Annex A

Muswellbrook Bush Fire Management Committee

Bush Fire Risk Management Plan





Prepared by the Muswellbrook Bush Fire Management Committee Pursuant to section 52 of the *Rural Fires Act 1997*

Authorisation

In accordance with Part 3 Division 4 of the Rural Fires Act 1997, this Draft Plan has been prepared by the Muswellbrook Bush Fire Management Committee and has been endorsed at the BFMC meeting on 17th February 2010 for submission to the Bush Fire Coordinating Committee.

Recommended

J. mag

Chairperson Cr Janelle Risby Muswellbrook Bush Fire Management Committee

Approved

On behalf of the NSW Bush Fire Co-ordinating Committee

- 7 MAR 2011

Amendment List

Amen	dment	Entered				
Number	Date	Signature	Date			

Table of Contents

Glossary	7
1.1 Background	9
1.2 Aim and Objectives	9
 1.3 Description of the Muswellbrook BFMC area 1.3.1 Location and land tenure 1.3.2 Climate and bush fire season 1.3.3 Population and demographic information 1.3.4 History of bush fire frequency and ignition cause 	10 10 10 11 11
Chapter 2. Identifying and assessing the bush fire risk	13
2.1 Process	13
2.2 Communication and consultation	13
 2.3 Identifying the bush fire risk 2.3.1 Assets 2.3.2 Assessing the bush fire risk - consequence 2.3.3 Assessing the bush fire risk - likelihood 2.3.4 Identifying the level of risk 2.3.5 Evaluating the bush fire risk 2.3.6 Prioritising treatments 2.3.7 Risk acceptability 	14 14 15 17 17 17 17
Chapter 3. Treating the risk	18
3.1 Bush Fire Management Zones	18
3.2 BFMC wide treatments	20
3.3 Asset specific treatments	22
3.4 Fire thresholds	23
3.5 Annual works programs	24
3.6 Implementation	24
Chapter 4. Performance monitoring and reviewing	25
4.1 Review	25
4.2 Monitoring	25
4.3 Reporting	25
4.4 Performance Measurements	25
Appendix 1: Community Participation Strategy	26
Appendix 2: Asset Register	32
Appendix 3: Treatment Register	36
Appendix 4: Maps	41

List of Tables

Table 1.1 Land tenure	10
Table 3.1 Bush Fire Management Zones: Purpose, objectives and characteristics	19
Table 3.2 Asset specific treatments used in the Muswellbrook BFMC area	22
Table 3.3 Fire Thresholds for Vegetation Categories	23
List of Figures	
Figure 2.1 Overview of the risk assessment process	

Glossary

Assets: anything valued by the community which includes houses, crops, livestock, heritage buildings and places, infrastructure, the environment, businesses, and forests, that may be at risk from bush fire.

Bush Fire: a general term used to describe fire in vegetation, includes grass fire.

Bush Fire Hazard: the potential severity of a bush fire, which is determined by fuel load, fuel arrangement and topography under a given climatic condition.

Bush Fire Risk: the chance of a bush fire igniting, spreading and causing damage to the community or the assets they value.

Bush Fire Risk Management: a systematic process that provides a range of treatments which contribute to the well being of communities and the environment, which suffer the adverse effects of wildfire/bush fire.

Bush Fire Threat: potential bush fire exposure of an asset due to the proximity and type of a hazard and the slope on which the hazard is situated.

Consequence: outcome or impact of a bush fire event.

Fire Fighting Authorities: the NSW Rural Fire Service, NSW Fire Brigades, the National Parks and Wildlife Service and Forests NSW.

Likelihood: the chance of a bush fire igniting and spreading.

Major Bush Fire: A bush fire which requires the attendance of multiple brigades, or causes damage to property or injury to one or more persons.

Display area: geographic area determined by the Bush Fire Management Committee which is used to provide a suitable area and scale for community participation and mapping display purposes.

Recovery costs: the capacity of an asset to recover from the impacts of a bush fire.

Risk Acceptance: an informed decision to accept the consequences and the likelihood of a particular risk.

Risk Analysis: a systematic process to understand the nature of and to deduce the level of risk.

Risk Assessment: the overall process of risk identification, risk analysis and risk evaluation.

Risk Identification: the process of determining what, where, when, why, and how something could happen.

Risk Treatment: the process of selection and implementation of measures to modify risk.

Vulnerability: the susceptibility of an asset to the impacts of bush fire.

Abbreviations

- **APZ:** Asset Protection Zone
- **BFCC:** Bush Fire Coordinating Committee
- **BFMC:** Bush Fire Management Committee
- BFRMP: Bush Fire Risk Management Plan
- BRIMS: Bush Fire Risk Information Management System
- **ESD:** Ecologically Sustainable Development
- LEP: Local Environment Plan
- LGA: Local Government Area
- LMZ: Land Management Zone
- NPWS: National Parks and Wildlife Service
- **RFS:** Rural Fire Service
- SFAZ: Strategic Fire Advantage Zone
- **SFP:** Special Fire Protection

Chapter 1.Introduction

1.1 Background

Under the *Rural Fires Act 1997* the Bush Fire Coordinating Committee (BFCC) must constitute a Bush Fire Management Committee (BFMC) for each area in the State, which is subject to the risk of bush fires. Each BFMC is required to prepare and submit to the BFCC a draft Bush Fire Risk Management Plan (BFRMP).

A BFRMP is a strategic document that identifies community assets at risk and sets out a five-year program of coordinated multi-agency treatments to reduce the risk of bush fire to the assets. Treatments may include such things as hazard reduction burning, grazing, community education, fire trail maintenance and establishing community fireguard groups.

Annual programs to implement the treatments identified in this plan will be undertaken by the relevant land managers and fire fighting authorities.

In exercising its functions under the *Rural Fires Act 1997*, including the preparation of a draft BFRMP, the BFMC is required to have regard to the principles of ecologically sustainable development (ESD).

This document and the accompanying maps together, form the BFRMP for the Muswellbrook BFMC area.

This BFRMP has been prepared by the Muswellbrook BFMC and covers both public and private lands. This BFRMP must be reviewed and updated within each successive five-year period from the constitution of the BFMC.

The BFCC recognises that climate change has the potential to increase bush fire risk. The risk assessment process applied in this BFRMP is based on current climatic conditions. The BFCC will monitor information on climate change and will modify the process when necessary.

1.2 Aim and Objectives

The **aim** of this BFRMP is to minimise the risk of adverse impact of bush fires on life, property and the environment.

The **objectives** of this BFRMP are to:

- reduce the number of human-induced bush fire ignitions that cause damage to life, property and the environment;
- manage fuel to reduce the rate of spread and intensity of bush fires, while minimising environmental/ecological impacts;
- reduce the community's vulnerability to bush fires by improving its preparedness; and
- effectively contain fires with a potential to cause damage to life, property and the environment.

1.3 Description of the Muswellbrook BFMC area

1.3.1 Location and land tenure

The Muswellbrook BFMC area is located in the centre of the Hunter Valley in New South Wales and includes the Local Government Area of Muswellbrook.

The area covered by the Muswellbrook BFMC is 3,402 km² and includes the land tenures outlined in Table 1.1.

Land Manager*	% of BFMC area
National Parks & Wildlife Service	43
Forests NSW	0
Department of Lands	6.4
Local Government	0.17
Private	46.9
Commonwealth	0.43
Coal Mining (Private Tenure)	3.1

Table 1.1 Land tenure

1.3.2 Climate and bush fire season

The climate of Muswellbrook and the Upper Hunter is warm temperate, characterised by hot summer days often relieved by evening 'southerly busters' and cool, dry winters. Summer temperatures often reach over 40°c for several days in January and February. Winter temperatures can result in frequent frosts in the coldest months.

Muswellbrook LGA is in a summer dominated rainfall pattern however heavy isolated falls have been known during winter. The average rainfall is around 700mm.

While there is currently no official weather station in Muswellbrook LGA, the stations at Jerrys Plains and Scone are typically representative. However, temperatures are often a few degrees higher than at these stations.

Seasonal variation in conditions produces hot summers and cool to mild winters with occasional severe frosts, and the bush fire season generally runs from September to March. The average maximum temperature for January is 30.6 degrees and for July 17.2 degrees. The average minimum temperature for January is 17.9 degrees and for July 5.1 degrees.

Prevailing weather conditions associated with the bush fire season in the Muswellbrook BFMC area is north-west to westerly winds accompanied by high daytime temperatures and low relative humidity. There are also many dry lightning storms that occur during the bush fire season.

1.3.3 Population and demographic information

The population of the Muswellbrook Local Government Area (LGA) in 2006 was 15,236 people. The major population centres are Muswellbrook 10,500 and Denman 1,500 people. Other centres of population include the rural residential areas of Woodland Ridge and McCullys Gap. Other centres of population are the rural villages of Sandy Hollow, Wybong, Baerami, Martindale, Widden Valley and Muscle Creek.

The following issues have been identified within the *Muswellbrook* BFMC area as potentially impacting on the ability of certain sections of the community to prepare themselves for bush fire:

- There are an increased number of people wanting a rural lifestyle and not being aware of the impact bush fires have on a community.
- There are an increasing number of visitors to the Hunter Valley wine tasting areas.
- A number of absentee landholders in the western end of Muswellbrook LGA.
- Increased amount of lands under the control of coal mines and other related support industries.

1.3.4 History of bush fire frequency and ignition cause

The Muswellbrook BFMC area has on average 113 fire calls per year, of which about 10 on average can be considered to be major fires.

The main sources of ignition in the Muswellbrook BFMC area are: lightning strikes from summer storms, fire escape from private properties and accidental ignitions in the rural areas and along the transport corridors.

