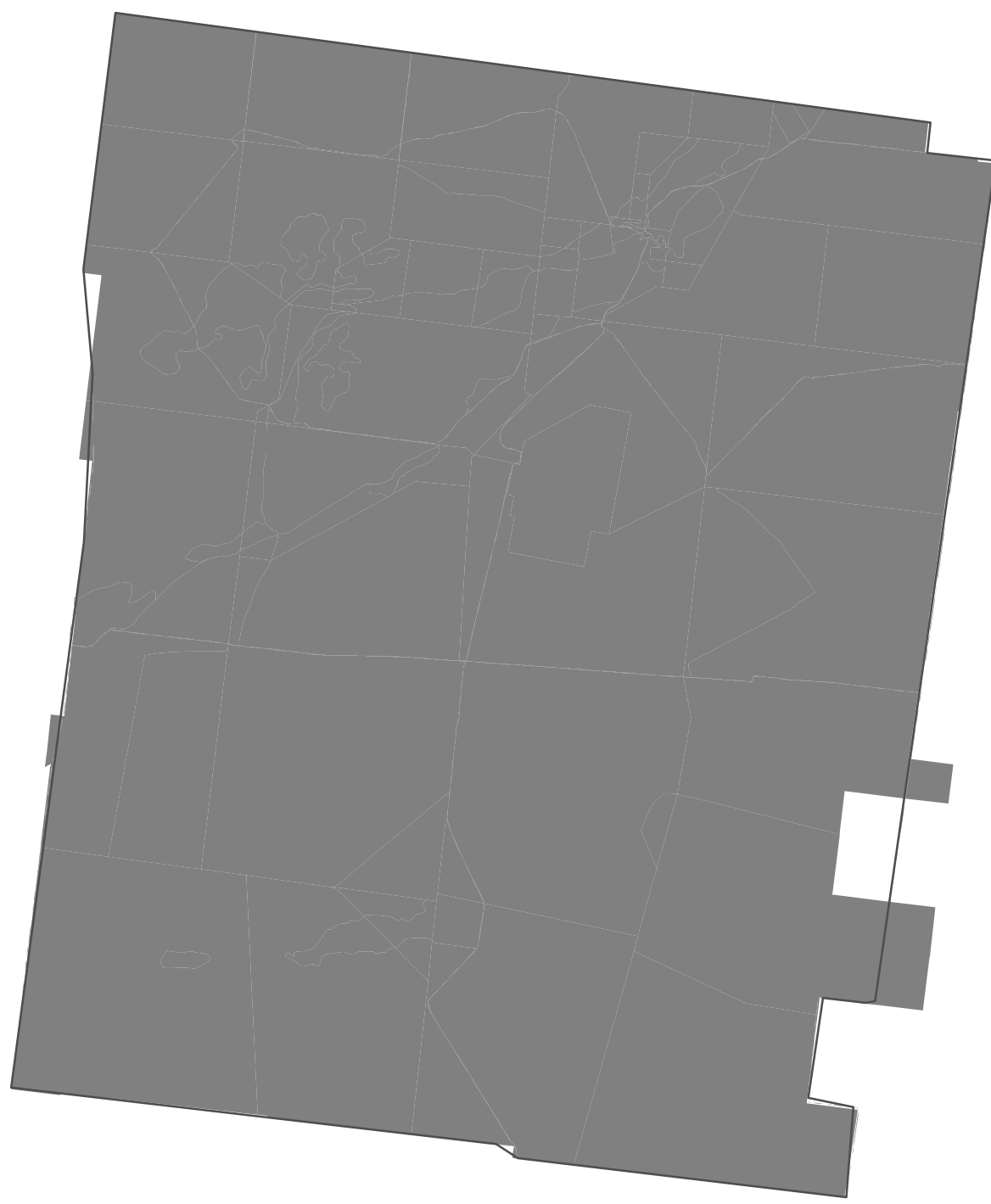


	NPWS Estate		Aboriginal Site - IS1
	River		Aboriginal Site - IS2
	Powerlines		Aboriginal Site - IS3
	Fence		Threatened Flora-FL1
	Wildfire Area		Threatened Flora-FL2
	Fire Trails BFCC Policy No. 2/2007		Threatened Property
	Cat 1 - Essential		Water Point Helicopter & Vehicle
	Cat 1 - Important		Water Point - Vehicle
	Cat 7 - Important		
	Dormant		
	Roads and Trails		
	Sealed Road - Two Lanes		
	Unsealed Road - Two Lanes		
	Unsealed Road - One Lane		

