

TABLE 1 - Fire Management Requirements of Flora and Fauna of Conservation Value in Greater Mount Alexandra Reserve

SPECIES	CONSERVATION STATUS	HABITAT AND OCCURRENCE	RESPONSE TO FIRE AND MANAGEMENT
FLORA			
<i>Persoonia glaucescens</i> (shrub to 2 m)	Endangered ¹ Vulnerable ²	Woodland to open woodland on sandstone. Common in scribbly gum heathy woodland near Welby, and close to the reserve boundary along Drapers Creek near Colo Vale. Small population to the west of Drapers Road near the Mittagong sewage treatment works was burnt in the 2002 wildfire.	Probably killed by fire. Time between fires should allow for seed set. The Bush Fire Environmental Assessment Code recommends a minimum fire interval of 15 years.
<i>Phyllota humifusa</i> (small prostrate shrub)	Vulnerable ¹ Vulnerable ²	Recorded in dry sclerophyll forest near Welby.	Probably killed by fire. Time between fires should allow for seed set. The Bush Fire Environmental Assessment Code recommends a minimum fire interval of 7 years.
<i>Lissanthe sapida</i> (small shrub)	ROTAP (code: 3RCa)	Forest on sandstone, often on rocky ground. Reported from above the tunnel on the Box Vale walking track.	Probably killed by fire. Time between fires should allow for seed set.
<i>Eucalyptus apiculata</i> (mallee to over 4 m)	ROTAP (code : 3RC-)	On edges of cliffs and rock outcrops on sandstone in the scribbly gum heathy woodland community north of Welby; possibly on other cliff lines in the reserve.	Mallees re-sprout from lignotuber after fire. Time between fires should allow for seed set.
<i>Persoonia mollis</i> subsp. <i>Revoluta</i> (prostrate shrub)	ROTAP (code: ZR)	Woodland and open woodland on sandy soils. Occasional along the Box Vale Walking Track. This species is endemic to the region.	Probably killed by fire. Time between fires should allow for seed set.
<i>Cryptandra amara</i> (shrub to 1 m)	Local importance	Dry sclerophyll forest near the summit of Mount Alexandra.	Probably killed by fire. Time between fires should allow for seed set.
<i>Dodonaea multijuga</i> (shrub to 1 m)	Local importance	Riparian vegetation along creek downstream of Lake Alexandra.	Probably killed by fire. Time between fires should allow for seed set.
<i>Eucalyptus dendromorpha</i> (mallee to tree)	Local importance	On the rim of the Nattai Gorge in some places.	Trees re-sprout from lignotuber after fire. Time between fires should allow for seed set.
<i>Eucalyptus oreades</i> (tree to over 20 m)	Local importance	Tall forest on moist sites in gullies. In the gorge of the upper section of the Nattai River north of Welby.	Reported to be very susceptible to fire (Benson and McDougal, 1998). Exclude fire from habitat where possible.

SPECIES	CONSERVATION STATUS	HABITAT AND OCCURRENCE	RESPONSE TO FIRE AND MANAGEMENT
FAUNA			
Glossy Black-Cockatoo <i>Calyptorhynchus lathamii</i>	Vulnerable ¹	Requires old trees with hollows for nesting, and mature stands of she-oak (<i>Allocasuarina</i> and <i>Casuarina</i> sp.) holding good quantities of cones as a food source. Recorded in stands of <i>Allocasuarina littoralis</i> throughout the reserve.	Old stands of she-oak can be killed by fire, but occasional hot fires will help regenerate senescent stands. Frequent fires will tend to inhibit establishment of she-oaks. The Bush Fire Environmental Assessment Code recommends mosaic burning and avoiding clearing stands of she-oak for fire management purposes.
Powerful Owl <i>Ninox strenua</i>	Vulnerable ¹	Requires large, hollow-bearing trees for nesting, good populations of arboreal mammals for food, and dense foliated trees for roosting. Needs extensive areas of forest, particularly tall moist forest containing large trees. Likely to occur in forest along the Nattai River Gorge.	Frequent fires may change character of forest in a negative way for the Powerful Owl or its prey (large arboreal mammals). Likely to benefit from a mosaic burning program which maintains relatively long inter-fire intervals while reducing the risk of large, high-intensity, wildfires. The Bush Fire Environmental Assessment Code recommends no burning around known nest sites at any time. No nest sites have been identified in the reserve.
Yellow-bellied Glider <i>Petaurus australis</i>	Vulnerable ¹	Requires tall open forest and open forest, where their favoured food tree, Grey Gum (<i>Eucalyptus punctata</i>) is present. Recent activity observed along the Box Vale walking track. Likely to occur wherever Grey Gums are present.	Likely to be adversely affected by hot fires that are frequent enough to reduce food sources and/or large tree hollows in the reserve. Likely to benefit from a mosaic burning program which maintains relatively long inter-fire intervals while reducing the risk of large, high-intensity, wildfires. Key resources, particularly old trees with large hollows, need to be protected during management burning (NPWS, 2003).
Brown Treecreeper <i>Climacteris picumnus</i>	Vulnerable ¹	Requires woodland with a fairly open understorey and fallen timber. This is mostly a species of west of the dividing range; record in the reserve is unconfirmed.	Unknown response to fire. As this species prefers an open understorey, fire could be beneficial. The Bush Fire Environmental Assessment Code recommends mosaic burning and minimising tree removal.

SPECIES	CONSERVATION STATUS	HABITAT AND OCCURRENCE	RESPONSE TO FIRE AND MANAGEMENT
Squirrel Glider <i>Petaurus norfolcensis</i>	Vulnerable ¹	Requires hollow-bearing trees for denning, and trees providing flowers and sap for food. Reported in the reserve, but exact location unknown.	Likely to be adversely affected by hot fires that are frequent enough to reduce food sources and/or tree hollows in the reserve. Likely to benefit from a mosaic burning program which maintains relatively long inter-fire intervals while reducing the risk of large, high-intensity, wildfires. The Bush Fire Environmental Assessment Code recommends mosaic burning.
Platypus <i>Ornithorhynchus anatinus</i>	Species of concern	Relatively unpolluted gravel bed creeks with large pools and sections of muddy bank. Recorded in the Nattai River.	Fires and fire track construction/maintenance may cause sedimentation of watercourses that fill pools needed for feeding.
Greater Glider <i>Petauroides volans</i>	Species of concern	Requires mature or dead trees with large hollows for dens. Likely to be widespread in the reserve.	Likely to be adversely affected by hot fires that are frequent enough to reduce food sources and/or large tree hollows in the reserve. Likely to benefit from a mosaic burning program which maintains relatively long inter-fire intervals while reducing the risk of large, high-intensity, wildfires.
Peregrine Falcon <i>Falco peregrinus</i>	Species of concern	Uses a wide range of habitats for foraging, requires ledges on high cliffs for nesting. Likely to range over the whole reserve.	Unlikely to be seriously affected by fire.

1 – NSW Threatened Species Conservation Act, 1995.