The Muswellbrook area has experienced bush fires on a variety of occasions which have been documented since 1939. Major fire activity occurred in September 1939, October 1968 and 1974, November 1980 and 1983, January 1994, December 1997 and 2001, January 2002 and October 2002, November 2006 and February, November and December 2009. These wildfires burnt large areas of public and private lands.

Fires generally travel in an easterly direction under the influence of west to north-westerly winds. Southerly and/or easterly winds also have the potential to intensify wildfire burning during the passage of cooler changes during the spring and summer.

To view recorded history of fire activity, refer to Maps 3 and 4 (Appendix 4).

Preventing the ignition of bush fires by human activities, particularly on days when severe bush fire weather conditions prevail, is an important strategy for managing bush fires. To put effective ignition management programs in place, it is important to understand the patterns and major sources of ignition in the area.

The major ignition causes in the Muswelllbrook area are:

- <u>Lightning</u> lightning activity in the district is spread right across the area, which is normally (but not always) accompanied by rainfall. Most thunderstorm activity generally occurs in late spring and summer.
- <u>Electrical power lines</u> arcing of electrical power lines in high winds, particularly those in the valley floor, can result in the ignition of fire. However the placement of spacers on low voltage power lines and the introduction of low voltage insulated aerial bundled conductors has minimised these in recent years.
- <u>Escapes from legal burning</u> mainly in rural areas of the BFMC, occurring in similar areas to illegal burning activity. This activity is also largely in mid to late spring, but can happen throughout the year.
- <u>Illegal burning activities</u> mainly concentrated, but not limited to, rural areas and occur generally from mid to late spring.
- <u>Car dumping</u> dumping of cars and setting them alight is one of the minor ignition sources in Muswellbrook LGA particularly in urban bushland areas close to the major population areas.
- <u>Arson</u> A small amount of arson has been recorded over the years.

Chapter 2. Identifying and assessing the bush fire risk

2.1 Process

The Australia/New Zealand Standard *AS/NZS 4360: 2004 Risk Management* was used as the basis for the risk assessment process. See Figure 2.1 for the steps involved. For a detailed description of the process undertaken see the Bush Fire Risk Management Planning Guidelines for Bush Fire Management Committees on the RFS website: <u>www.rfs.nsw.gov.au</u>.



Figure 2.1 Overview of the risk assessment process

2.2 Communication and consultation

Community participation is an integral part of risk management. The Community Participation Strategy involved developing and implementing a process to address the needs, issues and concerns of stakeholders within the BFMC area in regards to the BFRMP. See Appendix 1 for the Community Participation Strategy used by the Muswellbrook BFMC in preparing this BFRMP.

2.3 Identifying the bush fire risk

Identifying the level of bush fire risk involves firstly identifying the assets considered important by the community in the Muswellbrook BFMC area, and then identifying the threat to the assets. This involves consideration of fuel (vegetation type and arrangement), slope, separation (the distance between the asset and the fuel), the vulnerability or resilience of the asset, and the likelihood and consequences of a bush fire impacting on these assets.

2.3.1 Assets

BFMC members and the community, including RFS volunteers, identified assets within the Muswellbrook BFMC that they believed were at risk of bush fire.

See Appendix 2 for the full list of assets identified in the Muswellbrook BFMC area. See Maps 1 & 2 (Appendix 4) for the location of assets to be treated under this BFRMP.

The assets were divided into four asset types:

Human settlement

- Residential areas including urban bushland interface areas and rural properties;
- Special Fire Protection areas including schools, hospitals, nursing homes, and tourist facilities; and
- Other human settlement areas including commercial and industrial areas where distinct from major towns.

The Muswellbrook local government area (LGA) is located in the centre of the Hunter Valley region of New South Wales. The terrain ranges from dense rainforest with steep mountains and deep valley floors in the north through an extended valley floor where the majority of the settlement is located, to elevated sandstone ridges where the vegetation is mainly dry sclerophyll forest in the south.

High risk settlement is situated mainly in the southern areas of the Iga and includes the settlements of Baerami, Martindale, Sandy Hollow, Yarrawa and the Widden Valley areas. Also, the settlements of McCullys Gap and Muscle Creek near Muswellbrook have been considered to be at a high bush fire risk. These areas are expected to grow through the life of the Plan with an increased move to rural residential and weekender type of landholders.

Economic

• Agricultural; dairy and mushroom farms, vineyards and wine making facilities and extensive cropping/grazing land;

- Commercial/industrial; major industrial areas to the west and south of Muswellbrook.
- Infrastructure; large power stations and extensive power transmission lines, gas pipelines, railway lines, electricity substations, communication facilities;
- Tourist and recreational e.g. tourist sites and facilities, resorts, retreats;
- A large number of Coal Mines.
- Commercial forests e.g. eucalypt plantations and commercial native forests; and
- Drinking water catchment in the north of Singleton local government area.

Environmental

- Threatened species, populations and endangered ecological communities
- Locally important species and ecological communities, such as species and communities especially sensitive to fire.

The heavily timbered rainforest in the north and the weathered sandstone ridge country throughout the south supports a diverse range of flora and fauna. A large part of the BFMC area is reserved for national parks and water catchments with significant natural areas remaining on private land. Listed threatened species and communities are located in various areas throughout the Muswellbrook LGA. There are locally and regionally endangered individuals and populations found in the Muswellbrook area.

<u>Cultural</u>

- Aboriginal significance Aboriginal places and items of significance;
- Non-indigenous heritage places and items arising from the early occupation of NSW by European or other non-indigenous settlers; and
- Other cultural assets community halls, heritage list houses, clubs and recreational facilities.

See Appendix 2 for the full list of assets identified in the Muswellbrook BFMC area. See maps 1 & 2 for the location of assets to be treated under this BFRMP.

2.3.2 Assessing the bush fire risk - consequence

Once the assets were identified, the consequence of a bush fire impacting on these assets was assessed.

See Appendix 2 for the consequence ratings assigned to each asset identified in the Muswellbrook BFMC area.

The different asset types had different assessment processes used to determine the consequence. These processes are identified below.

Human settlement

A potential fire behaviour model using vegetation type, slope and separation distance was used to produce a threat rating for human settlement assets. The vulnerability of the asset to a bush fire was also assessed and a rating assigned. These ratings were then used to assess the consequence of a bush fire impacting upon these assets.

Special Fire Protection (SFP) assets were considered inherently more vulnerable to bush fire due to mobility capacity, knowledge or other issues relating to their inhabitants, (e.g. the elderly, infirm, children or tourists) and therefore stricter requirements for vulnerability assessment and rating were applied.

<u>Economic</u>

The level of economic impact e.g. local, regional or state, as well as the economic recovery costs (how long and complicated a financial recovery will be) of the asset were identified. These ratings were used to assess the consequence of a bush fire impacting upon these assets.

Environmental

Environmental assets with known minimum fire threshold were assessed to determine if they were at risk of a bush fire within the 5 year life of the BFRMP using fire history data. Those environmental assets which were within or above the fire threshold were not assessed in the BFRMP, as the negative impact of a fire within the 5 year period was determined as being low and may even be of benefit to the asset and surrounding habitat.

The vulnerability of an environmental asset was determined by its conservation status and its geographic extent (distribution across the landscape). Vulnerability and potential impact of bush fire were used to assess the consequence of a bush fire impacting upon an environmental asset.

<u>Cultural</u>

For non-indigenous historical, Aboriginal and other cultural assets a potential fire behaviour model using fuel load, slope and proximity was used to produce a threat rating. The physical vulnerability of the asset to a bush fire was also assessed. These ratings were then used to assess the consequence of a bush fire impacting upon a cultural asset.

2.3.3 Assessing the bush fire risk - likelihood

For all asset types the likelihood of a bush fire occurring was assessed. This involves considering fire history, including ignition cause and patterns, known fire paths, access, containment potential and potential fire run i.e. size of the vegetated area. See Appendix 2 for the likelihood ratings assigned to each asset identified in the Muswellbrook BFMC area.

2.3.4 Identifying the level of risk

The consequence and likelihood ratings were then used to identify the level of risk. See Appendix 2 for the risk ratings assigned to each asset identified in the Muswellbrook BFMC area.

2.3.5 Evaluating the bush fire risk

Once the risk ratings for each asset were identified, they were evaluated to:

- a) confirm that risk levels identified in the risk analysis process are appropriate and reflect the relative seriousness of the bush fire risk;
- b) identify which assets require treatments; and
- c) Identify treatment priorities.

2.3.6 Prioritising treatments

No organisation has limitless resources to deal with adverse risk. It is therefore necessary to define priorities. The bush fire risk ratings determined were used to prioritise the risk treatments, i.e. areas of extreme risk were considered first for treatment, then very high, then high then medium then low.

2.3.7 Risk acceptability

Risks below a certain level are assessed as not requiring treatment within the life of this Plan. This is due to a combination of resource availability, capacity to undertake works and risk priority. Within the Muswellbrook BFMC area, the level of risk acceptability is medium. Areas of low or medium risk are likely to be managed by routine procedures and so do not require a specific application of resources within the BRFMP. However, some low or moderate risk rating assets have been assigned treatments in the BFRMP. These assets have been assessed as low or moderate due to the occurrence of routine treatments such as mechanical hazard reduction. The continuation of the routine treatments will ensure that the risk remains at an acceptable level.

Chapter 3. Treating the risk

3.1 Bush Fire Management Zones

Bush Fire Management Zones were identified within the Muswellbrook BFMC area and mapped (see maps 1-2). These zones identify the fire management intent for a specific area. See Table 3.1 for descriptions of the zones and their purposes. The four categories of Bush Fire Management Zones are:

- Asset Protection Zone (APZ);
- Strategic Fire Advantage Zone (SFAZ);
- Land Management Zone (LMZ); and
- Fire Exclusion Zone (FEZ).

Some of these zones (usually Land Management Zones) may be further classified within this category by the land manager, e.g. LMZ - Heritage Management Zone (NPWS).

