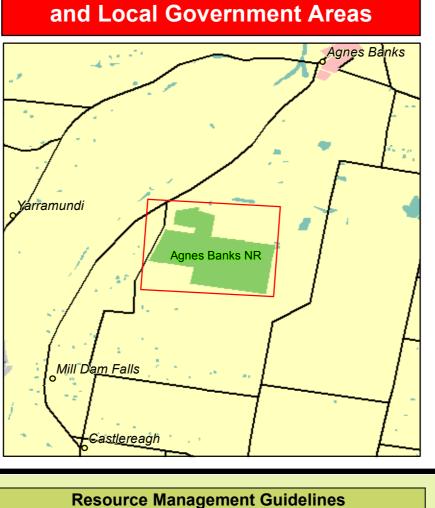


Position / Location	Phone
Regional Duty Officer (24 hour)	(02) 8579 0609
Cumberland Area Manager	0419 753 787
Fire Management Officer	9542 0636
Cumberland Area Office	4572 3100
	(fax) 4580 2714
MSW Regional Manager	9542 0643
24 Hours	
Business Hours	4734 7777
Fax	4737 8717
Emergency	000
Western Sydney Region	8811 7700
Emergency	000
Penrith	4721 9444
Blacktown	9671 9199
Emergency	000
Western Sydney and Nepean Blue	4731 2167
Mountains Sector	(fax) 4731 4501
Nepean	4734 2000
Hawkesbury District Health Service	4560 5555
Deerubbin LALC	4724 5600
Penrith Council	4732 7777
Blacktown Council	9839 6000
24 Hours	1300 133 491

Locality of Reserve



	onal Guidelines
	nent 2003 and Fire Management Manual 2005. ppression operations on the following issues:
The use of hor	Guidelines bing aircraft should support containment operations by
aggressively at	acking hotspots and spot-overs.
prospect Reser	
Ensure the equ propagules into	ipment used will not introduce chemicals or weed the reservoir.
The use of borr	bing aircraft without the support of ground based ews should be limited to very specific circumstances.
Ground crews r	nust be alerted to water bombing operations.
	nay be used during back-burning or fuel reduction re practicable, but only with the prior consent of NPWS
Regional Mana	ger or Section 44 delegate. ries to rapidly progress back-burns down slope where
required.	
determine the s	nd humidity trends must be monitored carefully to afest times to implement back-burns. Generally, when
	High or greater, backburning should commence when gins to rise in the late afternoon or early evening. With
a lower FDI bad	kburning may be safely undertaken during the day. ble, clear a 1m radius around dead and fibrous barked
trees adjacent f	o containment lines prior to backburning, or wet down
Avoid ignition o	part of the backburn ignition. f backburns at the bottom of slopes where a long and
	e burn is likely. tant agency on site may assume control of the fire, but
	re the relevant land management agency is notified
On the arrival o	f other combatant agencies, the initial incident
incident manag	onsult with regard to the ongoing command, control and ement team requirements as per the relevant BFMC
Plan of Operati Construction of	ons. new containment lines should be avoided, where
practicable, exc	ept where they can be constructed with minimal mpact. New containment lines require the prior
consent of a se	nior NPWS officer.
rehabilitated as	ble, containment lines should be stabilised and part of the wildfire suppression operation.
	lines not required for other purposes should be closed of the incident.
•	volved in containment line construction should be natural and cultural heritage sites in the location.
Within SCA Pro	spect dozer lines and helipads are unnecessary and
	uipment must always be guided and supervised by an
	icer, and accompanied by a support vehicle. When ct or parallel attack this vehicle must be a firefighting
vehicle.	es constructed by earthmoving equipment should
consider the pr	otection of drainage features, observe the Threatened
surveyed, wher	Iltural Heritage Operational Guidelines, and be e possible, to identify unknown cultural heritage sites.
	uipment should be washed down, where practicable, ng NPWS estate.
	uipment may only be used with the prior consent of a fficer, and then only if the probability of its success is
high.	
	ges used during wildfire suppression operations must where relevant added to the database.
	ng agents (surfactants) and retardants may be used a high probability of their use being successful.
Fire retardant	chemicals should not be used:
2. Whe	water supply off takes and avoiding spray drift; re spray drift may effect water storages, DECC must
	m SCA of the proposed use of fire retardants. s where use of retardants is inappropriate include
	bating high-intensity bushland fires s where there is thick canopy cover;
3. area	s where there are thick shrub or sub-canopy layers; s within the water quality management zone; and
5. area	s where there is a high probability of spot fires
	ble, containment lines should be stabilised and part of the wildfire suppression operation.
	npacts of smoke and possible mitigation tactics must be n planning for wildfire suppression and prescribed
burning operati	ons.
If smoke becon	nes a hazard on local roads or highways, the police and
	sion Strategies
• As far	as possible, undertake indirect, parallel or direct attack
along e	existing control lines.
assets	as possible, maximise area burnt without threatening including biodiversity.
Identify Undert	and survey backup control lines. ake indirect, parallel or direct attack to minimise the
time ta	ken to contain the fire.
to cont	uct new control lines if necessary to minimise the time ain the fire.
	and survey backup control lines. ake indirect attack along existing or newly constructed
control	lines.
downw	and deepen control lines along the next predicted ind side of the fire.
	and survey backup control lines. there is sufficient time to secure control lines before
the fire	gets to them.
	is insufficient time to secure control lines, fall back to t potential control line.
As far	as possible, implement threatened species and cultural e management guidelines.
	eanagement guidemiles.

