The Rock Nature Reserve
Fire Management Strategy 2014
Mapsheet 1 of 1

Office of Environment & Heritage
NSW National Parks & Wildlife Service

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 74359 645 6 **OEH:** 2014/0392 **Date:** October 2014 **Version:** 1

Map Details

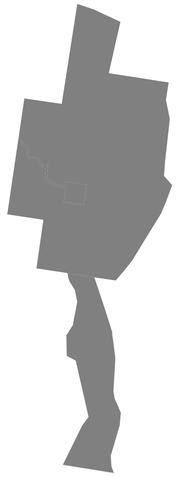
Datum: Geocentric Datum of Australia (GDA) 1994
Projection: Map Grid of Australia (MGA) Zone 55
Data: Spot Satellite Imagery: 2005.

1:25k Topographic Map: The Rock 8327-3-N (AGD-1966)
Scale: Noted scales are true when printed on A1 size paper

Related Documents

OEH Fire Management Manual 2013 – 2014 .

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

N Scale 1:30,000 0 0.5 1 km

Operational Guidelines

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

General	Guidelines
Aerial Water Bombing	▪ The use of bombing aircraft is designed to support suppression and containment operations and where necessary slow the progress of an advancing fire until ground crews arrive. ▪ Aircraft assist in aggressively attacking hotspots and spot-overs and their use without the support of ground based suppression crews generally has limited effectiveness. ▪ Where practicable foam should be used to increase the effectiveness of the water. ▪ Ground crews must be alerted to water bombing operations.
Aerial Ignition	▪ 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 and or reduce spotting potential by preventing longer uphill fire runs. ▪ Aerial ignition can be utilised to rapidly progress back-burns down-slope where required.
Back-burning	▪ 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 only commence when the humidity begins to rise in the late afternoon or early evening, ▪ Back-burning may be safely undertaken during the day only when FDI is low ▪ Where practicable, and prior to light up, clear (or wet down) around dead, hollow bearing, fibrous barked trees adjacent to containment lines to reduce effort needed for mop up activities, ▪ Avoid the ignition of back-burns at the bottom of slopes where a long and intense up-slope burn is likely, ▪ Back-burning in areas of Low – Moderate OFH will require the use of wind, or low humidity to maximise effectiveness, ▪ Use parallel containment lines when applicable, ▪ All personnel must be fully briefed before back-burning operations begin. Brief to include locations of known and potential cultural heritage and threatened species sites. ▪ Approval from the IC is required prior to commencement of back-burning operations.
Command & Control	▪ 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	▪ Construction of new containment lines should be avoided, where practicable, except when they can be constructed with minimal environmental impact, ▪ New containment lines require the prior consent of a senior NPWS officer, ▪ When constructing containment lines, steep and rocky areas and locations adjacent to riparian (creeks or streams) or significant drainage lines should be avoided. ▪ All personal involved in containment line construction should be briefed on the protection of the reserves natural and cultural assets. ▪ Containment line construction using earthmoving equipment must be conducted in accordance with this RFMS, the OEH FMM and sedimentation and erosion control measures must be implemented in accordance with both OEH and DLWC fire trail constructions guidelines and standards and the PWG Roads Policy (Manual). ▪ Containment lines not required for other purposes should be closed immediately at the cessation of the incident.
Rehabilitation	▪ Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Earthmoving Equipment	▪ 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, who can assist with survey (route selection) and the identification and protection of threatened species and/or or historic and Aboriginal sites (known nor unknown) along the proposed containment line. ▪ Earthmoving equipment must always be accompanied by a support vehicle and when engaged in direct or parallel attack this vehicle must be a fire fighting vehicle. ▪ 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 appointment of a Plant Operations Manager. ▪ Graders may be used to "sweep" existing fire trails.
Fire Suppression Chemicals	▪ The use of foams and gels (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. ▪ The aerial application use foam, gels and retardants requires the approval of a NPWS Senior Officer. ▪ Areas where fire suppression chemicals are used must be mapped and the used product's name recorded.
Smoke Management	▪ The potential impacts and mitigation tactics will be assessed during the planning of wildfire suppression and prescribed burning operations. ▪ Where possible the use of prevailing weather conditions along with specific light up strategies and ignition patterns will be used to manage and disperse smoke. ▪ If smoke becomes a hazard on local roads or highways, the police and relevant media must be notified. ▪ Smoke management will be in accordance with relevant OEH guidelines and RTA traffic management guidelines. ▪ During fire operations, place smoke hazard signs on Olympic Hwy& Lockhart-The Rock Road
Visitors	▪ The reserve may be closed to the public during periods of extreme or catastrophic fire danger, during prescribed burning or wildfire suppression operations, as outlined in the Western Rivers Region Incident Procedures.
Water points	▪ Dams located around the reserve may be useful in initial response situations, ▪ Suggest the use of Buoy walls or Cat1/Cat7 vehicles as on reserve storage. These would be replenished using a bulk water carrier from The Rock Town Supply.
WARNINGS	▪ **LOOKOUT** for overhead powerlines. ▪ The Rock Access Rd ends in locked bollards & cables with one removable section. The Riverina Zone RFS will be supplied keys for this lock.