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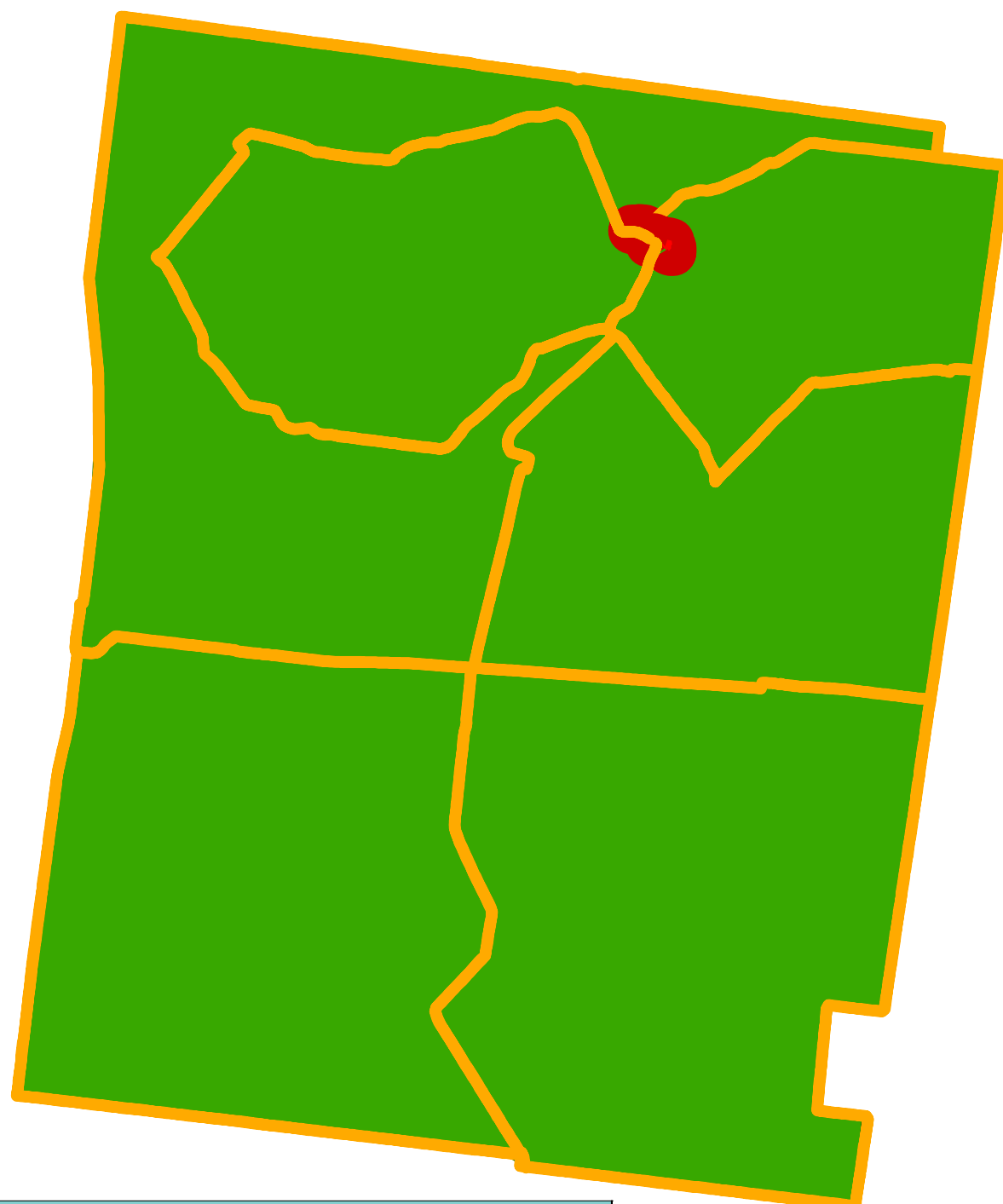
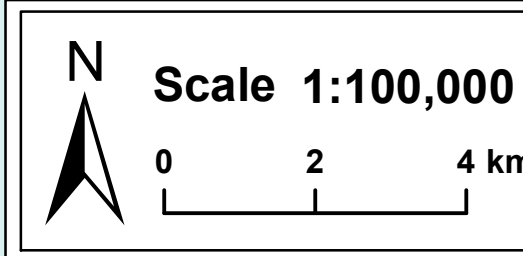
Status of Biodiversity Thresholds



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. NB. Fire thresholds are defined for vegetation communities to conserve biodiversity.