2 - Commonwealth Environment Protection and Biodiversity Conservation Act, 1999

TABLE 2 - Fire management requirements of vegetation types in Greater Mount Alexandra Reserve

FIRE MANAGEMENT CLASS	PLANT COMMUNITIES INCLUDED	DESCRIPTION	FIRE IMPACTS AND FIRE MANAGEMENT AIMS
Rainforest	Riparian (Simple) Rainforest (CER-WRF)	Riparian vegetation along the main watercourses in the reserve.	<p>Frequent fire can eliminate this vegetation type.</p> <p>Rainforest species are able to regenerate in the absence of fire.</p> <p>Exclude fire wherever possible.</p>
Tall wet forest	Peppermint – Gully Gum Tall Forest (PIP-SMI)	Tall forest with a rather open understorey.	<p>Generally eucalypts only regenerate successfully following fire.</p> <p>Frequent extensive fires may eliminate fire sensitive species and those that only regenerate from seed following fire resulting in these communities changing to shrubby dry forest.</p> <p>Extended fire intervals will create a single age class of eucalypts.</p> <p>Repeated intense wildfires reduce life expectancy of trees and remove old growth elements.</p> <p>Absence of fire for a period exceeding the life expectancy of particular eucalypt species will result in the local disappearance of those species.</p> <p>Natural fire frequency for this forest type is considered to be between 20 and 100 years. Wetter areas of this forest type will generally not carry a cool burn.</p> <p>Bradstock et. al. (1995) predicts a decline in biodiversity if there are:</p> <ol style="list-style-type: none"> 1 Three or more consecutive fires, with each of the fires being less than 20 years apart 2 Two or more fires high intensity fires with a complete scorch of the canopy within a period of one hundred years 3 No high intensity fire within a period of one to two hundred years. <p>Major fires every 60 to 100 years are sufficient to maintain tall wet forests.</p> <p>No management burning except for weed control or regeneration, or for hazard reduction if close to assets at risk.</p>

FIRE MANAGEMENT CLASS	PLANT COMMUNITIES INCLUDED	DESCRIPTION	FIRE IMPACTS AND FIRE MANAGEMENT AIMS
Shrubby dry sclerophyll forest	Grey Gum - White Stringybark Forest (PUN-GLB) Mixed Peppermint Forest (PIP-PUN) Mixed Scribbly Gum Forest (SCL-SIE) Scribbly Gum Heathy Woodland (SCL-MAN)	Tall forest to forest, very variable shrubby understorey.	Fire provides an opportunity for fire dependent species to germinate. Some of these communities may displace tall wet forest communities in areas that are frequently burnt. Bradstock et. al. (1995) predicts a decline in biodiversity if there are: 1 Three or more consecutive fires, with each of the fires less than 5 years apart 2 No fires for 30 years. Optimal fire interval for maintaining these communities is 12-25 years. Exclude fire from representative areas to provide controls for monitoring the effects of fire.
Wetland	Tea Tree Shrubland (swamp shrubland) (LEP-SHR)	Medium height shrubs with a dense fern groundcover on poorly drained sites with shallow soils.	Occurs in a small area on Drapers Creek to the west of Colo Vale. These wetlands are important for maintaining water quality. Very localised in the reserve and so appropriate to exclude fire for the duration of the plan.

TABLE 3 – Fire Risk Assessment for Built and Cultural Assets in the Greater Mount Alexandra Reserve

ASSET AT RISK	RISK ANALYSIS								COMMENTS	PROPOSED MANAGEMENT STRATEGIES
	A	B	C	D	E	F	G	Level of Risk		
Dwellings along Box Vale Road, Welby	5	2	3	2	1	2	6	720 Moderate	Dwellings in cleared areas on large lots that would provide adequate Asset Protection Zones if maintained with minimal fuel loads.. Ample room to maintain APZs to RFS requirements outside the reserve.	RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.
Recyclable materials stored at the old Welby landfill	5	5	3	2	2	2	1	600 Moderate	Temporary storage of materials pending full restoration of the site. Materials are of low value.	No fire protection measures required.
Power lines running past the former Mittagong water treatment plant, and to the old Welby Landfill	5	2	3	3	3	1	4	1080 High		Maintain existing easement. Clear at least 1 m around the base of each pole.
Dwellings bordering the reserve along Bowral Street and Jellore Street, Welby	2.5	2	3	2	1	1	6	180 Low	Isolated area of the reserve. Dwellings separated from the reserve by roads and cleared gardens that provide an APZ to RFS requirements.	RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining property is maintained.
Dwellings bordering the reserve along Colo Street, Welby	5	2	1	2	1	1	6	120 Low	Dwellings separated from the reserve by a road which, together with the front portions of each lot, provides an APZ to RFS requirements.	RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.

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Dwellings bordering the reserve to the north of, and at the eastern end of, Joadja Street, Welby	5	2	3	2	1	1	6	360 Moderate	Some dwellings are maintaining a wide APZ between the lot and the road to the former Welby landfill. For the other lots the recently constructed sewer provides an opportunity to establish an APZ along the reserve boundary. Together with the rear of the lots this will provide an approximately 30 m wide APZ.	Establish a 20 m wide APZ on the area cleared for the sewer as shown in Figure 5. This area should be grassed to control erosion and slashed as required to maintain the grass below 100 mm in height. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.
Dwellings bordering the reserve at the eastern end of Bowral Street, Welby	5	2	1	2	2	1	6	240 Low	Dwellings separated from bushland in the reserve by a turning area at the end of Bowral Street. This provides an APZ to RFS requirements. There is also a fire threat from a strip of bushland in a Council reserve on the northern side of Bowral Street that is continuous with bushland in the reserve.	Carry out periodic hazard reduction in the Council reserve on the northern side of Bowral Street. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.
RTA Motor Registry, Welby	5	2	1	2	1	1	6	120 Low	Registry building separated from the reserve by an approximately 50 m wide cleared, grassed area.	Establish and maintain a 20 m wide APZ between the registry building and the reserve as shown in Figure 5.
Commercial premises bordering the reserve at the northern ends of Owen and Frankland Streets, Mittagong	5	1	3	2	2	1	6	360 Moderate	Buildings separated from bushland in the reserve by grassland and partly cleared bushland. Ample room to maintain APZs to RFS requirements outside the reserve.	Establish and maintain a 20 m wide APZ between the buildings and the reserve on the adjoining properties.
Dwellings bordering the reserve at the western end of Sunset Point Drive, Mittagong	5	5	3	2	2	1	6	1800 High	Dwellings separated from the reserve by a sealed, two-way road (Sunset Point Drive) which provides an approximately 30 m wide APZ, together with the cleared portions of the lots.	Burn the strip of bushland between Sunset Point Drive and the fire trail downslope as required to maintain fine fuel loads below 10 tph. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.

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Dwellings bordering the reserve to the north of Sunset Point Drive, Mittagong	5	5	3	2	3	1	6	2700 High	Battle-axe lots with bushland on the lots. All lots have inadequate APZs and some will require a portion of the APZ in the reserve, others have room to provide ample APZs within the property.	Maintain portions of APZs required around adjoining dwellings within the reserve as shown in Figure 5. Burn the strip of bushland between the dwellings and the fire trail downslope as required to maintain fine fuel loads below 10 tph. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining property is maintained.
Dwellings bordering the reserve along Pioneer Street, Mittagong	5	2	1	2	1	1	6	120 Low	Dwellings separated from the reserve by a sealed, two-way road (Sunset Point Drive) which provides an approximately 30 m wide APZ, provided the area between the road and the dwellings is maintained as an IPA.	RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.
Dwellings bordering the reserve at the western ends of Arthur Street and Leopold Street, Mittagong; including the two dwellings on the northern side of Leopold Street that face the road to the top of Mt Alexandra	5	2	3	2	2	1	6	720 moderate	Dwellings at the end of Arthur Street directly adjoin the reserve, dwellings at the end of Leopold Street are separated from the reserve by a sealed road. Dwellings require a 25 wide APZ to comply with RFS requirements some of which will need to be established in the reserve.	Maintain portions of APZs required around adjoining dwellings within the reserve as shown in Figure 5. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.