Zone	Purpose	Suppression Objective(s)	Zone characteristics
Asset Protection Zone	To protect human life, property and highly valued public assets and values.	To enable the safe use of Direct Attack suppression strategies within the zone. To minimise bush fire impacts on undefended assets.	As per RFS document Standards for Asset Protection Zones.
Strategic Fire Advantage Zone	To provide strategic areas of fire protection advantage which will reduce the speed and intensity of bush fires, and reduce the potential for spot fire development; To aid containment of wildfires to existing management boundaries.	To improve the likelihood and safe use of: Parallel Attack suppression strategies within the zone. and/or Indirect Attack (back burning) in high to very high fire weather conditions within the zone. To reduce the likelihood of: Crown fire development within the zone. and/or Spot fire ignition potential from the zone	 Zone width related to suppression objectives and dependant upon: Topography Aspect Spotting propensity Location of adjacent firebreaks Mosaic pattern of treatment Assess Overall Fuel Hazard (OFH) once vegetation communities reach minimum fire thresholds within this plan. Management practices should aim to achieve mosaic fuel reduction patterns so that the majority of the SFAZ has an OFH of less than high.
Land Management Zone	To meet relevant land management objectives in areas where APZs or SFAZs are not appropriate.	As per the land management and fire protection objectives of the responsible land management agency. To reduce the likelihood of spread of fires. To undertake mosaic burning	As appropriate to achieve land management e.g. heritage and/or fire protection e.g. broad scale mosaic burning objectives.
Fire Exclusion Zone	To exclude bush fires.	N/A	Variable dependant on size of fire sensitive area requiring protection.

Table 3.1 Bush Fire Management Zones: Purpose, objectives and
characteristics

NB: OFH refers the Overall Fuel Hazard Guide as described in the document published by (Dept. of Sustainability and Environment 3rd ed. 1999 & NPWS version); State-wide procedures for assessment of fuel hazard will be developed in conjunction with the BFCC.

Note: All areas that are not mapped or described as APZs or SFAZs are considered as LMZs.

*For the purpose of the Bush Fire Environmental Assessment Code:

- 1. Plantations that are approved under the *Plantations & Reafforestation Act 1999* after closure of the public exhibition period for this BFRMP are considered to be identified in this BFRMP; and
- 2. Retained vegetation within the aforementioned plantations is considered to be a Strategic Fire Advantage Zone identified in the text of this BFRMP as long as it meets the suppression objectives for SFAZs included in the BFRMP, and is not mapped or otherwise described as a Fire Exclusion Zone in the BFRMP.

3.2 BFMC wide treatments

BFMC wide treatments are activities which reduce the overall bush fire risk within the BFMC area and are undertaken on an ongoing basis as part of normal business. These treatments are not linked to specific assets in the BFRMP, rather they are applied across all or part of the BFMC area as designated by legislation or agency policy. BFMC wide treatments include the following:

• Reviewing the bush fire prone land map

These maps identify bush fire prone land and are used to trigger whether a development application is assessed using *Planning for Bush Fire Protection*¹.

• Ensuring developments in bush fire prone land comply with *Planning for Bush Fire Protection*

This assessment process requires new applications for development to include bush fire protection measures.

Using the Local Environment Plan/s (LEPs) to control developments in areas with a bush fire risk

LEPs can be used to exclude development in extreme bush fire risk areas or where bush fire protection measures cannot be incorporated.

• Varying the standard bush fire danger period as required

In years where the weather is particularly adverse the bush fire danger period may be brought in early or extended. This is assessed every year by the BFMC.

• Requiring permits during the bush fire danger period

In the bush fire danger period a fire safety permit is required to light a fire in the open. Permits specify conditions such as fire fighting equipment that must be on site, or restrict burns based on weather conditions.

¹ NSW Rural Fire Service 2006 *Planning for Bush Fire Protection: A guide for councils, planners, fire authorities and developers.*

• Prosecution of offenders in relation to deliberate ignitions

Under the *Rural Fires Act 1997* persons may be prosecuted for breaching the conditions on a fire permit, lighting a fire during a Total Fire Ban, allowing fire to escape their property, or other breaches of the Act. In addition the member agencies of the BFMC will co-operate with the NSW Police in relation to the prosecution of arsonists under the *Crimes Act* 1900.

• Investigation of bush fire cause

All bush fires which do not have a known cause are investigated to identify how they started.

• Normal fire suppression activities

Responding to bush fire is a normal business activity for the fire fighting authorities.

• Assessing and managing compliance with strategic fire fighting resource allocation provisions

Strategic fire fighting resource allocation provisions is the process used to identify the number of stations, brigades and appliances required in an area, and consider members, training, assets and hazards.

• Preparation of a S52 Operations Coordination Plan

The Operations Coordination Plan is prepared biannually and sets out how coordinated fire fighting will occur. It includes specific operational restrictions on fire fighting techniques in certain areas, where fires will be managed from, and how agencies involved can communicate during operations.

• Fire Management Plans or Plans of Management

Some land management agencies have developed fire management plans or plans of management with specific fire or fuel management strategies, for example a Forests NSW Regional Fuel Management Risk Plan, a NPWS Fire Management Strategy. These publicly exhibited plans form the basis for operational fire planning on public parks, reserves and forests.

• Bush Fire Hazard Complaints

If someone is concerned about possible bush fire hazards on a neighbouring property or any other land, then this can be reported to the RFS Commissioner or their local RFS Fire Control Centre. The complaint will be investigated and may result in a notice being issued to the landowner or manager to reduce the hazard.

3.3 Asset specific treatments

There are five broad strategy groups available to treat the bush fire risk to assets identified in the BFRMP.

The types of asset specific treatments in each strategy group used in the Muswellbrook BFMC area are listed below. A full list of the treatment strategies in the Muswellbrook BFMC area are in Appendix 3.

Strategy	Targeted treatments used in the Muswellbrook BFMC area
Hazard Reduction Community Education	 Inspect APZ and maintain as required Implement BFMC Hazard Reduction Program in SFAZ Implement relevant maintenance program / schedule Implement Community Engagement Activity
Property Planning	 Develop and implement horse relocation plan Review and provide advice for fuel management plan
Preparedness	 Implement relevant management plan / maintenance program Develop management guidelines for IMT's Implement Property Identification Project Inspect fire trails and maintain as required Develop perimeter fire trail strategy
Other	Update and review bush fire risk management plan

Table 3.2 Asset specific treatments used in the Muswellbrook BFMC area

3.4 Fire thresholds

The vegetation in the Muswellbrook BFMC area has been classified into fire threshold categories (Table 3.3).

Vegetation formation	Minimum SFAZ Threshold	Minimum LMZ Threshold	Maximum Threshold	Notes
Rainforest	NA	NA	NA	Fire should be avoided.
Alpine complex	NA	NA	NA	Fire should be avoided.
Wet Sclerophyll forest (shrubby sub formation)	25	30	60	Crown fires should be avoided in the lower end of the interval range.
Wet Sclerophyll forest (grassy sub formation)	10	15	50	Crown fires should be avoided in the lower end of the interval range.
Grassy woodland	5	8	40	Minimum interval of 10 years should apply in the southern Tablelands area. Occasional intervals greater then 15 years may be desirable.
Grassland	2	2 3 10		Occasional intervals greater than 7 years should be included in coastal areas. There was insufficient data to give a maximum interval; available evidence indicates maximum intervals should be approximately 10 years.
Dry sclerophyll forest (shrub/grass sub formation)	5	8	50	Occasional intervals greater than 25 years may be desirable.
Dry sclerophyll forest (shrub sub formation)	7	10	30	Occasional intervals greater than 25 years may be desirable.
Heathlands	7	10	30	Occasional intervals greater than 20 years may be desirable.
Freshwater wetlands	6	10	35	Occasional intervals greater than 30 years may be desirable.
Forested wetlands	7	10	35	Some intervals greater than 20 years may be desirable.
Saline wetlands	NA	NA	NA	Fire should be avoided.
Semi-arid woodlands (grassy sub formation)	6	9	No max	Not enough data for a maximum fire interval.
Semi-arid woodlands (shrubby sub formation)	10	15	No Max	Not enough data for a maximum fire interval.
Arid scrublands (chenopod sub formation	NA	NA	NA	Fire should be avoided.
Arid scrublands (acacia sub formation)	10	15	No Max	Not enough data for a maximum fire interval.

Table 3.3 Fire Thresholds for Vegetation Categories

3.5 Annual works programs

The land management agencies and fire fighting authorities responsible for implementing the treatments identified in this plan will include those treatments in their annual works programs detailing how, when, and where the required activities will be undertaken.

3.6 Implementation

When the treatments identified in this BFRMP are implemented there are a number of issues that need to be considered by the responsible agency/land manager including environmental assessments and approvals, and smoke management and prescribed burn plans.

• Environmental assessment

Hazard reduction works usually require an environmental assessment to be undertaken prior to the commencement of the works. The Bush Fire Environmental Assessment Code, where applicable, is the simplest form of environmental assessment for hazard reduction works. This sets out available works and minimum fire thresholds for each zone type, as well as considering threatened species, cultural heritage, and soil and erosion issues.

• Smoke

The BFCC has issued a policy on smoke management, BFCC Policy 3-01 Bush Fire Smoke Management. This policy requires identified smoke issues to be managed through a prescribed burn plan, and where required traffic management plans, prior to work being undertaken.

Chapter 4. Performance monitoring and reviewing

4.1 Review

This BFRMP must be reviewed and updated within each successive five-year period from the constitution of the BFMC. The Muswellbrook BFMC will also review this plan as necessary to account for any changes in context or risk. This may be triggered by a range of circumstances, including but not limited to:

- changes to the BFMC area, organisational responsibilities or legislation;
- changes to the bush fire risk in the area; or
- Following a major fire event.