Vegetation

N Scale 1:30,000 0 0.5 1 km

Contact Information

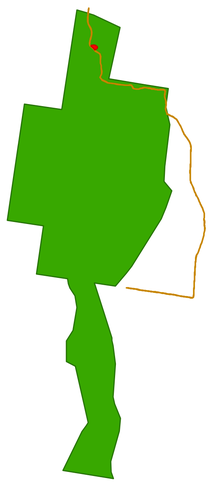
Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer	**02** 6332 6350
	South West Area Office	**03** 5483 9100
	Regional Office – 200 Yambil St Griffith	**02** 6966 8100
NSW Rural Fire Service Riverina Zone	Fire Control Centre	**02** 6971 4500
	Duty Officer	**02** 6971 4591
Fire and Rescue NSW	Wagga Wagga Fire Station	**02** 6921 4375
	Lockhart Fire Sation	**02** 6920 5103
Emergency Services		000
SES		13 2500
Police Station (not open 24 hrs)	The Rock	**02** 6920 2044
Police - Local Area Command	Wagga Wagga	**02** 6922 2599
Hospital	Wagga Wagga Base	**02** 6938 6666
Council	Lockhart Council	**02** 6920 5305
	Wagga Wagga Council	**02** 6926 9100
Local Aboriginal Land Council (LALC)	Wagga Wagga	**02** 6921 4095

Fire Season Information

Wildfires	▪ 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	▪ Prescribed burning should be undertaken during Autumn. ▪ Care should be taken to ensure a Moderate intensity burn over most of the area treated.

Bushfire Risk Management Strategies

Fire Management Zones	
Asset Protection Zones	The objective of **APZ**s 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 **SFAZ**s 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 **LMZ**s is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.



N Scale 1:30,000 0 0.5 1 km

Suppression Strategies

Typical Conditions	Indicative Suppression Strategies
▪ 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.
▪ 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.

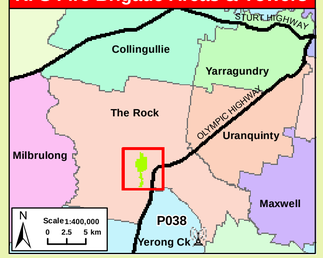
Vegetation Map Legend

Broad Vegetation Class	Vegetation Type	Biodiversity Thresholds	Fire Behaviour
Semi-arid Woodlands (Shrubby sub-formation)	Inland Rocky Hill Woodlands with Dwyers Red Gum, Red Stringybark & Black Cypress Currawang Shrubby Low Woodland on Rocky Hills	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 long unburnt areas, very high to extreme potential for spotting due to bark fuels. Isolated areas with heavy ground fuel may have the potential for very high fire behaviour.
Dry Sclerophyll Forest (Shrub formation)	Western Grey & Cypress Pine Shrubby Woodland	An interval between fire events less than 10 years and above 30 years should be avoided. These communities typically consist of obligate seeders.	
Grassy Woodlands	White Box, White Cypress Pine & Western Grey Box Grassy Woodlands	An interval between fire events less than 8 years and greater than 40 years should be avoided.	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 fire 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. Potential spotting from trees.
Fire History	3 Wildfires have been recorded for this reserve. A majority of the Northern portion burnt in 1991-92 (271Ha), in 2001-02 approximately half the Southern portion was burnt (230Ha) and in 2012 -13 a lighting strike burnt less than 1 Ha in the Northern portion. Although not shown on the map due to its size a small fire (0.25Ha) occurred in 2006 -07 on the Southern boundary, cause was undetermined.		
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.		
Drought Conditions	During drought conditions and when vegetation communities are visibly stressed or experiencing dieback no prescribed burning will be permitted and wildfire areas will be minimised.		

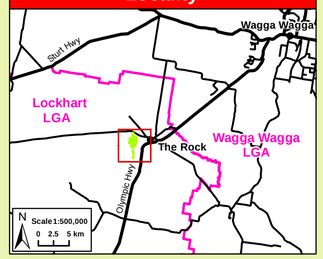
Threatened Sites Guidelines

Site	Guidelines
Aboriginal Cultural Heritage Site Management	
Note	An Aboriginal sites survey is yet to be conducted for this reserve (as of May 2014). Therefore Aboriginal sites may be present and consideration in engaging a Senior NPWS Officer or Aboriginal Sites Officer prior to hazard reduction and wildfire suppression activities is required.
Threatened Fauna Management	
Although not shown on this map there are some vulnerable species that have been sighted previously on the reserve including the Brown Treecreeper, Diamond Firetail, Flame Robin, Glossy Black-Cockatoo, Scarlet Robin, Speckled Warbler, Little Eagle, Turquoise Parrot, Varied Sittella and Woolly Ragwort. Please consult your local NPWS office for more information.	