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Two dwellings bordering the reserve at the western end of the lots on the northern side of Leopold Street.	5	2	3	2	3	2	6	2160 High	The road to the lookout at the top of Mount Alexandra provides a fire control line for these dwellings. Access to the northern-most dwelling runs through the reserve and could be cut by fire. These dwellings require a 25 m APZ on the western side and 20 m on the northern side, most of which needs to be established in the reserve.	Maintain portions of APZs required around adjoining dwellings within the reserve as shown in Figure 5. Burn the triangle of bushland between the two dwellings and the road to the lookout as required to maintain fine fuel loads below 10 tph. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.
Dwellings bordering the reserve on the northern side of Leopold Street, Mittagong	5	1	3	2	2	1	6	360 Moderate	Some dwellings on battle-axe blocks which could make fire brigade vehicle access difficult. Dwellings require a 20 m wide APZ which can be maintained on the lots.	RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.
Dwellings bordering the reserve on the northern side of Darch Place, Mittagong.	5	1	3	2	3	1	6	540 Moderate	Fire trail close to the reserve boundary provides some protection. Dwellings on the northern side of Darch Place require a minimum 20 m wide APZ on their northern side, most of which needs to be established in the reserve.	Maintain portions of APZs required around adjoining dwellings within the reserve as shown in Figure 5. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.
Mittagong Recreation Centre, and buildings associated with the swimming pool and golf course.	5	2	3	2	2	1	6	720 Moderate	Buildings in partly cleared areas. RFS recommends a 10 m wide APZ around non-habitable structures.	Establish and maintain a minimum 10 m wide APZ around buildings and improve resistance to ember attack by bringing buildings up to Level 1 requirements in AS 3959 – 1999, particularly screening openings against entry of burning embers. Carry out regular maintenance to ensure there are no flammable materials (leaves etc) in contact with combustible parts of the buildings.

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Dwellings bordering the reserve on the southern sides of Links Place and Willow Street, Willow Vale.	2	2	3	2	1	1	6	144 Low	Dwellings are partly protected by the adjoining golf course though there is a strip of bushland between the golf course and adjoining dwellings that burnt in the major fire in November 2002.	Maintain bushland between the golf course and the adjoining dwellings with fuel loads less than 8 tph by burning or periodic slashing. RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.
Dwellings bordering the reserve on the western side of Cordeaux Street, Willow Vale	5	1	3	2	2	1	6	360 Moderate	All lots have room to maintain the 20 m wide APZ required by the RFS within the lot except for the dwelling at the southern end of Cordeaux Street which is close to the reserve boundary.	Maintain portions of APZs required around adjoining dwellings within the reserve as shown in Figure 5. RFS to issue Section 66 notices as required to ensure that the portion of the APZ required on adjoining private property is maintained.
Dwellings bordering the reserve at the western end of Badgery Street, Willow Vale	5	2	3	2	1	1	6	360 Moderate	Only 2 dwellings on Badgery Street actually adjoin the reserve, however other dwellings along Badgery Street and Carlton Street adjoin bushland that is continuous with the reserve. These 2 lots have adequate APZs between the dwellings and the reserve. Dwellings on the southern side of Badgery Street and Carlton Street are separated from bushland by an approximately 20 m wide road.	RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.
Dwellings bordering the reserve on the western side of Drapers Road, Willow Vale	5	2	3	2	2	1	6	720 Moderate	Dwellings on large, partly-cleared lots, some have adequate APZs around the dwellings, others are inadequate. All dwellings in this area require a 25 m APZ to meet RFS requirements. APZs can be established within the lots.	Establish a 20 m wide APZ along the unformed portion of Parkes Road to the west of Drapers Road as shown on Figure 5 to protect adjoining dwellings. RFS to issue Section 66 notices as required to ensure that APZs are maintained on adjoining private properties.

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Mittagong sewage treatment plant	5	2	3	2	1	1	5	300 Moderate	Treatment works facilities are in a large cleared area which provides an adequate APZ.	Ensure that buildings containing flammable materials are adequately screened against the entry of wind-blown burning embers.
Dwellings on rural properties adjoining the eastern side of the reserve along Drapers Road, McCallums Road, and Drapers Creek Road	5	2	3	2	2	2	6	1440 High	Dwellings on large lots, most have adequate APZs and a moderate risk, but some are close to bushland and have a high level of risk. Ample room to maintain adequate APZs outside the reserve. All dwellings in this area require a minimum 25 m APZ to meet RFS requirements. Some dwellings have alternative access and all access routes will take residents away from fires approaching from the reserve.	RFS to issue Section 66 notices as required to ensure that adequate APZs are maintained on adjoining private properties.
Dwellings on rural properties adjoining the north-eastern side of the reserve along Colo Road	5	2	3	2	2	2	6	1440 High	Dwellings on large, partly-cleared lots, some have adequate APZs around the dwellings, others are inadequate. All dwellings in this area require a minimum 25 m APZ to meet RFS requirements. APZs can be established within the lots. Access to these dwellings is likely to be cut during a major fire.	RFS to issue Section 66 notices as required to ensure that adequate APZs are maintained on adjoining private properties.
Dwellings on rural properties adjoining the northern side of the reserve at Mount Flora and The Craggs	5	1	1	2	2	1	6	120 Low	Dwellings on large partly-cleared lots with ample room to maintain adequate APZs outside the reserve.	RFS to issue Section 66 notices as required to ensure that adequate APZs are maintained on adjoining private properties.

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Dwellings on rural properties adjoining the eastern side of the reserve along Kells Creek Road, and Drapers Creek Road	5	2	1	2	2	1	6	240 Low	Dwellings on large, partly-cleared lots, some have adequate APZs around the dwellings, others are inadequate. All dwellings in this area require a minimum 25 m APZ to meet RFS requirements. APZs can be established within the lots.	RFS to issue Section 66 notices as required to ensure that adequate APZs are maintained on adjoining private properties.
Timber signage, board walks, bridges and steps along tracks.	5	3	3	3	3	4	2	3240 High	Variable fire approach but most are highly vulnerable to fire damage.	Ensure that timber bridges, board walks, signs and steps are not damaged during management burns. Replace timber bridges, board walks, signs and steps damaged by wildfires.
Picnic facilities at Lake Alexandra	5	2	3	2	1	1	2	120 Low	Facilities are in a cleared managed area that provides an adequate asset protection zone.	Ensure furniture and shelters are not damaged during management burns. Repair if damaged by wildfires.
Timber barriers and picnic tables at the Box Vale Track car park	5	2	3	3	2	1	2	360 Moderate	Facilities are in a small cleared area that may provide some protection from fire.	Ensure barriers and picnic tables are not damaged during management burns. Repair if damaged by wildfires
Toilet blocks at Box Vale Track.	5	2	3	3	3	1	2	540 Moderate	Toilets are constructed of timber.	Replace toilets if damaged by wildfires. Avoid damage during hazard reduction burns.
Mittagong Golf Club	5	2	3	2	1	1	4	240 Low	Club buildings is in a cleared area and is separated from bushland by the Mittagong swimming pool. Sheds located in the reserve are vulnerable to damage by bushfires as is equipment on the fairways.	Maintain a minimum 20 m cleared area around the club building and 10 m around sheds.

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Aboriginal sites in the reserve.								Minimal	No combustible materials however sites may be damaged by fire control line construction and off road vehicle movements during fire management or suppression.	<p>Ensure that the RFS is aware of the location of Aboriginal heritage sites in the reserve and their importance.</p> <p>Do not take vehicles off existing trails, except if there is a threat to crew safety.</p> <p>Wherever possible use existing trails and tracks for fire control lines, or use wet lines.</p>

TABLE 4 - Condition and maintenance of fire trails in Greater Mount Alexandra Reserve

Trail accessibility code:

- trail width; 1w - single lane, 2w - double lane
- trail access; alt - alternative access, dead - dead end
- fire service tanker type; L - light tanker only (Cat 7 & 9), H - light and heavy 4WD tankers.

Trail classification and maintenance priority:

- PRIMARY fire trail – strategic importance or a primary feeder route (high priority)
- SECONDARY fire trail - important fire control lines (medium priority)
- DORMANT fire trail – not maintained but can be quickly reopened if required as a fire control line for fire suppression or management burning. May be maintained for other management purposes.