4.2 Monitoring

The BFMC is required to monitor progress towards the completion of treatment works listed in the BFRMP, and the timeliness of the works.

4.3 Reporting

The BFMC is required to report annually to the BFCC on its progress in implementing the bush fire risk management activities identified in this plan.

4.4 Performance Measurements

State wide performance measurements which are linked to the BFRMP have been identified by the BFCC. All BFMCs must use these to monitor and report on their success in reducing the bush fire risk in their BFMC area.

Appendices

Appendix 1: Community Participation Strategy

MUSWELLB ROOK BUSH FIRE RISK MANAGEMENT PLAN COMMUNITY ENGAGEMENT BRIEF

Prepared by Keith Lobb BFRMP Support Officer Modified by Muswellbrook BFRMP Sub Committee January 2010

Proposed methodology

The following Community Engagement Process is proposed as the most efficient, effective and appropriate means to ensure the delivery of the Bush Fire Risk Management Plan (BFRMP).

The Process is comprised of a number of stages, each uniquely focussed on delivering the necessary **purpose**. The stages of the Community Engagement Process will either be directed at informing stakeholders, inviting stakeholder participation, or seeking feedback.

Engagement in the process

The Bush Fire Management Committee (BFMC) understands that in the preparation of any plan, initial community engagement is essential. Community engagement at the initial stages of any project has enormous benefits to the community and the outcome of the project.

The aim of this community engagement is to obtain information that will primarily form the BFRMP. The challenge for the BFRMP is to unify the diverse views of stakeholders and develop a range of measures and strategies that address the relevant requirements.

Study area

The Study Area includes the Local Government Area of:

Muswellbrook

Stage 1 Scope of Works

Purpose - in broader terms the consultation will aim to:

- Ensure that specific and targeted communication occurs between the BFMC and the community throughout the development of BFRMP.
- Ensure prominent stakeholders do not make judgements of the acceptability of a risk based on their own perception of risk.
- Provide greater opportunity for local brigades, land holders and other stakeholders to have input into the bush fire risk management process.
- Determine the concerns of the community regarding bush fire risks within the community.
- Ensure that the community's perceptions of risk, as well as their perceptions of benefits, be identified, understood, documented and addressed in the BFRMPs.
- Improve community confidence in bush fire risk management across the landscape and provide the community with a sense of ownership of the BFRMP.
- Educate the community regarding bush fire risk management in the area so that they can contribute towards risk reduction.

Stage 2 - Informing the community

A comprehensive communications strategy is proposed as the means of informing the community of the BFRMP. The specific message to be delivered will include:

- Informing the community of the BFRMP;
- What it specifically is and isn't;
- Outline the process involved in developing the Muswellbrook BFRMP. Provide details of the consultation process i.e. how the community can participate;
- Reiterate what the next step in the process is, so to advise and minimise anticipated community contact; and
- Where to go for information, only if required.

A variety of mediums will ensure 'viral' marketing of information regarding the project. This will include:

Web

A link on Muswellbrook Council's web page will be utilised to promote the BFRMP process. This web site will be used as the central point for posting and receiving information about the project. The site will be regularly updated and reviewed daily for messages and comments. The site can be accessed at <u>www.muswellbrook.nsw.gov.au</u> and can be found under Bush Fire Risk Management.

Responsibility: Muswellbrook Shire Council

Newspaper

Hunter Valley News Muswellbrook Chronicle Denman News Sandy Hollow School newsletter

Responsibility: Paul Jones BFMC Executive Officer

Radio ABC 2NM/Power FM

Responsibility: RFS Media and BFMC Executive Officer

Television NBN (News and Community Announcement)

Community and Neighbourhood Centres

Responsibility: RFS Media and BFMC Executive Officer

Stage 3 - Engagement Sessions (data collection)

The BFMC does not recommend conducting public meetings as an engagement strategy. Public meetings are difficult to manage, often encourage attendance by individuals 'with an axe to grind', are opportunities for individuals or collectives to monopolise the address system, encourage poor seating arrangements (someone normally has their back to someone), and are difficult to gain valuable and constructive information from participants.

A number of engagement sessions are proposed to compliment the survey in the data collection process. The engagement session is a technique used to gain information from a variety of community members that prefer to speak with someone directly one on one. It is necessary to engage this section of the community, yet they are difficult to consult by the more traditional methods of consultation such as phone surveys or door to door surveys. The session is designed to engage the mobile user.

The session provides an informal and comfortable opportunity for the community to provide comment. The quality of data that is collected by this method can be very sound because we are gathering information on location where specific examples can be pointed out.

The following locations for engagement sessions are proposed:

 Muswellbrook Mall Rutherford Road Muswellbrook: Tuesday 9th February 2010 9am – 4pm Mangoola Rural Fire Brigade Station Merton Street Denman: Saturday 13^h February 2010 9 am – 2pm

These sessions will operate with a number of BFMC Sub Committee members who will use a series of standard questions and spontaneous discussion prompts to seek comment. The sessions will be equipped with visual aids including maps and electronic data to encourage discussion.

The value of this type of technique is the opportunity to engage a variety of users. However, the BFMC is mindful that this type of engagement can also attract residents that may have issues that are not relevant to the preparation of the BFRMP.

Stage 4 - One-on-one consultations (data collection)

The quality of information collected within specific timeframes provides an effective and efficient means of engagement. The quality of information obtained has been far better than that obtained during more traditional methods of consultation such as public meetings.

The one on one interview is an opportunity for project staff to:

- outline the project and detail the expected outcomes
- specify their involvement in the process
- present a snap shot of the study area including any initial findings
- gather standardised information from each stakeholder
- provide personal attention to each stakeholder, thereby building a relationship between the project and the stakeholder
- gather information from the stakeholder
- create a partnership approach where trust and transparency is established

Selected government agencies and community organisations will be interviewed using the one-on-one technique.

The following government agencies and NGO's are proposed to be consulted and are all current members of the BFMC:

- ARTC
- Department of Lands
- Transgrid
- Macquarie Generation
- Energy Australia
- National Parks and Wildlife Service
- Nature Conservation Council
- Muswellbrook Council
- NSW Fire Brigade
- NSW Police
- NSW Rural Fire Service
- Department of Defence
- NSW Farmers Association

Local Coal Mines

Stage 5 - Submissions (data collection)

Submissions in writing will be invited from the community. This is an opportunity for stakeholders who prefer not to attend engagement sessions or complete surveys.

It should be noted that this Strategy is subject to additional information supplied by the desktop analysis.

Stage 6 - Prepare and deliver data report

All of the data collected from the various engagement options and desktop analysis will be collated and provided in a report to the BFMC. This information will compliment the existing information supplied by each of the project partners. A draft BFRMP will be prepared and comments invited.

Stage 7 - Exhibition of the Draft BFRMP

BFMC propose that Stages 2- 5 be repeated in order to receive relevant feedback on the draft BFRMP. It is envisaged that this process will avert any possible grandstanding by individuals and groups, whilst providing the opportunity for the community to constructively comment on the proposed Plan. The engagement process will be promoted via the same channels, and additionally, those who attended the engagement sessions previously will be advised in writing on when and where the second round of engagement options will be conducted.

8 - Final report (feedback)

This report is a collation of all relevant information collected in Stage 7. The final report (feedback) provides the last opportunity for stakeholders to have input into the BFMC endorsed BFRMP.

Timeframe

The broad timeframes for the Community Engagement Process for the BFRMP are proposed as follows:

Stage 1 - Identify Scope of Works	April 2009
Stage 2 - Informing the Community	November 2009 - February 2010
Stage 5 - Data Collection	April 09 - Jan 10

Stage 5a - Engagement Sessions (Data Collection)	February 2010
Stage 5b - One-on-One (Data Collection)	As required till daft prepared
Stage 6 - Prepare Data Report and Promote Draft Pla	n (Inform) March/ April 2010
Stage 7 - Present Draft Plan (Seek Feedback)	17 th February 2010
Stage 7a - Web View	From January 2010
Stage 7c - Submissions	March/ April 2010
Stage 7d - Muswellbrook & Denman Library/ Muswellt Council Foyer and Website	brook March/ April 2010
Stage 7e - Exhibition (Draft) BFRMP	March/ April 2010
Stage 8 - Final Report (Feedback)	May 2010
Stage 9 - Endorsement of BFRMP	May 2010