Vegetation Community	Biodiversity Thresholds*	Fire Behaviour	Year Burnt	Area (%)
Castlereagh Scribbly Gum Woodland	Minimum fire interval 8 - 10 years Implement variable fire regime within this range Maximum fire interval 15 - 30 years Longer unburnt areas tend to have increased weed invasion. May need to implement fire to assist in weed management Site and context specific, research and monitoring required, eg. Some communities may require 15 years, others 30 years	Moderate to		
Cooks River Castlereagh Ironbark Forest				
Shale Gravel Transition Forest	<u>Min</u> . interval 4-6 yrs <u>Max</u> . interval 15–20 yrs Re-assess biodiversity after approx. 15 years as <i>Bursaria</i> tends to become competitive dominant & <i>Themeda</i> dies (after approx. 10-12 years) Significant research & monitoring is required	Moderate to High	2013	10
Alluvial Woodland Castlereagh Swamp Woodland	 Avoid any fire occurrence (a limited recovery ability exists) 	Low	2013	5
Cleared	Not applicable.	-	-	-
*There is insuffi ndicates approx above. It is impo mean that this c	Not applicable. cient data to give definite detail kimate minimum and maximum is ortant to note that specifying the ommunity should be burnt at this ly a quide and fire should be	intervals as t above thresh s specific tim	hose spe iolds, do e (say e	ecified es not very 6

frequencies within the specified range. Significant research & monitoring of the effects of either the presence or absence of fire on each of the communities is required in order to come up with more accurate guidelines.

Recent Fire History Legend
Watercourse
StandardRoad

2013 - Wildfire Scale 1:10,000

Guidelines Resource Indigenous Cultural Heritage Site Management (NPWS FMM 2.0 Site unlikely to be affected by fire. Avoid ground disturbance including earthmoving machinery, hand tools and driving over sites. IS2 Avoid all water bombing activities that may cause ground disturbance. Do not break earth around known sites If using fire, place control lines well away from site Historic Site Management (NPWS FMM 2.0) As far as possible protect site from fire. HS1 Reduce fuel loads by mowing / slashing a 10m buffer around structure Heritage site unlikely to be effected by fire HS2 Avoid use of earth moving machinery Avoid all water bombing activities that may cause ground disturbance Threatened Fauna Management (NPWS FMM 2.1 & 4.2) Avoid high intensity fires that consumes the canopy FA2 Avoid fires in times of nectar scarcity (winter) No slashing or trittering or earth-moving equipment Protect logs and fallen timber and dead standing timber Maintain appropriate fire frequencies to prevent dense understoreys FA3 No slashing or trittering or earth-moving equipment Avoid fires during the breeding season (August - January) Avoid fire intervals < 3 years Protect large old, hollow-bearing trees Exclude fire or protect riparian zone from frequent fire Protect logs and fallen timber FA4 Avoid high intensity fire that consumes the canopy and frequent fires over large areas No slashing or trittering or earth-moving equipment Avoid smoke and fires during the breeding season (Autumn/winter) Protect large old, hollow-bearing trees Avoid smoke and fire near known roost/den trees, roost sites and during the breeding season (spring/summer) FA5 Avoid high intensity fire that consumes the canopy and frequent fires over large areas Protect logs and fallen timber Protect large, old hollow-bearing trees Avoid smoke and fire during the breeding season (spring/summer) Avoid fire in, or protect the riparian zone from frequent fire FA6 Avoid hot fires that consume canopy and high intensity fire over large Avoid fire intervals < 6 years Protect logs and fallen timber Avoid fire in known habitat locations FA11 If not possible, avoid fires > 1 ha in known habitat locations No slashing, trittering or earthmoving works Threatened Fauna Management (NPWS FMM 2.1 & 4.2) Avoid inter- fire intervals of < 8 - 15 years Avoid inter-fire intervals > 20 - 30 years No slashing or trittering or earthmoving machinery FL4 Avoid the use of chemical retardant Avoid burning during August to March Avoid inter-fire intervals of < 10 - 12 yea Avoid inter-fire intervals of > 20 - 25 years No slashing trittering or tree removal or earth moving equipment FL5 Avoid use of retardants Avoid fire November - March Avoid inter-fire interval of < 10 - 15 years Avoid inter-fire intervals > 20 - 25 years FL7 Moderate-high intensity fires preferable - Late summer/Autumn No slashing, trittering or tree removal or use of earthmoving equipment Avoid use of retardant Where possible 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. Threatened Property