The trail accessibility code describes the suitability of the fire trail if properly maintained, not necessarily its condition at the time of inspection.

FIRE TRAIL Ref. No.	CODE	CLASSIFICATION	LOCATION AND CONDITION AT APRIL 2004	ACTION REQUIRED
GMA1	1w/alt/H	Primary	From the end of Meranie Street at the Welby Cemetery to the eastern end of Bowral Street. Trail provides a defensive line around Welby. Trail is in variable condition; reasonable condition at the cemetery end, overgrown at the Bowral Street end. Access to the Bowral Street end of the trail was blocked off by rocks. Both access points have recently been provided with locked gates.	Clear the overgrown section of the trail near Bowral Street and improve trail surface. Remove rocks blocking access from Bowral Street.
GMA2	1w/alt/H	Primary	Runs from GMA1 near the former Welby landfill to the western end of Leopold Street. Trail was created during the January 2002 fires by joining a number of existing trails. Trail is in variable condition with some rough patches. The crossing over Gibbergunyah Creek needs to be stabilised to ensure it is not damaged during floods. Safety could be improved by providing an additional access to this trail from nearby public roads. This is an important fire trail and maintenance should be considered a high priority.	Improve surface and drainage on rough sections of the trail. Provide a stable crossing over Gibbergunyah Creek. Provide a link to this trail (plus locked gate) from Iron Mines Oval through the former Mittagong sewage treatment works.
GMA3	1w/dead/H	Primary	Runs from the end of Beatrice Street to the site of the old Mittagong coal mine next to the Hume Freeway. Trail is in excellent condition though there are some places where water is flowing across the trail.	Periodic inspection and maintenance as required (MP 2). Improve drainage where water is flowing across the trail.

FIRE TRAIL Ref. No.	CODE	CLASSIFICATION	LOCATION AND CONDITION AT APRIL 2004	ACTION REQUIRED
GMA4 Wonsons Fire Trail	1w/dead/H	Primary	Trail runs from the Sheepwash Creek crossing on Drapers Road to the north-western corner of the reserve. There are links to McCallums Road across private property. Condition is variable with some very rough sections, particularly on steeper slopes. Northern end of the trail is becoming overgrown and there are some fallen trees partly blocking the trail. Limited space for turning at the northern end of the trail. This trail would be safer and more useful if the northern end was linked to the new trail from Mount Flora to The Craggs. A short portion of the eastern end of the trail appears to run through private property.	<p>Improve surface and drainage on steeper sections of the trail.</p> <p>Clear fallen trees and branches off the trail.</p> <p>Clear shrubs that are encroaching on the trail at its northern end.</p> <p>Investigate the feasibility of linking this trail through to The Craggs, alternatively provide a wider turning area at the northern end.</p> <p>Consult with landowner to ensure that the portion of the trail on private property can be maintained and used for emergency access.</p>
GMA5 Falls Fire Trail	1w/alt/H	Primary	Trail runs from the junction of Bells Road and Wattle Road to Colo Road, and provides a second line of defence for Colo Vale. Part of the trail runs along a road reserve to the north of the reserve. Locked gates at the northern end but no control on vehicle access from the southern end. Trail is overgrown but trafficable.	<p>Clear shrubs that are encroaching on the trail.</p> <p>Install a suitable gate to control vehicle access at the southern end of the trail.</p>
GMA6	1w/alt/H	Primary	Trail runs from the end of Drapers Creek Road to Colo Road and provides a first line of defence for Colo Vale. Trail has recently been upgraded and is in good condition. There are no gates at either end of the trail.	<p>Periodic inspection and maintenance as required (MP 2).</p> <p>Install suitable gates to control vehicle access at both ends of the trail.</p>
GMA7 West Break Fire Trail	1w/dead/H	Primary	Trail is a continuation of the West Break Fire Trail that runs from Hill Top to Colo Road. Trail runs along the northern boundary of the reserve from Colo Road. Trail is in reasonable condition.	<p>Periodic inspection and maintenance as required (MP 2).</p>
GMA8 Box Vale Fire Trail	1w/dead/H	Primary	Trail runs from the eastern end of Morris Road to the site of the headwork's of the former Box Vale coal mine. Trail has been recently been repaired and is in very good condition.	<p>Periodic inspection and maintenance as required (MP 2).</p> <p>Maintain the cleared helipad at the northern end of the trail.</p>
GMA9	1w/alt/H	Primary	Trail runs from the Box Vale walking track car park to the eastern end of Morris Road. Trail is in reasonable condition. No gate to control access at the Morris Road end of the trail.	<p>Periodic inspection and maintenance as required (MP 2).</p> <p>Install a suitable gate to control vehicle access at the Morris Road end of the trail.</p>
GMA10	1w/alt/H	Secondary	Trail runs from GMA1 to GMA2 around the former Welby landfill. Trail is in reasonable condition but has a boggy area near the junction with GMA2.	<p>Periodic inspection and maintenance as required (MP 2).</p> <p>Improve surface and drainage of boggy areas.</p>

FIRE TRAIL Ref. No.	CODE	CLASSIFICATION	LOCATION AND CONDITION AT APRIL 2004	ACTION REQUIRED
GMA11	1w/dead/H	Secondary	Trail runs from GMA2 to the Hume Highway along Gibbergunyah Creek. Access onto the freeway is blocked by rocks. Trail is in reasonable condition.	Periodic inspection and maintenance as required (MP 2). Approach the RTA to see if emergency access on to the freeway can be provided at the end of this trail.
GMA12	2w/alt/H	Secondary	Sealed road to the former Welby landfill.	Periodic inspection and maintenance as required (MP 2).
GMA13	1w/alt/H	Secondary	Trail runs through part of the asset protection zone around Welby with a link to GMA1. Trail is in reasonable condition. No gate to control access from the end of Joadja Lane.	Periodic inspection and maintenance as required (MP 2). Install a suitable gate at the Joadja Lane entrance to the trail.
GMA14	1w/dead/H	Secondary	Tail runs along the top of Mount Alexandra and is in reasonable condition.	Periodic inspection and maintenance as required (MP 2).
GMA15	1w/alt/H	Secondary	Trail runs from the car park at the top of Mount Alexandra to Darch Place. Trail has recently been repaired and regraded, and provided with locked gates at either end.	Periodic inspection and maintenance as required (MP 2).
GMA16	1w/dead/H	Secondary	Trail runs from GMA3 to the Hume Highway, emergency access to highway possible by cutting fence. Trail is in excellent condition.	Periodic inspection and maintenance as required (MP 2).
GMA17	1w/dead/H	Secondary	Trail runs from GMA3 to the Hume Highway. No access to the highway. Trail is in good condition.	Periodic inspection and maintenance as required (MP 2).
GMA18 Webbs Trail	1w/dead/H	Secondary	Trail runs from GMA3 to the Hume Highway. No access to the highway. Trail is in reasonable condition.	Periodic inspection and maintenance as required (MP 2).
GMA19	1w/alt/H	Secondary	Trail runs along the western side of the Mittagong Golf Course from Cordeaux Street in Willow Vale. Access is either across the golf course or through private property from Cordeaux Street. Trail is in reasonable condition but with some rough sections.	Improve surface and drainage on rough sections. Provide a new access (with locked gate) along the road reserve at the northern end of Cordeaux Street.
GMA20	1w/dead/H	Secondary	Trail runs from Carlton Street, Willow Vale, to the Hume Highway. The beginning of the trail runs across private property which is unlikely to be developed in the near future. Emergency access on to the Hume Highway is possible from the western branch of the trail. The steeper section of the trail is badly eroded and blocked by fallen trees.	Repair eroded section of the trail (on private property) and clear fallen trees of the trail. Install suitable erosion controls on the repaired trail.
GMA21	1w/dead/H	Secondary	Trail runs from Badgery Street, Willow Vale, to the Hume Highway. No access to the Hume Highway from the trail. Tail is in reasonable condition. The beginning of the trail runs across private property which is likely to be developed in the near future.	Periodic inspection and maintenance as required (MP 2). To avoid the trail being cut off by future developments establish a link trail to Drapers Road along the unformed portion of Parkes Street.