Appendix 2: Asset Register

Map Ref No.	Asset Type	Asset Sub-type	Asset Name	Asset Location	Display Area	Likelihood	Consequence	Risk	Priority	Treatment No.
1	Economic	Infrastructure	Myambat	Rosemount Road	North	Almost certain	Catastrophic	Extreme	1A	1
2	Economic	Agricultural	Widden Valley Though bred Horse Studs		North; South	Likely	Major	Very High	2A	3;4;5;6;7
3	Economic	Infrastructure	Communications Tower - Denman	Denman Lookout	North	Likely	Major	Very High	2A	3;8
4	Economic	Infrastructure	Communications Tower - Mt Arthur	Mount Arthur	North	Likely	Major	Very High	2A	9
5	Settlement	Residential	Isolated Rural Properties Giants Creek	Coffin Arm/ Upper Reedy Creek	North	Likely	Major	High	2A	3;11;12;13
6	Economic	Infrastructure	Energy Aust Mitchell Line sub station (STS)	Thomas Mitchell Drive	North	Likely	Major	Very High	2A	15
7	Economic	Infrastructure	Energy Aust Muswellbrook sub station (STS)	Sandy Creek Road McCullys Gap	North	Likely	Major	Very High	2A	16
8	Economic	Infrastructure	Energy Aus Denman sub station (STS)	144 Golden Highway Denman	North	Likely	Major	Very High	2A	17
9	Economic	Infrastructure	Communications Tower - Mount Skelletar	East end of Muswellbrook Common	North	Likely	Major	Very High	2A	14
10	Economic	Mines	Bengalla Open Cut & Coal Preparation Plant	Bengalla Road	North	Likely	Moderate	High	ЗA	37
11	Economic	Mines	Drayton Open Cut	Thomas Mitchel Drive	North	Likely	Moderate	High	3A	38
12	Economic	Mines	Mount Arthur Open Cut & Coal Preparation Plant	Thomas Mitchell Drive	North	Likely	Moderate	High	3A	39
13	Economic	Mines	Muswellbrook Coal Open Cut	Muscle Creek Road	North	Likely	Moderate	High	3A	40
14	Economic	Mines	Liddell Coal Preparation Plant	Liddell	North	Likely	Major	Very High	2A	41
15	Economic	Mines	Mangoola Open Cut	Wybong Road	North	Likely	Moderate	High	3A	42
16	Economic	Mines	Liddell Coal	Hebden Road	North	Likely	Major	Very High	2A	43
17	Economic	Mines	Dartbrook Coal Preparation Plant & Loader	New England Highway	North	Likely	Moderate	High	ЗA	44
18	Human Settlement	Residential	Woodland Ridge Estate	Muscle Creek	North	Likely	Moderate	High	ЗA	20
19	Settlement	Residential	Rural Properties Martindale & Horseshoe	Martindale Valley and Horseshoe	South	Likely	Moderate	High	ЗA	3;6;21;22;23
20	Settlement	Residential	Rural properties Yarrawa	Yarrawa Valley	South	Likely	Moderate	High	ЗA	3;6;24;25;26
21	Human Settlement	Residential	Rural properties Baerami and Baerami Creek	Baerami Valley	South	Likely	Moderate	High	ЗA	3;6;27;28;29
22	Human Settlement	Residential	Sandy Hollow Village	Golden Highway	North	Likely	Moderate	High	ЗA	3;30;31
23	Human Settlement	Residential	Rural Properties Wybong	Ridgelands Rd, Dry Creek Rd, Yaraman Rd, Wybong PO Rd.	North	Likely	Moderate	High	ЗA	3;31;32
24	Human	Posidontial	McCullys Cap	Sandy Creek Rd, Dolahentys Rd, Pretoria Row, Rouchel Gap Rd, Wells	North	Likoly	Moderate	High	34	3.33
24		NESIUEIIIIal			norun		wouerale	1 ligi1	34	0,00
25	Human Settlement	Residential	Kerrabee	Bylong Valley Way & Widden Valley Rd	South	Likely	Moderate	High	ЗA	18;3;4;5;6

Map Ref					Display					Treatment
No.	Asset Type	Asset Sub-type	Asset Name	Asset Location	Area	Likelihood	Consequence	Risk	Priority	No.
	Human		Rural Residential Properties West of							
26	Settlement	Residential	Denman	Grey Gum, Rosemount & Yarrawa Rd.	North	Likely	Moderate	High	3A	3;19
27	Economic	Commercial	Muswellbrook Industrial Estate	Thomas Mitchell Drive	North	Likely	Moderate	High	3A	45
28	Human Settlement	Special Fire Protection	Sandy Hollow Public School	Golden Highway Sandy Hollow	North	Likely	Moderate	High	3A	3;34
29	Economic	Infrastructure	Communications Tower - Mt Dangar	Mount Dangar	South	Likely	Moderate	High	3A	35
33	Cultural	Non Indigenous	Baerami Shale Mine		South	Likely	Moderate	High	3A	2;46
34	Economic	Mines	Bayswater Open Cut	South east of Muswellbrook	North	Likely	Moderate	High	3A	48
35	Human Settlement	Special Fire Protection	Martindale Public School	Martindale Road x Horseshoe Road	South	Likelv	Moderate	High	3A	53
36	Economic	Infrastructure	Weather Station - Kerrabee	Bylong Valley Way	South	Likely	Moderate	Hiah	3A	47
37	Economic	Infrastructure	Energy Aust Works Depot	41 Thomas Mitchell Drive	North	Likely	Moderate	High	3A	50
38	Economic	Infrastructure	Water Treatment Plant - Denman	off Rosemount Road	North	Likely	Moderate	High	3A	52
	Human			Wells Gully, Rouchel Gap, end of Sandy						
39	Settlement	Residential	Tree-line properties McCullys Gap	Creek Road	North	Likelv	Moderate	Hiah	3A	3:51
40	Economic	Infrastructure	Martindale Telephone exchange	Martindale Road	South	Likely	Moderate	High	3A	54
41	Economic	Infrastructure	Water Reservoir Sandy Hollow	Behind Caravan Park	North	Likely	Moderate	High	3A	56
			Communications Tower - Muswellbrook	Doning Bardvan Park		Lintery		- ngn	0,1	
42	Economic	Infrastructure	Common	Muswellbrook Common off Coal Road	North	Possible	Maior	Hiah	3B	3:57
43	Cultural	Non Indigenous	Martindale Church Hall	Martindale Road	South	Likely	Minor	Medium	4	0,01
44	Economic	Agricultural	Darley (Woodlands) Stud	Golden Highway	North	Likely	Minor	Medium	4	
		Tourist and		Coldon Highlidy		Lintery		modiam		
45	Economic	Recreational	Rosemount Estate Winery	Rosemount Road	North	Likely	Minor	Medium	4	
46	Economic	Mines	Dartbrook Underground	Kayuga Road	North	Unlikely	Major	Medium	4	
47	Economic	Infrastructure	Bayswater Power Station	New England Highway	North	Unlikely	Major	Medium	4	58
48	Economic	Infrastructure	Liddell Power Station	Lake Liddell	North	Unlikely	Major	Medium	4	58
49	Human Settlement	Residential	Rural properties Bureen	Bureen	South	Likely	Minor	Medium	4	
	Human									
50	Settlement	Residential	Castlerock Rural Properties	Castlerock Rd	North	Likely	Minor	Medium	4	3
51	Human Settlement	Residential	Kayuga	Kayuga Rd, Dorset Rd, Coal Creek Rd.	North	Likely	Minor	Medium	4	
52	Human Settlement	Residential	Muscle Creek Rural Properties	Muscle Creek Rd, Beggary Creek Rd, Inglewood Rd.	North	Likelv	Minor	Medium	4	
	Human			Giants Creek Road, Greg Stairs Road &						
53	Settlement	Residential	Rural Properties Giants Creek	Golden Highway	North	Likelv	Minor	Medium	4	3
	Human		Rural Properties Albano & Bowmans							
54	Settlement	Residential	Creek		North	Likely	Minor	Medium	4	
	Human			Denman Rd, Dalswinton Rd & Golden						
55	Settlement	Residential	Rural Properties Dalswinton	Highway	North	Likely	Minor	Medium	4	
	Human			Hebden Rd, Upper Hebden Rd, Scrumlo						
56	Settlement	Residential	Rural Properties Hebden	Rd	North	Likely	Minor	Medium	4	
57	Economic	Infrastructure	Energy Aust Baerami Zone Substation	1380 Bylong Valley Way Baerami	South	Likely	Minor	Medium	4	59
58	Economic	Infrastructure	Energy Aust Sandy Hollow Regulator	Golden Highway Sandy Hollow	North	Likely	Minor	Medium	4	60
	Human									
59	Settlement	Special Fire Protection	St Heliers Prison		North	Unlikely	Major	Medium	4	
60	Economic	Tourist and Recreational	Sandy Hollow Tourist Park	Golden Highway Sandy Hollow	North	Likely	Minor	Medium	4	3
61	Economic	Tourist and Recreational	Lake Liddell Camping Area	Hebden Rd	North	Likely	Minor	Medium	4	

Map Ref					Display					Treatment
No.	Asset Type	Asset Sub-type	Asset Name	Asset Location	Area	Likelihood	Consequence	Risk	Priority	No.
		Tourist and								
62	Economic	Recreational	Yarramin Winery	700 Yarramin Road	North	Likely	Minor	Medium	4	3
62	Foonomio	Tourist and	Basaglan Wines	820 Decompount Decid	North	Likoby	Minor	Madium	4	
63	Economic	Negladigeneue	Rosegien Wines	820 Rosemount Road	North	Likely	Minor	Medium	4	
64	Cultural	Non Indigenous	Baramui Stud		South	сікеіу	Minor	wealum	4	
65	Economic	Recreational	Denman recreation area	Bell Street Denman	North	Likoly	Minor	Medium	1	
00		Tourist and			North	Likely		Wealum	-	
66	Economic	Recreational	Denman wetland area	Merino Street Denman	North	Likely	Minor	Medium	4	
		Tourist and				,				
67	Economic	Recreational	Muscle Creek	Wilkinson Rd	North	Likely	Minor	Medium	4	
				Common Road, Industrial Close,						
68	Economic	Commercial	Industrial Estate, Muswellbrook Common	Muswellbrook.	North	Likely	Minor	Medium	4	
				Wilds Plant hire New England Highway						
69	Economic	Infrastructure	Transmission tower - NBN TV	Muswellbrook	North	Likely	Minor	Medium	4	
70	Cultural	Non Indigenous	Martindale homestead	Martindale Road	South	Likely	Minor	Medium	4	
	Human									
71	Settlement	Residential	Denman	Golden Highway	North	Unlikely	Moderate	Low	NA	61
			Energy Aust Muswellbrook Zone							
72	Economic	Infrastructure	Substation	Queen Street Muswellbrook	North	Unlikely	Minor	Low	NA	62
			Endangered Ecological Communities -							
74	Environment	Endangered	Medium			Unlikely	Major	Medium	4	2
					North;					
75	Environment	Locally Important	Locally Important Environmental Assets		South	Unlikely	Moderate	Low	NA	
70	En viron ant		Endangered Ecological Communities -			Likabi	Madarata	Llingh	24	0
70	Environment	Endangered			North			⊓ign Lliab	3A 20	2
77	Economic	Infrastructure	Coal Loading Facilities		North	Unlikely	Catastrophic	Fign	30	63
/8	Economic	Infrastructure	I ransgrid Electricity I ransmission Line		North	Lікеіу	Catastrophic	Extreme	IB	55
0	Settlement	Residential	Muswellbrook City	New England Highway	North	Linlikely	Minor	Low	ΝΔ	
0	Economic	Agricultural	Grazing Lands North MDA	Rural grazing lands in North NDA	North		Minor	Medium	1	
0	Economic		Vinevards South MDA	Vinevards South MDA	South		Minor	Medium	4	
0	Economic		Vineyards South MDA	Vineyards in North MDA	North		Minor	Medium	4	
0	Economic	Agricultural	Grazing Lands South MDA		South	Likoly	Minor	Modium	4	
0	Economic	Agricultural		Locations throughout Muswellbrook	North:	LIKEIY	IVIITIOI	Medium	4	
0	Economic	Infrastructure	Rural Telephone Exchanges	Shire	South	Likely	Moderate	Hiah	3A	36
					North;			Verv		
0	Economic	Infrastructure	Northern Rail & Coal Transport Corridor		South	Likely	Major	High	2A	10
			Energy Aust Sub-transmission Power							
0	Economic	Infrastructure	Lines	Muswellbrook LGA		Likely	Moderate	High	3A	49
		Tourist and								
0	Economic	Recreational	Two Rivers Wines	2 Yarrawa Road	North	Likely	Minor	Medium	4	
		Tourist and								
0	Economic	Recreational	Kerrabee Homestead	Bylong Valley Way	South	Likely	Minor	Medium	4	
	Feenemie	I ourist and			Counth	Likabi	Minor	Madium	4	
0		Kecreational	The Old Dairy at Baerami	430 Mount Dangar Road Baerami	South	∟ікеіу	iviinor	iviedium	4	
0	Economic	Recreational	Carellen Holiday Cottages	39 Rosemount Road Hollydeen	North	Likely	Minor	Medium	4	
0								Medium	т 	
0	Economic	Mines	Mount Arthur Underground	Thomas Mitchell Drive	North	Unlikely	Major	Medium	4	
			7							