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.
Threatened Fauna Management	
Although not shown on this map there is a range of Threatened species that have been sighted on the reserve. Vulnerable – Spotted Harrier, Little Eagle, Superb Parrot, White-fronted Chat, Painted Honeyeater and the Grey-crowned Babbler. Endangered – Plains-wanderer Consideration of these when planning prescribed burn activities is essential, for more detailed information contact NPWS.	
Threatened Flora Management	
FL2	<ul style="list-style-type: none"> Utilise mosaic burning (Slender Darling Pea and Austral Pillwort)

Bushfire Risk Management Strategies



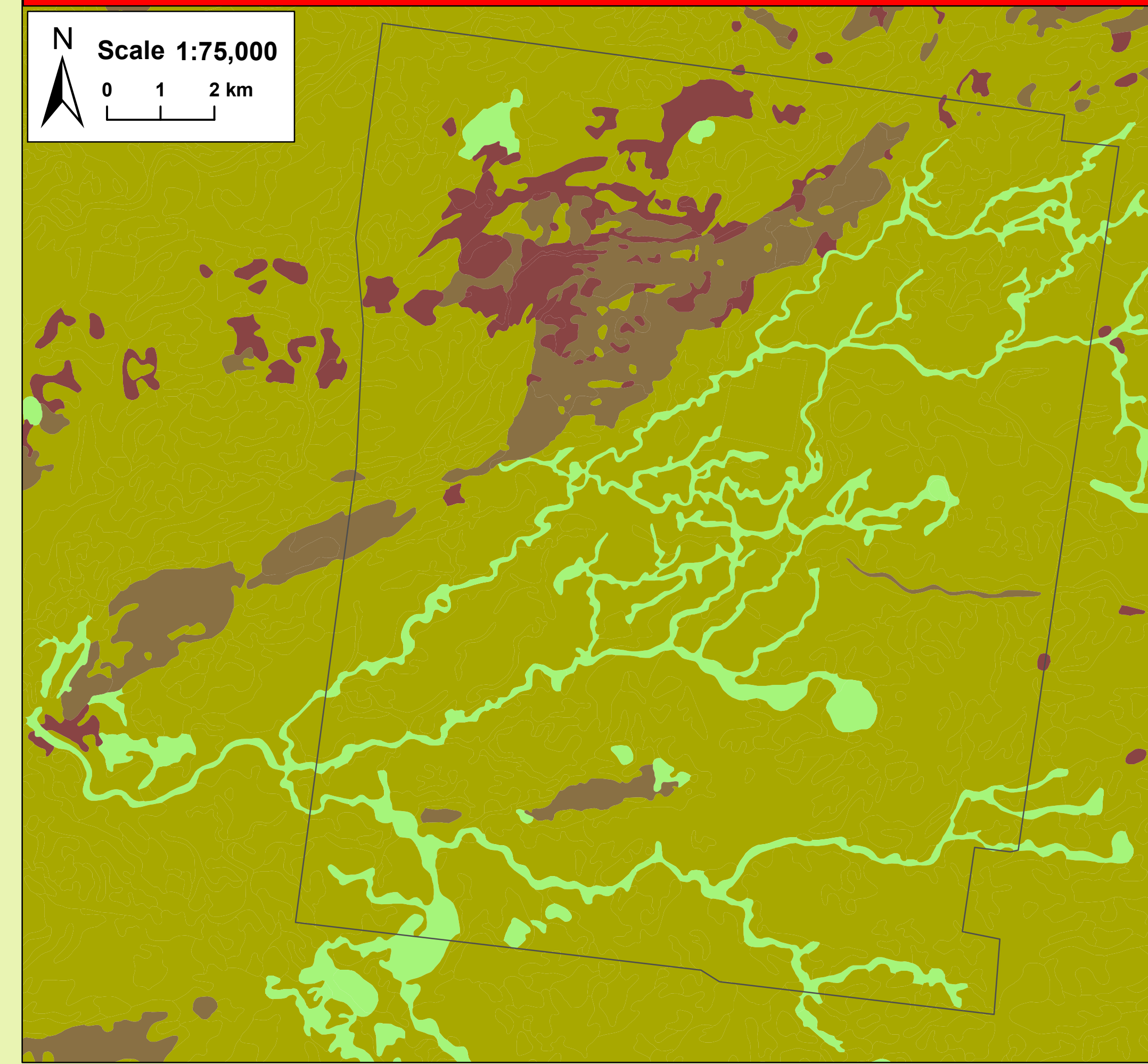
Fire Management Zones	
Asset Protection Zones	The objective of APZs is the protection of human life and property. This will have precedence over guidelines for the management of biodiversity. Maintain Overall Fuel Hazard at Moderate or below.
Strategic Fire Advantage Zones	The objective of SFAZs is to 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.
Land Management Zones	The objective of LMZs is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.