FIRE TRAIL Ref. No.	CODE	CLASSIFICATION	LOCATION AND CONDITION AT APRIL 2004	ACTION REQUIRED
GMA22 Winters Fire Trail	1w/dead/H	Secondary	Runs from Wonsons Fire Trail to the edge of the Nattai River Gorge. Trail is in good condition.	Periodic inspection and maintenance as required (MP 2).
GMA23	1w/alt/H	Secondary	Link trail from Wonsons & Winters trails to McCallums Road across private property. Trail is in good condition.	Periodic inspection and maintenance as required (MP 2).
GMA24	1w/dead/H	Secondary	Trail runs from Wonsons Trail to the Nattai River Gorge. Trail is in reasonable condition but has one rough rocky patch.	Periodic inspection and maintenance as required (MP 2).
GMA25	1w/alt/H	Secondary	Trail runs from the West Break Fire Trail to Colo Road through private property. Trail is in good condition.	Periodic inspection and maintenance as required (MP 2).
GMA26	1w/alt/H	Secondary	Trail runs from the Box Vale Fire Trail to the reserve boundary – links to Kells Creek Road across private property. Trail is in very good condition, but blocked by a fallen tree.	Clear fallen tree off the trail.
GMA27 Forty Foot Falls Fire Trail	1w/dead/H	Secondary	Trail runs from the end of Morris Road to near Forty Foot Falls. Trail is in good condition.	Periodic inspection and maintenance as required (MP 2).
GMA28	1w/dead/H	Secondary	Trail runs from the Box Vale Trail car park to the quarry along the rear of properties along Box Vale Road. Trail is in reasonable condition.	Periodic inspection and maintenance as required (MP 2).
GMA29	1w/alt/H	Dormant	Trail runs from Morris Road to GMA9. Trail has uncontrolled access from Morris Road. Trail is overgrown but trafficable.	Re-open as required for fire management.
GMA30	variable	Dormant	Number of short trails in the area bounded by Welby, Gibbergunyah Creek and the Hume Highway. Most trails are in good condition but some are becoming overgrown.	Maintain when required for fire management.
GMA31	1w/dead/H	Dormant	Trail runs from GMA2 at the end of Sunset Point Drive to “Adams Seat”. Trail is in poor condition but trafficable.	Maintain when required for fire management.
GMA32	1w/dead/H	Dormant	Trail follows an old sealed road that was cut off by the new Hume Highway. Trail is in reasonable condition.	Maintain when required for fire management.
GMA33	1w/dead/H	Dormant	Trail runs from Winters Fire Trail to a lookout overlooking the Hume Highway. Trail is in poor condition but trafficable.	Maintain when required for fire management.
GMA34	1w/alt/H	Dormant	Loop trail constructed to help contain the Willow Vale fire in November 2002. Trail is rough but trafficable.	Maintain when required for fire management.

FIRE TRAIL Ref. No.	CODE	CLASSIFICATION	LOCATION AND CONDITION AT APRIL 2004	ACTION REQUIRED
GMA35	1w/dead/H	Dormant	Trail runs north from Wonsons Fire Trail. Trail is partly overgrown but trafficable.	Maintain when required for fire management.
GMA36	1w/dead/H	Dormant	Trail runs north from GMA26 to the site of a small wildfire. Trail is rough but trafficable.	Maintain when required for fire management.
GMA37	1w/dead/H	Dormant	Network of old trails running east from GMA7. Trail surfaces are in reasonable condition.	Maintain when required for fire management.

TABLE 5 - Response to fire of introduced species known, or considered likely to occur in Greater Mount Alexandra Reserve

WEED SPECIES	WHOLE PLANT KILLED	RE-SPROUTS FROM ROOTSTOCK ²	RE-SPROUTS FROM EPICORMIC BUDS	SEED GERMINATION LIKELY AFTER FIRE	COMMENTS
<i>Acer pseudoplatanus</i> (Sycamore)	X			X	
<i>Acer negundo</i> (Box Elder)	X			X	
<i>Ailanthus altissima</i> (Tree of Heaven)		X			Sprouts from suckers rather than main stem
<i>Arbutus unedo</i> (Strawberry Tree)	X			X	
Bamboo		X			
<i>Berberis vulgaris</i> (Barberry)		X			
<i>Buddleja davidii</i> (Butterfly Bush)		X			
<i>Chamaecytisus prolifer</i> (Tree Lucerne)		X		X	
<i>Chrysanthemoides monilifera</i> ssp. <i>monilifera</i> (Boneseed)		X		X	Resprouts if fire is not hot enough to kill plant
<i>Cotoneaster</i> spp. (Cotoneaster)		X			
<i>Cortaderia selloana</i> (Pampas Grass)		X			
<i>Crataegus monogyna</i> (Hawthorn)		X		X	
<i>Crocosmia X crocosmiflora</i> (Montbretia)		X			
<i>Cupressocyparis leylandii</i> (Leylandii)	X			X	
<i>Cytisus scoparius</i> (English Broom)		X		X	Seeds may remain viable up to 70 years
<i>Erica lusitanica</i> (Spanish Heath)	X	X		X	Resprouts if fire is not hot enough to kill plant
<i>Foeniculum vulgare</i> (Fennel)		X			
<i>Fraxinus angustifolia</i> (Desert Ash)		X		X	
<i>Genista monspessulana</i> (Canary Broom)		X		X	
<i>Hedera helix</i> (English Ivy)		X			
<i>Ilex aquifolium</i> (Holly)		X			
<i>Ligustrum</i> sp. (Privet)		X		X	
<i>Lonicera japonica</i> (Honeysuckle)		X			
<i>Leucanthemum vulgare</i> (Ox-eye Daisy)	X			X	
<i>Lycium ferocissimum</i> (Boxthorn)		X		X	

WEED SPECIES	WHOLE PLANT KILLED	RE-SPROUTS FROM ROOTSTOCK ²	RE-SPROUTS FROM EPICORMIC BUDS	SEED GERMINATION LIKELY AFTER FIRE	COMMENTS
<i>Myosotis sylvatica</i> (Forget-me-not)	X			X	
<i>Myrsiphyllum asperagoides</i> (Bridal Creeper)		X			
<i>Olea europaea</i> ssp. <i>europaea</i> (Olive)		X			
<i>Oxalis pes-caprae</i> (Soursob)		X			
<i>Passiflora</i> sp. (Passionfruit)	X			X	
<i>Pennisetum clandestinum</i> (Kikuyu)		X			
<i>Populus alba</i> (Silver poplar)		X		X	Sprouts from suckers rather than main stem
<i>Pinus radiata</i> (Monterey Pine)	X			X	
<i>Prunus</i> sp. (Prunus)		X	X		Degree of resprouting depends on fire intensity
<i>Pyracantha</i> sp (Fire Thorn)		X		X	
<i>Rosa rubiginosa</i> (Briar Rose)		X			
<i>Rubus fruticosus</i> (Blackberry) ¹		X			
<i>Salix alba</i> X <i>fragilis</i> (Crack Willow) ¹		X			
<i>Ulex europaeus</i> (Gorse) ¹		X	X	X	Seeds may remain viable for up to 40 years
<i>Vinca major</i> (Periwinkle)		X			