	Threatened Flora Fire Ecology					
Label	Name	Fire Ecology				
FL.	<i>Dillwynia tenufolia</i> (Vulnerable)	Minimum interval 8 years recommended, while 10-15 years is required to allow sufficient seed and fuel to accumulate, particularly if burnt late summer to autumn. Killed by fire but regenerates from soil seedbank. Prolific seed germination in response to fire. May be a weak resprouter, expect most plants to be killed by mod-high intensity fire. Lifespan 20-30 yrs. Reproductive maturity occurs >4 years after germination. Flowering occurs sporadically, though peaks from August to March.				
	<i>Micromyrtus minutiflora</i> (Endangered)	An obligate seed regenerator. Seed germination is promoted by fire and also by physical disturbance. Although listed as a short-lived species much of the ecology is poorly known. Maturity is expected in about 10 years. Peak flowering is from November to March with sporadic flowering all year round.				
	Persoonia nutans Nodding Geebung (Endangered)	Peak flowering occurs from December to January. Reproductive maturity is not reached for 3-4 years, with peak reproduction at 5-6 years. Lifespan is about 20 years. Killed by fire and re-establishes from soil-stored seed. Germination can be prolific after a moderate to high intensity fire. There is no evidence of vegetative spread. Fire intervals of 10-15 years allows adequate build-up of seed storage and fuel levels to provide for moderate to high intensity burns (particularly in summer to autumn).				

hreatened Fauna Fire Ecology Label Name Fire Ecology Chalinolobus Roosts in mines and caves in colonies of anywhere from 3 to 37 individuals dwyeri Usually found roosting close to the entrance of the site, in the twilight zone. Th Large-eared species has also been found roosting in tree hollows and the mud nests of fairy Pied Bat martins. Little is known of the breeding biology. Females are known to give birt

 (Vulnerable)
 to one or two young in late November and early December.

 (Vulnerable)
 Avoid frequent, high intensity burning within known habitat during breeding season (August - January). Avoid any fire management operations within known habitat. The breeding season is between July and February. Nests are constructed on the ground and are well concealed by vegetation, leaf litter, and

 (Vulnerable) trees or shrubs. Survival and population viability are sensitive to habitat isolation, reduced patch Daphoenositta size and habitat simplification, including reductions in tree species diversity, tree chrysoptera canopy cover, shrub cover, ground cover, logs, fallen branches and litter. Listed Varied Sittella threats include removal of live and dead timber, removal of patches of regrowth (Vulnerable) eucalypts or shrubs and inappropriate fire regimes. Breeding season is August to Glossopsitia Glossopsitia nest sites are limited. Riparian trees are often chosen (Allocasuarina). Feeds pusilla *pusilla* Little Lorikeet (Vulnerable) mostly on nectar and pollen in the canopy. Protect known nesting sites during breeding season (May to September). Maintain appropriate fire regimes to maintain diverse tree age classes. Protect trees with hollows by prepping site Meridolum Primarily inhabits Cumberland Plain Woodland. Lives under litter of bark, leaves corneovirens and logs, or shelters in loose soil around grass clumps. Dispersal distances are Cumberland Plain Land Snail thought to be small and there is some suggestion that gene flow between populations is low. Fires at inappropriate times, or too frequently, will destroy the habitat required by the species, or burn the groundcover in which it can be
 (Endangered)
 sheltering, leading to direct loss of individuals.

 Miniopterus
 Caves are the primary roosting habitat. Form discrete populations centred on a schreibersii

 maternity cave that is used annually in spring and summer for the birth and
 oceanensis Eastern 300 km range of maternity caves. Hunt in forested areas, catching moths and Bentwing-bat other flying insects above the tree tops. Listed threats include hazard reduction
 (Vulnerable)
 and wildfire fires during the breeding season. Avoid fire around known roost sites.

 Mormopterus
 Roosts mainly in tree hollows but will roost under bark or in man-made structures.

 norfolkensis
 Avoid removing hollow-bearing trees. Avoid large scale wildfire or hazard
 Eastern Free-tail Bat feeder.

 Image: Construction of the construc
 Cumberland Area reserves.

 Scoteanax
 Utilises a variety of habitats. Usually roosts in tree hollows. Creek and reserves.
 rueppellii Greater corridors are important foraging areas. Little is known of its reproductive cycle, however a single young is born in January. Prior to birth, females congregate at Broad-nosed maternity sites located in suitable trees. Avoid burning of riparian corridors in
 Bat (Vulnerable)
 known habitat locations; avoid felling potential roost trees (those with hollows); avoid burning during breeding season; maintain appropriate fire regimes.

 A forest owl, but often hunts along the edges of forests, including roadsides. The
 Tyto typical diet consists of tree-dwelling and ground mammals, especially rats. Roosts novaehollandi and breeds in moist eucalypt forested gullies, using large tree hollows for nesting.

ae Avoid loss of mature hollow-bearing trees and changes to forest and woodlar Masked Owl (Vulnerable) Maintain the quality of ground cover for mammal prey, particularly in open, grass