Map Ref					Display					Treatment
No.	Asset Type	Asset Sub-type	Asset Name	Asset Location	Area	Likelihood	Consequence	Risk	Priority	No.
			Threatened flora and fauna of major		North;			Very		
0	Environment	Endangered	consequence		South	Likely	Major	High	2A	2
			Threatened flora and fauna of moderate		North;					
0	Environment	Vulnerable	and minor consequence		South	Likely	Moderate	High	3A	2
0	Cultural	Aboriginal Significance	Aboriginal sites with low vulnerability		North; South	Likely	Moderate	High	ЗA	2
			Aboriginal sites of high and moderate		North;					
0	Cultural	Aboriginal Significance	vulnerability		South	Likely	Catastrophic	Extreme	1B	2
0	Cultural	Non Indigenous	Negoa Homestead	Wilton Lane Kayuga		Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Elamara	Giants Creek		Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Baerami Homestead	Bearami	South	Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Baerami School of Arts	Baerami Hall	South	Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Bengalla Homestead	Bengalla	South	Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Blunt's Butter Factory			Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Overdene	Bengalla		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Dalmar	Bengalla		Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Rosebrook	Rosebrook Lane		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Fairview	Liddell		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Old Kerrabee Homestead	Kerrabee		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Former Post Office Kerrabee	Kerrabee		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Hillcrest	Liddell		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Pomany	Widden		Likely	Minor	Medium	4	
0	Cultural	Non Indigenous	Kayuga Homestead	Kayuga Road		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Riverview	Kayuga		Unlikely	Minor	Low	NA	
0	Cultural	Non Indigenous	Brogheda	Yaramin Road Wybong		Likely	Minor	Medium	4	

Appendix 3: Treatment Register

Priority (Risk Rating)	Asset	Asset Name	Strategy	Treatment	Action Description	Responsible	Other RA	Support Agencies	1011	1112	1213	1314	1415
i (atilig)			onatogy	10	Implement Myambat Bushfire	/ gonoloo		Agonoloc			1210	1014	
1A (Extreme)	1	Myambat	Preparedness	1	Management Plan	Defence			[1011]	[1112]	[1213]	[1314]	[1415]
		Aboriginal sites of high and	•		Develop management guidelines for			DL;LGA;					<u> </u>
1B (Extreme)	0	moderate vulnerability	Preparedness	2	IMT's	DECC		NSWFB;RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Transgrid Electricity			Implement power easement								
	78	Transmission Line	Hazard Reduction	55	maintenance program	Other	Transgrid	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	0	Northern Rail & Coal Transport	Deserves	10	ARIC to maintain rail corridor and	ADTO			[4044]	[4440]	[4040]	[4044]	[[4 44 5]
ZA (Very Hign)	0	Corridor Threatened flore and found of	Preparedness	10	access tracks.	ARIC			[1011]	[1112]	[1213]	[1314]	[1415]
		maior consequence	Proparadpass	2	Develop management guidelines for	DECC		DL;LGA;	[1011]	[1110]	[1012]	[121/]	[1/15]
		Widden Valley Thoughbred	Fiepaleuliess	2	Implement BEMC HR Strategy program			NOVED, NES			[1213]	[1314]	[1415]
	2	Horse Studs	Hazard Reduction	3	in SFAZ or I MZ	NSWEB'RES			[1011]	[1112]	[1213]	[1314]	[1415]
	_		Prenaredness	4	Complete Property Identification Project	RES			[1011]	[1112]	[1210]	[1011]	
			Troparediteos	-	Inspect fire trails and maintain as				[1011]				+
				5	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
				6	Develop perimeter fire trail strategy	DL:LGA:DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
					Develop and implement horse						1		
			Property Planning	7	relocation plan	Private;DPI		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Communications Tower -			Implement BFMC HR Strategy program	DL;LGA;DECC;							
	3	Denman	Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
					Maintain as per Telstra ground							.	
	-			8	maintenance schedule	Other	Telstra	DL;RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Communications Tower - Mt		0		Other	Transgrid /	DEO	[4044]	[4440]	[4040]	[4044]	54 44 51
	4	Arthur Jaclated Burel Properties Ciente	Hazard Reduction	9	Inspect APZ and maintain as required	Other	private	RF5	[1011]	[1112]	[1213]	[1314]	[1415]
	5	Crook	Education	13	activity	DES			[1011]		[1212]		[1/15]
	5	Cleek		13	Implement BEMC HR Strategy program			DL,DLCC			[1213]		
			Hazard Reduction	3	in SFAZ or LMZ	NSWFB:RFS			[1011]	[1112]	[1213]	[1314]	[1415]
			Preparedness	11	Complete Property Identification Project	RFS			[]	[1112]	[]	[1314]	
			roparoanooo		Inspect fire trails and maintain as					[]		[1011]	
				12	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Energy Aust Mitchell Line sub					Energy						
	6	station (STS)	Hazard Reduction	15	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Energy Aust Muswellbrook sub					Energy					_	
	7	station (STS)	Hazard Reduction	16	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	0	Energy Aus Denman sub station	Lis and Dark offers	47			Energy	550	[4044]	[4440]	[4040]	[4044]	[4445]
	8	(SIS)	Hazard Reduction	17	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	٥	Skelletar	Hazard Reduction	14	maintain as per Teistra ground	Other	Toletra	DEC	[1011]	[1112]	[1212]	[131/]	[1/15]
	3	Skelletal		14	Review and provide advice for fuel	Oulei	Teistia	N S		[1112]	[1213]	[1314]	[1413]
	14	Liddell Coal Preparation Plant	Property Planning	41	management plan	RES					[1213]		
					Review and provide advice for fuel						[1210]		
	16	Liddell Coal	Property Planning	43	management plan	RFS					[1213]		1
		Aboriginal sites with low			Develop management guidelines for			DL;LGA;					1
3A (High)	0	vulnerability	Preparedness	2	IMT's	DECC		NSWFB;RFS	[1011]	[1112]	[1213]	[1314]	[1415]
													1
													1
		Energy Aust Sub-transmission					Energy						1
		Power Lines	Hazard Reduction	49	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]