1 WONS = Weed of National Significance – National Weed Strategy 1999

2 Some plants may resprout after low intensity fires but will be killed by high intensity fires.

TABLE 6 - Burning regimes for Greater Mount Alexandra Reserve

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 1	5.3	SCL-MAN Scribbly Gum Heathy Woodland	15 – 25	Ecosystem management unit Partly burnt in 2003 Contains the endangered plant <i>Persoonia Glaucescens</i> Protect power line and toilet blocks Protect boundary fence during burn	Burn				
Alex 2	36.0	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Burn will require at least closure of a lane of the north-bound carriageway of the Hume Highway Potential smoke hazard on the Hume Highway Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight	Burn				
Alex 3	4.0	SCL-MAN Scribbly Gum Heathy Woodland	15 – 25	Ecosystem management unit Contains the endangered plant <i>Persoonia Glaucescens</i> Protect wooden bridges on the Box Vale Track and power line along the old Hume Highway Potential smoke hazard on the Old Hume Highway Close Box Vale walking track during burn Protect regeneration plantings near the dam	Burn				

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 4	3.6	SCL-MAN Scribbly Gum Heathy Woodland	15 - 25	Ecosystem management unit Contains the endangered plant <i>Persoonia Glaucescens</i> , do not burn until recovery of plants in Alex 3 is confirmed. Protect wooden bridges on the Box Vale walking track Close Box Vale walking track during burn		Burn			
Alex 5	11.0	SCL-MAN Scribbly Gum Heathy Woodland	15 - 25	Ecosystem management unit Do not burn in the same year as Alex 4 Contains the endangered plant <i>Persoonia Glaucescens</i>		Burn			
Alex 6	15.0	SCL-MAN Scribbly Gum Heathy Woodland	15 - 25	Ecosystem management unit Contains the endangered plant <i>Persoonia Glaucescens</i> , do not burn until recovery of plants in Alex 5 is confirmed Contains the ROTAP species <i>Eucalyptus apiculata</i> and <i>Persoonia mollis</i> Protect power lines Do not burn in the same year as Alex 7			Burn		
Alex 7	10.8	SCL-MAN Scribbly Gum Heathy Woodland	15 - 25	Ecosystem management unit Contains the endangered plant <i>Persoonia Glaucescens</i> , do not burn until recovery of plants in Alex 4 is confirmed Do not burn in the same year as Alex 6 Close Box Vale walking track during burn			Burn		
Alex 8	5.3	PIP-PUN Mixed Peppermint Forest	12 - 25	Ecosystem management unit Protect boundary fence during burn				Burn	
Alex 9	15.3	PIP-PUN Mixed Peppermint Forest	12 - 25	Ecosystem management unit					Burn

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 10	9.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Protect power line during burn Close Box Vale walking track during burn				Burn	
Alex 11	5.1	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Close Box Vale walking track during burn					Burn
Alex 12	29.8	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight		Burn			
Alex 13	38.8	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight			Burn		
Alex 14	25.3	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Protect picnic table at the start to the track to Forty Foot Falls Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight				Burn	
Alex 15	25.0	PIP-SMI Peppermint Tall Forest	20 - 60	Ecosystem management unit Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight Close Box Vale walking track during burn Avoid burning timber bridge on the Box Vale walking track					Burn
Alex 16	19.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Close Box Vale walking track during burn			Burn		

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 17	56.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Burn in late autumn or winter Burn when weather conditions will ensure the fire will go out overnight Protect boundary fence during burn				Burn	
Alex 18	16.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Protect boundary fence during burn		Burn			
Alex 19	1.0	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Potential smoke hazard on the Hume Highway	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 20	0.5	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Potential smoke hazard on the Hume Highway	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 21	3.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway		Burn			
Alex 22	3.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway			Burn		
Alex 23	6.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway				Burn	
Alex 24	5.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit					Burn
Alex 25	1.7	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 26	10.6	PIP-SMI Peppermint Tall Forest	20 - 60	Ecosystem management unit, partly burnt in 2001 Protect former landfill from fire Potential smoke hazard on the Hume Highway	Burn				
Alex 27	4.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit				Burn	
Alex 28	3.9	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit	Burn				
Alex 29	6.6	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 30	5.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit					Burn
Alex 31	8.8	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit				Burn	
Alex 32	14.2	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Contains the vulnerable plant species <i>Phyllota humifusa</i>		Burn			
Alex 33	2.3	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 34	5.7	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit			Burn		
Alex 35	4.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit				Burn	

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 36	2.0	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 37	2.9	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 38	2.4	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 39	27.2	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway	Burn				
Alex 40	48.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit			Burn		
Alex 41	51.8	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway Contains the ROTAP species <i>Lissanthe sapida</i> and the plant species of local conservation value <i>Cryptandra amara</i>	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 42	1.6	PIP-SMI Peppermint Tall Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 43	1.9	PIP-SMI Peppermint Tall Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 44	1.0	PIP-SMI Peppermint Tall Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 45	2.9	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required		Burn			
Alex 46	5.3	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 47	7.7	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit					Burn
Alex 48	9.0	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 49	15.2	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway					Burn
Alex 50	5.5	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 51	22.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 52	18.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 53	16.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit					Burn
Alex 54	2.8	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 55	5.1	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 56	12.2	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Potential smoke hazard on the Hume Highway	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 57	2.5	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit All of this unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 58	5.4	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 59	8.2	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Potential smoke hazard on the Hume Highway					Burn
Alex 60	10.1	PIP-PUN Mixed Peppermint Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 61	8.6	SCL-MAN Scribbly Gum Heathy Woodland	15 – 25	Ecosystem management unit Burnt in 2002 Endangered plant <i>Persoonia Glaucescens</i> recorded in the unit Potential smoke hazard on the Hume Highway	Burn in the next cycle of the Fire Management Plan, but not before 2017				
Alex 62	34.9	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Protect boundary fence during burn					Burn

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 63	24.6	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Protect boundary fence during burn	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 64	28.0	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Protect boundary fence during burn					Burn
Alex 65	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along southern side of trail when fire will self-extinguish overnight	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 66	NA	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Ignition along southern side of trail when fire will self-extinguish overnight	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 67	NA	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Ignition along southern side of trail when fire will self-extinguish overnight	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 68	NA	SCL-SIE Mixed Scribbly Gum Forest	12 – 25	Ecosystem management unit Ignition along northern side of trail when fire will self-extinguish overnight					Burn
Alex 69	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along southern side of trail when fire will self-extinguish overnight	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 70	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along western side of trail when fire will self-extinguish overnight	Burnt by a wildfire in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 71	24.8	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Protect boundary fence during burn			Burn		

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 72	21.0	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit					Burn
Alex 73	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along southern side of trail when fire will self-extinguish overnight	Hazard reduction burn in 2002. Burn in the next cycle of the Fire Management Plan				
Alex 74	21.9	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Protect boundary fence during burn Exclude fire from the wetland along Drapers Creek	Burn				
Alex 75	80.1	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Part of the unit is on private property, landowner permission required Protect boundary fence during burn Exclude fire from the wetland along Drapers Creek		Burn			
Alex 76	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along eastern side of trail when fire will self-extinguish overnight	Burn		Burn		Burn
Alex 77	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along western side of trail when fire will self-extinguish overnight		Burn		Burn	
Alex 78	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ridge top ignition along temporary fire trail or aerial incendiary when fire will self extinguish overnight			Burn		