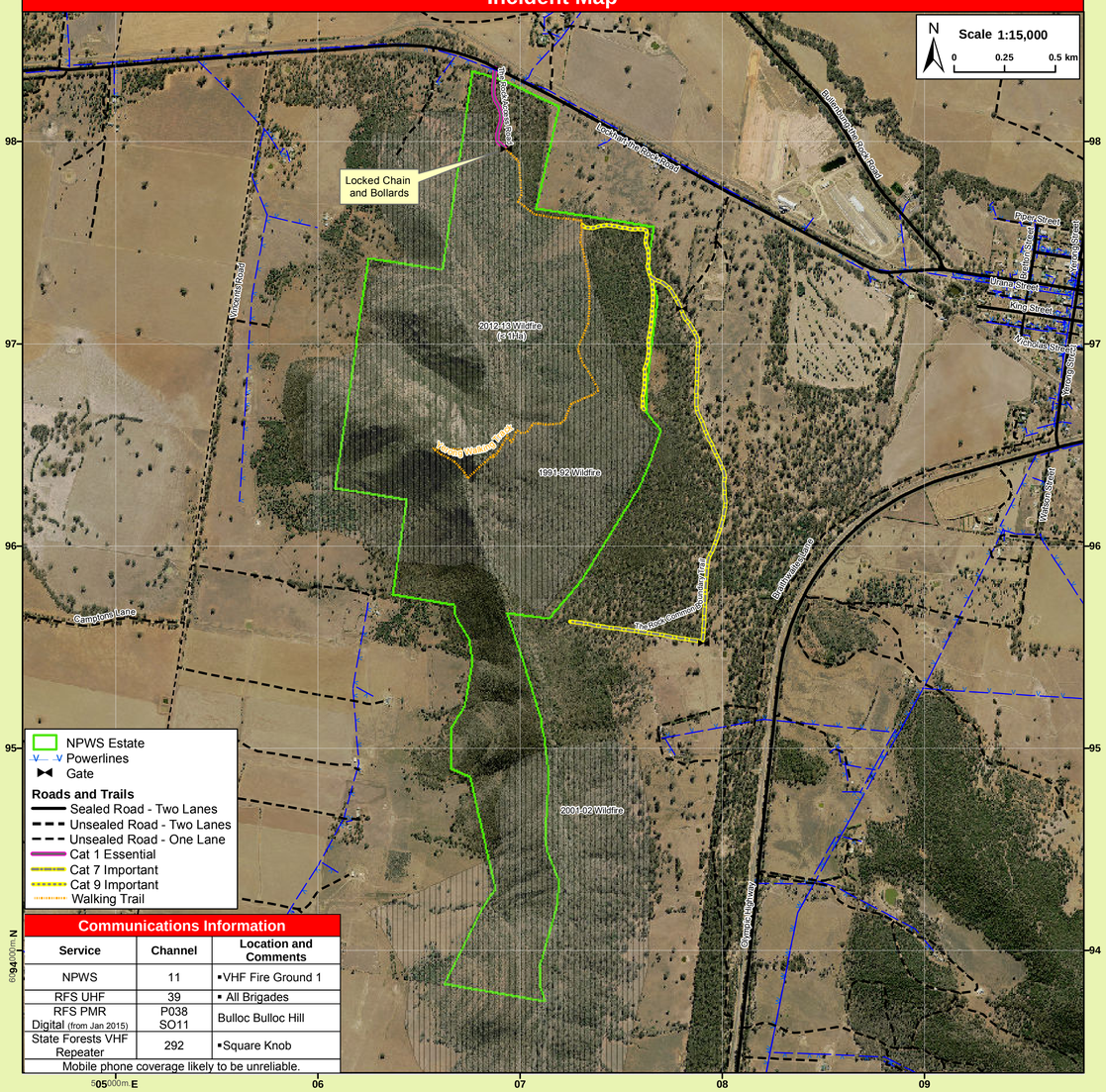
RFS Fire Brigade Areas & Towers



Locality



Incident Map



Communications Information		
Service	**Channel**	**Location and Comments**
NPWS	11	▪ VHF Fire Ground 1
RFS UHF	39	▪ All Brigades
RFS PMR Digital (from Jan 2015)	P038 SO11	Bulloc Bulloc Hill
State Forests VHF Repeater	292	▪ Square Knob

Mobile phone coverage likely to be unreliable.