Priority (Risk	Asset			Treatment		Responsible		Support					
Rating)	ID	Asset Name	Strategy	ID	Action Description	Agencies	Other RA	Agencies	1011	1112	1213	1314	1415
					Maintain as per Telstra ground								.
		Rural Telephone Exchanges	Hazard Reduction	36	maintenance schedule	Other	Telstra	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Threatened flora and fauna of											
		moderate and minor	Droporodpooo	2	Develop management guidelines for	DECC		DL;LGA;	[1011]	[1110]	[1010]	[1214]	[1/15]
		Bengalla Open Cut & Coal	Frepareuness	2	Review and provide advice for fuel	DECC		NOVED, KES		[1112]	[1213]	[1314]	[1415]
	10	Preparation Plant	Property Planning	37	management plan	RES					[1213]		
	10			07	Review and provide advice for fuel						[1210]		
	11	Drayton Open Cut	Property Planning	38	management plan	RFS					[1213]		
		Mount Arthur Open Cut & Coal			Review and provide advice for fuel								
	12	Preparation Plant	Property Planning	39	management plan	RFS					[1213]		
					Review and provide advice for fuel								
	13	Muswellbrook Coal Open Cut	Property Planning	40	management plan	RFS					[1213]		
	4.5			10	Review and provide advice for fuel	550					[4040]		
	15	Mangoola Open Cut	Property Planning	42	management plan	RFS					[1213]		
	17	& Loader	Property Planning	11	Review and provide advice for fuel	DES					[1212]		
	17		Community	44	Implement community engagement						[1213]		
	18	Woodland Ridge Estate	Education	20	activity	RFS			[1011]		[1213]		[1415]
		Rural Properties Martindale &	Community		Implement community engagement				[]		[.=.0]		[]
	19	Horseshoe	Education	21	activity	RFS		DECC	[1011]		[1213]		[1415]
					Implement BFMC HR Strategy program	DL;LGA;DECC;							
			Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
			Preparedness	6	Develop perimeter fire trail strategy	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
				22	Complete Property Identification Project	RFS			[1011]	[1112]			
					Inspect fire trails and maintain as								.
				23	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	20	Rural proportion Varrowa	Community	24	Implement community engagement	DES				[1110]		[1214]	
	20	Rurai properties faitawa	Euucalion	24	Implement REMC HP Strategy program					[1112]		[1314]	
			Hazard Reduction	3	in SEAZ or LMZ	NSWEB RES			[1011]	[1112]	[1213]	[1314]	[1415]
			Preparedness	6	Develop perimeter fire trail strategy			RES	[1011]	[1112]	[1213]	[1314]	[1415]
			rioparoanooo	25	Complete Property Identification Project	RES			[1011]	[2]	[1213]	[1314]	[1110]
					Inspect fire trails and maintain as						[1210]		
				26	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
		Rural properties Baerami and	Community		Implement community engagement								
	21	Baerami Creek	Education	27	activity	RFS		DECC		[1112]		[1314]	
					Implement BFMC HR Strategy program	DL;LGA;DECC;							.
			Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
			Preparedness	6	Develop perimeter fire trail strategy	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
				28	Complete Property Identification Project	RFS					[1213]	[1314]	
				20	Inspect fire trails and maintain as			DEC	[1011]	[1110]	[4040]	[4044]	[4 4 4 5]
			Community	29		DL,LGA,DECC		KF3		[1112]	[1213]	[1314]	[1415]
	22	Sandy Hollow Village	Education	30	activity	RES				[1112]		[1314]	
		Carlay Hollow Villago			Implement BFMC HR Strategy program	DL:LGA:DECC:				[2]		[1011]	
			Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
					Inspect fire trails and maintain as				[
			Preparedness	31	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
			Community		Implement community engagement	550							
	23	Rural Properties Wybong	Education	32		KFS		DL;DECC	[1011]		[1213]		[1415]
			Hozard Deduction	2	Implement BENIC HK Strategy program	DL;LGA;DECC;			[1011]	[1110]	[1040]	[1 2 4 4]	[1/15]
	I			3		INSVIED,RES				[[]]]	[ເ∠ເວ]	[[1314]	[1413]