UNIT	SIZE (ha)	DOMINANT PLANT COMMUNITY	OPTIMAL FIRE FREQUENCY (years)	NOTES & PRECAUTIONS	BURNING SCHEDULE				
					FIRST 3-YEAR PERIOD 2004 TO 2006	SECOND 3-YEAR PERIOD 2007 TO 2009	THIRD 3-YEAR PERIOD 2010 TO 2012	FOURTH 3-YEAR PERIOD 2013 TO 2015	FIFTH 3-YEAR PERIOD 2016 TO 2018
Alex 79	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along eastern side of trail when fire will self-extinguish overnight	Burn				
Alex 80	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ridge top ignition by foot or aerial incendiary when fire will self extinguish overnight			Burn		
Alex 81	14.6	PIP-SMI Peppermint Tall Forest		Strategic hazard management unit Part of the unit is on private property, landowner permission required	Maintain average fine fuel loads below 10 tonnes per hectare. If hazard reduction is by burning, do not burn in same year as the adjoining units				
Alex 82	NA	PIP-PUN Mixed Peppermint Forest	12 – 25	Ecosystem management unit Ignition along northern side of trail when fire will self-extinguish overnight					Burn

NOTES:

- 1 The optimal season for low intensity burning is autumn or winter. However, early spring burning within control lines is not necessarily unsuitable and can be implemented if the opportunity for autumn burns has been missed, or vegetation is too damp to burn at this time of year.
- 2 It will generally not be possible to achieve a uniform fire intensity and flame height during a burn due to variations in topography and fuel loads, however flame height should be kept below 1.5 m wherever possible to minimise canopy scorch.