Suppression Strategies	
Typical Conditions	Indicative Suppression Strategies
<ul style="list-style-type: none"> Current Fire Danger Rating (FDR) of Very High or Greater, Short and medium range forecasts suggest conditions typical to a FDR of Very High or Greater, A risk to life and/or property exists in the short – medium term, A broad area risk to biodiversity exists. 	Direct Initial attacks should be to try to extinguish or to contain to the smallest possible area. Indirect Develop a suppression plan using existing and/or potential containment lines. If possible take into account biodiversity requirements but never to the detriment of life and property.
<ul style="list-style-type: none"> FDR of High or below, Short – medium term forecast indicate a continuing FDR of High or below No risk to life or property exists in the short-medium term, Only small area risk to biodiversity exists. 	Direct Evaluate the biodiversity thresholds and use direct attack methods to extinguish if required. Indirect Develop a fire suppression plan to the maximum allowable perimeter based on Biodiversity thresholds.

Operational Guidelines

Brief all personnel involved in suppression operations on the following issues using the SMEACS format:	
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
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, For new containment lines IMT to liaise with and receive consent from a Senior NPWS officer prior to construction, Use parallel containment lines when applicable, All containment lines not required for other purposes should be closed at the cessation of the incident, All personal 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.
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 FMM, 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 prescribed burning or wildfire suppression operations.
Water	<ul style="list-style-type: none"> There are water points located on the reserve itself that are bore fed and are reliable.
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.

Vegetation



Vegetation Map Legend			
Broad Vegetation Class	Vegetation Type	Biodiversity Thresholds	Fire Behaviour
Freshwater Wetlands	Seasonally Inundated drainage lines of Lignum & Nitre Goosfoot	Normal Intervals for this Broad Veg Class are less than 10 years and greater than 35 years should be avoided but due to the disturbed nature of the veg and the presence of mostly Chenopod species fire should be avoided where possible	These vegetation communities will generally not carry fire unless there are high ephemeral fuel loads, which generally occur after flooding events and effective. 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
Semi-arid Woodlands (Grassy sub-formation)	Modified Boree/Black Box Open Woodland with a White Top/Rough Spear grass understorey	An interval between fire events less than 9 years should be avoided. There is no maximum interval between fire events specified for this vegetation type as 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.	The Cypress Pine Woodlands generally occur on source-bordering dunes and the potential rate of spread would be low due to low overall fuel hazard. Fire runs are likely to slow down when entering this vegetation.
Semi-arid Woodlands (Shrubby sub-formation)	White Cypress Pine Sandhill Woodland	An interval between fire events less than 15 years should be avoided. There is no maximum interval between fire events specified for this vegetation type as there was insufficient data to give definite intervals.	In more open areas fire behaviour as for grassland areas described below.
Grassland	Grassland (with areas of regenerating Cottonbush & Boree)	The grassland areas of Oolambeyan are in a state of regeneration as some native species naturally make their return. Most Notable is the Boree in the North Eastern Section and also the Cottonbush in the Southern section. Both species are quite fire sensitive and due to this it is not envisaged that fire would be introduced into the reserve.	High intensity fast moving fire once grasses have cured. Fire behaviour is dominated by winds, both speed and direction. Even in very low fuel, grass fires can be erratic and fast moving. In ephemeral years intensity will be higher and in drought years minimal growth will result in moderate fire behaviour but potentially still fast moving depending on weather conditions at the time.
Fire History	No prescribed burns apart from some small pile burns have occurred in this reserve. There are 3 recorded wildfires for Oolambeyan. In the 2003/2004 fire year 112Ha burnt and in 2006/2007 fire year there were 2 fires of 42Ha and also 0.5Ha.		
Status Of Biodiversity	With this reserve the fire tools have not been able to be used due to the fact that none of the vegetation requires fire and most of it is in a transitional stage between the cropland it was and the returning natural biodiversity.		
Ephemeral Conditions	Ephemeral fuel conditions occur after consecutive years of effective rainfall and significant flooding events. 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. As a result expect higher fire intensity.		