MANAGEMENT ACTION SUMMARY

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
1. Minimise the risk of wildfires starting in the reserve.	<p>a) On total fire ban days, erect fire ban warning signs and regularly patrol the area to ensure that no fires are lit.</p> <p>b) Remove wood-fired barbecues from picnic areas along the Box Vale walking track. Replace with gas or electric barbecues if necessary.</p> <p>c) Implement a community education program to request residents near the reserve to report any smoke or suspicious persons on days of total fire bans.</p>	<p>a) E</p> <p>b) E</p> <p>c) REC</p>	<ul style="list-style-type: none"> No wildfires started by accident in the reserve Wood-fired barbecues removed.
2. Minimise the risk of fire to users of the reserve and the general public.	<p>a) Erect appropriate signs on tracks and roads to warn reserve users of management burns.</p> <p>b) Ensure that smoke from burns does not cause accidents on the Hume Highway, or other roads, by preparing and implementing a traffic management plan for burns close to the highway.</p> <p>c) Implement the recovery procedures in MP 13 following fires.</p>	<p>a) E</p> <p>b) E</p> <p>c) REC</p>	<ul style="list-style-type: none"> Post-fire recovery carried out after wildfires. No users of the reserve injured by bushfires or the effects of bushfires.
3. Minimise the risk of wildfire damaging built and cultural heritage assets in and surrounding the reserve.	<p>a) Implement the fire protection measures listed in Table 3, including the establishment and maintenance of adequate Asset Protection Zones around dwellings and assets.</p> <p>b) Ensure properties surrounding the reserve are inspected at the beginning of the bushfire danger period and Section 66 notices are issued as required (RFS responsibility).</p> <p>c) Ensure that authorities planning wildfire control operations in the reserve are aware of built and cultural heritage assets and ensure they are not damaged by machinery movement or other activities.</p> <p>d) Following fires implement the recovery procedures in MP 13.</p>	<p>a) E</p> <p>b) REC</p> <p>c) REC</p> <p>d) REC</p>	<ul style="list-style-type: none"> Fire protection measures in the reserve implemented and maintained. Asset Protection Zones maintained on properties adjoining the reserve No assets lost to fires originating in, or moving through, the reserve. No cultural heritage assets damaged during fire management or control operations in the reserve. Post-fire recovery carried out after wildfires.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
4. Minimise the impact of fire and fire management activities on water quality.	a) Minimise the risk of wildfires starting and spreading. b) Maintain a minimum 20 m unburnt buffer along flowing watercourses and a 5 m wide unburnt buffer along dry watercourses during management burning wherever possible. c) Implement the recovery procedures in MP 13 following fires. d) Do not spray fire fighting foams or retardants onto water courses during prescribed burning or wildfire suppression operations.	a) E b) REC c) REC d) REC	<ul style="list-style-type: none"> • Minimal impact on water quality from wildfires, management burning and fire management activities. • Unburnt buffers maintained along creeklines. • Post-fire recovery carried out after wildfires.
5. Implement planning controls on new developments within and adjoining the reserve to ensure they incorporate adequate bushfire protection measures.	a) All new buildings in the reserve must be constructed in accordance with the relevant construction level in Australian Standard 3959 - 1999 <i>Construction of Buildings in Bushfire Prone Areas</i> . b) All new buildings in the reserve should be surrounded with an Asset Protection Zone as detailed in MP 5. c) All new developments within 100 m of the reserve boundary should meet the requirements of the RFS document <i>Planning for Bushfire Protection</i> .	a) E b) E c) REC	All new developments in and within 100 m of the reserve incorporate fire protection measures to Rural Fire Service standards.
6. Maintain existing emergency vehicle access points and fire trails shown on Figure 5 in a trafficable condition.	a) Carry out fire trail repairs and maintenance listed in Table 4. b) Ensure all fire trails shown on Figure 5 are inspected and maintained in a trafficable condition at all times according to MP 2. c) Maintain the helipad at the northern end of the Box Vale Fire Trail.	a) E – 1A b) ROU – A c) REC	<ul style="list-style-type: none"> • Access routes inspected as required in MP 2, and maintained in a trafficable condition for fire service vehicles. • Helipad at the northern end of the Box Vale Fire Trail maintained.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
7. Provide additional fire trails to ensure adequate vehicle access for fire control and to eliminate dead ends.	<p>a) Provide new fire trail links (as shown on Figure 5) between:</p> <ul style="list-style-type: none"> • Joadja Lane and Bowral Street, Welby, and the fire trail system. • Fire trail GMA2 from Iron Mines Oval through the former Mittagong sewage treatment works. • Drapers Road, Welby, and the existing fire trail off Badgery Street, along the unformed portion of Parkes Road. • The junction of Cordeaux and Gascoigne Streets, Willow Vale, and Fire Trail GMA19 to the west of the Mittagong Golf Course. <p>b) Investigate the feasibility of linking the northern end of Wonsons Fire Trail (GMA4) with the road to The Craggs.</p>	<p>a) E – 2</p> <p>b) REC</p>	Additional fire trails constructed within the time specified.
8. Minimise damage to the fire trail system by preventing unauthorised vehicle access.	<p>a) Implement a security lock system (keys that can't be copied without permission) to control access to fire trails in the reserve. Issue copies of the key to the NSW Fire Brigades, the Rural Fire Service and other emergency services. Each brigade to be provided with a key for each vehicle likely to be used to respond to a fire in the reserve.</p> <p>b) Install additional gates as recommended in Table 4 and shown in Figure 5.</p> <p>c) Inspect gates regularly to ensure that locks are in place and functioning.</p>	<p>a) REC - 3</p> <p>b) REC - 2</p> <p>c) ROU - A</p>	<ul style="list-style-type: none"> • No unauthorised use of fire trails in the reserve. • Security lock system implemented, keys distributed to fire brigades and other emergency services. • Minimal damage to fire trails in the reserve.
9. Signpost all fire trails at their access points, and at trail intersections.	<p>a) Erect appropriate signage at all vehicle access points, and at fire trail intersections, to guide emergency service vehicles. Signs should include commonly used names and /or codes. Dead end trails should be marked as such on the signs.</p> <p>b) Consult with the Rural Fire Service, and the Wingecarribee Bushfire Risk Management Committee, on the most appropriate form and location for the signs.</p>	<p>a) REC – 5</p> <p>b) REC - 5</p>	Signs erected at all fire trail entry points and intersections.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
10. Close and rehabilitate all vehicle trails not designated as fire trails in Figure 5, and not required for other management purposes.	Rehabilitate any vehicle trails not designated as fire trails in Figure 5, and not required for other purposes, using the procedure in MP 3.	REC	Trails not required for management purposes stabilised and revegetated.
11. Construct any future foot tracks so as to maximise their use for fire management.	Locate any new foot tracks along the boundaries of fire management units wherever possible, and construct to MP 4.	REC	New foot tracks routed along fire management unit boundaries, and constructed and maintained according to MP 4.
12. Ensure an adequate and accessible water supply for fire fighting.	<p>a) Ensure fire hydrants within and surrounding the reserve are clearly marked, and maintained to Australian Standard AS 2419.1 – 1996 wherever possible.</p> <p>b) Encourage residents in areas with poor mains pressure' or no mains supply to install stored water supplies for fire fighting that are accessible by fire brigade vehicles.</p> <p>c) All stored water supplies should be registered with the Stored Water Supply Program, and identified with special markers available from the NSW Fire Brigades.</p>	<p>a) E - A</p> <p>b) REC</p> <p>c) REC</p>	<ul style="list-style-type: none"> • Fire plugs in and surrounding the reserve are clearly marked and meet current standards of flow rate and pressure. • Feasibility of improving flow rate and pressure in the mains on the eastern side of the reserve investigated. • Stored water supplies installed where there is no mains supply or the mains supply does not meet the requirements of AS 2419 – 1996, registered with the SWS program, and marked.
13. Apply the appropriate fire regime to populations of flora and fauna of conservation value in the reserve that require periodic fire for their long-term survival.	<p>a) Consult with the NPWS Threatened Species Unit when planning prescribed burns in units containing populations or communities listed in the Threatened Species Conservation Act, 1995.</p> <p>b) Avoid burning the whole of any population of a threatened or rare plant species in a single management burn.</p> <p>c) Monitor the recovery of any populations of threatened or rare flora and fauna burnt by wildfires or prescribed burns.</p>	<p>a) E</p> <p>b) E</p> <p>c) E</p>	<ul style="list-style-type: none"> • All burns in units designated for Ecosystem Management carried out according to the requirements of flora and fauna of conservation value. • No decline in the populations of threatened or rare flora and fauna due to fire.
14. Exclude fire from the simple rainforest (riparian) plant communities in the Mount Alexandra Reserve.	Avoid burning simple rainforest (riparian) plant communities wherever possible.	REC	Simple rainforest (riparian) plant communities remain unburnt for the duration of this plan.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
15. Implement a mosaic burning program in selected forest plant communities to maintain and enhance existing habitat diversity, and reduce overall fuel loads in bushland areas.	a) Carry out prescribed burning according to the schedule in Table 6 using the procedure in MP 8. b) Regularly revise burning prescriptions to ensure they incorporate the most recent information on the fire ecology of flora, fauna and plant communities of conservation value in the reserve.	a) E - A/S b) REC - A/S	<ul style="list-style-type: none"> • Mosaic of burnt fire management units maintained. • No decline in the populations or distribution of threatened species. • No decline in the area or distribution of plant communities of conservation value.
16. Control of unwanted plant species through coordinating fire management and weed control activities.	a) Treat any weeds in areas to be burnt under this fire management plan according to MP 9. b) Coordinate fire management and weed management activities using the procedure in MP 10. c) Integrate the prescribed burning program and its associated weed control activities into any weed management program for the reserve. d) Ensure that all vehicles involved in fire management activities in the reserve (excluding emergencies) are washed to remove any mud, soil or plant material prior to entering the reserve, particularly vehicle underbodies, in order to control the spread of weeds and plant diseases. This is the responsibility of the owner of the vehicle.	a) REC – A/S b) REC – A c) REC d) REC	<ul style="list-style-type: none"> • Pre and post fire weed control carried out in any weed infested fire management units burnt under this plan. Minimal coppicing or regrowth of weeds from treated rootstock. • All declared noxious weeds removed, reduction in extent of other weeds. • Any weed management plan integrated with this fire management plan.
17. Coordination of fire management activities in the reserve amongst the various stakeholders.	a) Implement the procedures for coordinating fire management activities in MP 10. b) Preparation of pre-fire season map updates and distribution to the NSW Fire Brigades and Rural Fire Service. c) Approach all landowners who have works or activities recommended on their land in this fire management plan and obtain their cooperation in implementing the relevant activities on their land. d) Units scheduled for burning should be inspected by representatives of Council, the reserve committee, and the person who will be in charge of the burn approximately 3 months prior to the burn to determine if the scheduling is suitable and if any works need to be carried out prior to the burn.	a) E b) REC – A c) E – 1 d) REC	<ul style="list-style-type: none"> • Meetings held and minuted as outlined in MP 10. • Landowner cooperation for works on adjoining properties obtained. • Units scheduled for burning inspected by those involved in the burn prior to the burn.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
18. Ensure all personnel carrying out fire management activities in the reserve are suitably trained, equipped and supervised.	a) Ensure all personnel engaged in prescribed burning activities in the reserve have the appropriate level of training and equipment as outlined in Section 6.4, and the minimum equipment listed in MP 8. b) Ensure all personnel engaged in fire management activities in the reserve, including fire trail maintenance, are provided with appropriate instruction in the recognition and protection of items of natural and cultural heritage value, or are supervised by a person with this knowledge.	a) E b) REC	<ul style="list-style-type: none"> All personnel are able to demonstrate the required level of training and minimum levels of equipment. All personnel instructed in the recognition and protection of items of natural and cultural heritage value, or properly supervised.
19. Develop, assist development of, or utilise existing education programs and materials aimed at: <ul style="list-style-type: none"> reducing arson informing residents adjacent to the reserve of fire safety issues, and measures to improve protection of themselves and their property informing residents of adjoining properties about the potential impact of their fuel management activities on environmental and other values interpreting fire management activities for the public, particularly the role of fire in maintaining biodiversity. 	Prepare an information sheet as outlined in Section 6.1 and Appendix F of this plan, and distribute to adjoining residents, reserve users and other interest groups.	REC - 1	<ul style="list-style-type: none"> Information sheets distributed and problem solving sessions offered as required when complaints or unfavourable comments are received. Educational material distributed to adjoining residents. Reduction in the incidence of illegal fires on and around the reserve.
20. Encourage the setting up of Community Fire Units in moderate and high risk urban areas adjoining the reserve.	Consider setting up Community Fire Units at Darch Place, Mittagong; Badgery and Carlton Streets, Willow Vale; and Short and Joadja Streets, Welby (NSW Fire Brigades).	REC	Community fire units set up in urban areas with moderate and high bushfire risk.
21. Maintain up-to-date information on location of dwellings, fire trails and their condition, water supply points, Asset Protection Zones, and areas burnt in prescribed fires and wildfires.	a) Record fire management activities and wildfires using the procedures in MPs 11 and 12. b) Enter details of each management burn and wildfire in the Bushfire Risk Information Management System (BRIMS).	a) REC - A/S b) REC - A/S	Records maintained of all fire management activities.

FIRE MANAGEMENT OBJECTIVE	RECOMMENDED ACTION	PRIORITY	PERFORMANCE INDICATORS
22. Monitor the impact of fire management activities in the reserve. Adjust practices to achieve relevant objectives, and periodically review the fire management plan.	a) Monitor the impacts of fires as outlined in Section 6.5. b) Review this fire management plan at regular intervals using the procedures in Section 6.5.4. and Table 7. c) Regularly revise burning prescriptions to ensure they incorporate the most recent information on the fire ecology of flora, fauna and plant communities of conservation value in the reserve. d) Carry out further research on the impacts of fire on the reserve.	a) REC - A/S b) ROU - 5 c) REC - A/S d) REC	<ul style="list-style-type: none"> • Monitoring and review carried out as scheduled in the plan. • New information on the fire management requirements of threatened flora and fauna incorporated into the fire management plan.