Pating D Asset Name Strategy D Action Description Other RA Agencies Other RA Agencies 1011 1112 1213 1214 1416 <th>Priority (Risk</th> <th>Asset</th> <th></th> <th></th> <th>Treatment</th> <th></th> <th>Responsible</th> <th></th> <th>Support</th> <th></th> <th></th> <th></th> <th></th> <th></th>	Priority (Risk	Asset			Treatment		Responsible		Support					
Impact for trains and manhain all Dist.GA.DECC RFS (1011) (112) (124) (144) 24 McCulys Gup Television 33 ackivity RFS - (111) (121)	Rating)	ID	Asset Name	Strategy	ID	Action Description	Agencies	Other RA	Agencies	1011	1112	1213	1314	1415
Processeries Strategy organization Res [011] [112] [123] [134] [143] 24 McCultys Gap Hazard Reduction 3 Science Reduction 1 Boland Ford Proporties Widen [1112] [134] [143] [143] 25 Valley & Keinsbee Community Incluster Reduction 1 Science [1112] [123] [1434] [1434] 26 Valley & Keinsbee Incluster Science Reduction 1 Reduction Reduction Reduction Reduction </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>Inspect fire trails and maintain as</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						Inspect fire trails and maintain as								
Part Resolution Community and major and community engagement prof. pr				Preparedness	31	required	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
1.4 Buckey's dap. Duckey's dap. <td></td> <td>24</td> <td>McCullyc Gap</td> <td>Education</td> <td>22</td> <td>Implement community engagement</td> <td>DES</td> <td></td> <td></td> <td></td> <td>[1112]</td> <td></td> <td></td> <td>[1/15]</td>		24	McCullyc Gap	Education	22	Implement community engagement	DES				[1112]			[1/15]
Indelated Rural Properties Work Headed Robustion 3 in SPA2 of UAZ NSWFBRES 10111 (112) (123) (1314) (145) 25 Valley & Keriabee Header Robustion 1 imperant Chronic Project RTS 0 0 (1213) (1314) (1415) 24 Valley & Keriabee - 0 Ompared Frager Number Project RTS 0 0 (111) (1213) (1314) (1415) 26 Valley & Keriabee - 0 Ownolp of Project Net Net Net Net Net Net Net Net Net Ne		24	McCullys Gap			Implement BEMC HR Strategy program								[1415]
2 Valley & Kerabes Community Implement community engagement Reduction RFS DECC 1011 1012 1013				Hazard Reduction	3	in SFAZ or LMZ	NSWFB:RFS			[1011]	[1112]	[1213]	[1314]	[1415]
25 Valley & Korrabou ¹ Education ¹ 18 activity FR DECC [1011] [1213] [1414] Hazard Reduction 3 in SFA2 or LM2 RFS 10011 1112 <td< td=""><td></td><td></td><td>Isolated Rural Properties Widden</td><td>Community</td><td></td><td>Implement community engagement</td><td></td><td></td><td></td><td>[]</td><td>[]</td><td>[]</td><td>[]</td><td>[]</td></td<>			Isolated Rural Properties Widden	Community		Implement community engagement				[]	[]	[]	[]	[]
Hazed Reduction Stand Reduction Implement IPMC HR Strategy program DLL GA.DECC; Intelligence Intelligence Intelligence Preparedness 4 Complete Progent/ Identification Proget. RFS Intelligence		25	Valley & Kerrabee	Education	18	activity	RFS		DECC	[1011]		[1213]		[1415]
Hard Reduction 3 is RFA or LVZ NSWFB.FFS [1011] [112] [1213] [1314] [1415] Respective standing required - Inspective standing required Preparedness - Inspective standing required - Inspective standing required - <td></td> <td></td> <td></td> <td></td> <td></td> <td>Implement BFMC HR Strategy program</td> <td>DL;LGA;DECC;</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						Implement BFMC HR Strategy program	DL;LGA;DECC;							
Preparedness 4 Compute Property Identification Project PFS [1010] [1112]				Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
Image: Control in the state of the				Preparedness	4	Complete Property Identification Project	RFS			[1011]	[1112]			
Answellshow Solution					_	Inspect fire trails and maintain as			550	[4044]	144401	[4040]	140441	
Rural Residential Properties Community Develop permeter intra landatogy DLLLA/DECC RH-S [1011] [112] [123] [134] [1415] 26 West of Demman Education 10 Implement DFMC Histopy rorgam DL DL (1011) [112] [123] [134] [1415] 27 Muswellbrook Industrial Estate Education 10 SFA or IMZ NWFFB RFS [1011] [112] [1314] [1415] 28 Sandy Hollow Public School Education 45 attrifty NWFFB RFS [1011] [112] [1314] [1415] 28 Sandy Hollow Public School Hazard Reduction 31 in SFA2 or IMZ NWFFB RFS [1011] [112] [1314] [1415] 29 Dangar Preparedness 2 Implement DFMC Histopy regamement DECC NWFB,RFS [1011] [112] [1213] [1314] [1415] 30 Baeriami Shale Mine Preparedness 2 Implement DFMC Histopy regamement D					5		DL;LGA;DECC		RES		[1112]	[1213]	[1314]	
Provid respective Continuity Implement Continuity engagement PFS DL (1011) (112) (114) 26 West of Demman Education 3 in SF2.2 or LNZ. NSWFB.RFS 10011 (1112)			Dural Decidential Dreparties	Community	6	Develop perimeter fire trail strategy	DL;LGA;DECC		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
Lobal Velocitor Lobal Control List of the Strategy program Disc of the Strategy program Disc of the Strategy program Disc of the Strategy program 27 Muswellbrook Industrial Estate Education 1mplement community engagement NSWFB RFS [1011] [112] [1314] 28 Sandy Hollow Public School Education 1mplement community engagement RFS [1011] [112] [1314] 28 Sandy Hollow Public School Hazard Reduction 1mslement EPMC HR Strategy program NSWFB, RFS [10111] [112] [1314] 29 Dengar Preparedness 2 Implement ABC mathemace program DECC DLLGA: [1011] [112] [1213] [1314] 30 Baerami Shale Mine Preparedness 2 IMTs DECC NSWFB, RFS [1011] [112] [1213] [1314] [1415] 31 Baerami Shale Mine Preparedness 2 IMTs DECC NSWFB, RFS [1011] [112] [1213] [1314] [1415] 33 Baerami		26	West of Denman	Education	10	activity	DES		וח	[1011]		[1213]		[1/15]
Image: state in the s		20			13	Implement BEMC HR Strategy program						[1213]		[1413]
27 Musevellbrook Industrial Estate Community (Lacation Implement community engagement (Preparedness NSWFB RFS [1112] [1314] 28 Sandy Hollow Public School Education adviviy Implement Community engagement (Preparedness RFS [1112] [1314] [1415] 28 Sandy Hollow Public School Education adviviy Implement DRV CH R Strategy program (Preparedness DLLGA.DECC. [1011] [1112] [1314] [1415] 29 Dangar Preparedness Berleinenance program DECC NSWFB,RFS [1011] [1112] [1213] [1314] [1415] 30 Baerami Shale Mine Preparedness 2 IMT's Develop management guidelines for evelop management guidelines for provide advice for fuel DECC NSWFB,RFS [1011] [1112] [1213] [1314] [1415] 34 Bayswater Open Cut Property Planning 48 management guidelines for provide advice for fuel RFS [1011] [1112] [1213] [1314] [1415] 36 Martindale Public School Hazard Reduction <td></td> <td></td> <td></td> <td>Hazard Reduction</td> <td>3</td> <td>in SFAZ or LMZ</td> <td>NSWFB:RFS</td> <td></td> <td></td> <td>[1011]</td> <td>[1112]</td> <td>[1213]</td> <td>[1314]</td> <td>[1415]</td>				Hazard Reduction	3	in SFAZ or LMZ	NSWFB:RFS			[1011]	[1112]	[1213]	[1314]	[1415]
27 Musvelibrook industrial Estate Education 45 activity NSWE RFS [1112] [1314] 28 Sandy Hollow Public School Education 34 activity RFS [1011] [1112] [1111] [1112] [1112]				Community		Implement community engagement								
28 Sandy Hollow Public School Community Hazard Reduction 1mplement DEVC Free break Implement DECC Free break FFS 1011 1112 1213 1314 [1415] 20 Dangar Preparedness 35 maintenance program DECC DLIGA/DECC: 10011 1112 1213 [1415] 20 Dangar Preparedness 35 maintenance program DECC DECC NSWFB:RFS 10011 1112 1213 [1415] 33 Baerani Shale Mine Preparedness 2 IMT's DECC NSWFB:RS 10011 1112 [1213] [1314] [1415] 34 Bayswater Open Cut Property Planning 48 management plan RFS 10011 1112 [1213] [1314] [1415] 35 Marindale Public School Hazard Reduction 53 Inspect APZ and maintain as required Other School 10111 [1112] [1314] [1415] 36 Water Treatment Plan - Denman Hazard Reduction 52 Inspect APZ and maintain a		27	Muswellbrook Industrial Estate	Education	45	activity	NSWFB		RFS		[1112]		[1314]	
28 Sandy Hollow Public School Education 34 activity RFS 1112 <th< td=""><td></td><td></td><td></td><td>Community</td><td></td><td>Implement community engagement</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>				Community		Implement community engagement								
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Implement DECC Fire break Dangar Instrument DECC Fire break Dangar Instrument DECC Fire break Decc Instrument DECC				Lineard Deduction		Implement BFMC HR Strategy program	DL;LGA;DECC;			[4044]	[4440]	[4040]	[404 4]	54 44 51
20 Dangar Preparedness 38 Implement DeCorpara DECC Control Intel (111) [1213] [1415] 33 Baerami Shale Mine Preparedness 2 IMTs Decvelop management guidelines for Link DECC NSWFB.RFS [1011] [1112] [1213] [1415] 34 Bayswater Open Cut Property Planning 44 Implement AMS maintenance program DECC NSWFB.RFS [1011] [1112] [1213] [1415] 35 Martindale Public School Hazard Reduction 55 Implement maintenance activities as DECC Implement maintenance activities as [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 50 Implement maintenance activities as DECC [1011] [1112] [1213] [1314] [1415] 37 Energy Aust Works Depot Hazard Reduction 52 Inspect APZ and maintain as required GA [1011] [1112] [1213] [1314] [1415] [1415] 38			Communications Towar Mt	Hazard Reduction	3	IN SFAZ OF LIMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
1 2 Dangain 100pd0alloside 30 Develop management guidelines for 2 DECC DL:LGA; [1011] [1112] [1213] [1314] 33 Baerami Shale Mine Preparedness 2 MTs DECC NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 34 Bayswater Open Cut Property Planning Review and provide advice for fuel management plan RFS Martindale [1011] [1112] [1213] [1314] [1415] 35 Martindale Public School Hazard Reduction 53 Inspect APZ and maintain as required Other School LGA [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1		29	Dangar	Prenaredness	35	maintenance program	DECC			[1011]		[1213]		[1415]
33 Baerami Shale Mine Preparedness 2 IMT s DECC NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 34 Bayswater Open Cut Property Planning 48 Implement AMS maintenance program DECC NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 34 Bayswater Open Cut Property Planning 48 management plan RFS Martindale [1213] [1314] [1415] 35 Martindale Public School Hazard Reduction 51 Inspect APZ and maintain as required Other School LGA [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213]		20		Troparcaneos	00	Develop management guidelines for	DLOO		DL:LGA:	[1011]		[1210]		
And Composition And Composite And Composition And Composit		33	Baerami Shale Mine	Preparedness	2	IMT's	DECC		NSWFB;RFS	[1011]	[1112]	[1213]	[1314]	[1415]
34 Bayswater Open Cut Property Planning 48 Review and provide advice for fuel management plan RFS Imagement plan RFS Imagement plan Imagement plan RFS Imagement plan Imagement plan RFS Imagement plan Imagement plan Imagement plan RFS Imagement plan Imagement plan Imagement plan RFS Imagement plan					46	Implement AMS maintenance program	DECC			[1011]	[1112]	[1213]	[1314]	
34 Bayswater Open Cut Property Planning 48 management plan RFS C [1213] [1213] 35 Martindale Public School Hazard Reduction 53 Inspect APZ and maintain as required Other School LGA [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 50 Implement maintenance activities as DECC [1011] [1112] [1213] [1314] [1415] 37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required DECC Energy [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required LGA [1011] [1112] [1213] [1314] [1415] 39 Gap Community Implement DFMCH R Strategy program DL;LGA; [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction						Review and provide advice for fuel								
35 Martindale Public School Hazard Reduction 53 Inspect APZ and maintain as required Other School LGA [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 47 required DECC Inspect APZ and maintain as required Other LGA [1011] [1112] [1213] [1314] [1415] 37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatiment Plant - Demman Hazard Reduction 50 Inspect APZ and maintain as required LGA In1112 [1213] [1314] [1415] 39 Gap Community Community Inspect APZ and maintain as required LGA DL;DECC [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction 56 Inspect APZ and maintain as required Other Telstra		34	Bayswater Open Cut	Property Planning	48	management plan	RFS					[1213]		
35 Martindale Public School Hazard Reduction 53 Inspect APZ and maintain as required Other School LGA [1011] [1112] [1213] [1314] [1415] 36 Weather Station - Kerrabee Hazard Reduction 47 required DECC Inol [1011] [1112] [1213] [1314] [1415] 37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required UGA Inplement Community engagement [1011] [1112] [1213] [1314] [1415] 39 Gap Community Implement BFMC HR Strategy program DL; LGA; DECC; [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] <								Martindale						
38 Weather Station - Kerrabee Hazard Reduction 47 required DECC [1011] [1112] [1213] [1314] [1415] 37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required LGA [1011] [1112] [1213] [1314] [1415] 39 Gap Community Implement BFMC HR Strategy program DL;LGA;DECC; [1011] [1112] [1213] [1314] [1415] 40 Marindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required UGA;OECC; [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA;Other Telstra RFS [1011] [1112] [1213] [1314] [1415]		35	Martindale Public School	Hazard Reduction	53	Inspect APZ and maintain as required	Other	School	LGA	[1011]	[1112]	[1213]	[1314]	[1415]
30 Weather Gradin Freinable Hazard Reduction 4/ required DECC (1011) (1112) (1213) (1314) (1415) 37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Demman Hazard Reduction 52 Inspect APZ and maintain as required LGA [1011] [1112] [1213] [1314] [1415] 39 Gap Community Education 51 activity RFS DL;DECC [1011] [1123] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 40 Martinale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314		36	Weather Station - Kerrahee	Hazard Reduction	47	required	DECC			[1011]	[1112]	[1212]	[131/]	[1/15]
37 Energy Aust Works Depot Hazard Reduction 50 Inspect APZ and maintain as required Other Australia RFS [1011] [1112] [1213] [1314] [1415] 38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required LGA [1011] [1112] [1213] [1314] [1415] 39 Gap Community Implement community engagement RFS DL;DECC [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA; DL;LGA; [1011] [1112]					47		DLCC	Energy			[1112]	[1213]	[1314]	[1413]
38 Water Treatment Plant - Denman Hazard Reduction 52 Inspect APZ and maintain as required activity LGA [1011] [1112] [1213] [1314] [1415] 39 Gap Community Education 51 Implement community engagement activity RFS DL;DECC [1011] [1112] [1213] [1314] [1415] 40 Matrindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 40 Matrindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA; DL;LGA; DL;LGA; Inspect APZ and maintain as required LGA; NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 38 (High) 42 Communities - High </td <td></td> <td>37</td> <td>Energy Aust Works Depot</td> <td>Hazard Reduction</td> <td>50</td> <td>Inspect APZ and maintain as required</td> <td>Other</td> <td>Australia</td> <td>RFS</td> <td>[1011]</td> <td>[1112]</td> <td>[1213]</td> <td>[1314]</td> <td>[1415]</td>		37	Energy Aust Works Depot	Hazard Reduction	50	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
And Properties McCullys Community Community Implement community engagement activity RFS DL;DECC [1011] [1213] [1415] 39 Gap Implement SFMC HR Strategy program DL;LGA;DECC; DL;LGA;DECC; Intervention [1011] [1112] [1213] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA; Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA; Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 40 Martindale Telephone exchange Preparedness 2 Implement BFMC HR Strategy program DECC NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 38 (High) 42 <		38	Water Treatment Plant - Denman	Hazard Reduction	52	Inspect APZ and maintain as required	LGA			[1011]	[1112]	[1213]	[1314]	[1415]
39 Gap Education 51 activity RFS DL;DECC [1011] [1213] [1415] 40 Martindale Telephone exchange Hazard Reduction 3 in SFAZ or LMZ NSWFB;RFS Inolini [1112] [1213] [1415] 40 Martindale Telephone exchange Hazard Reduction 54 Inspect APZ and maintain as required Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA;Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 41 Water Reservoir Sandy Hollow Hazard Reduction 56 Inspect APZ and maintain as required LGA;Other Telstra RFS [1011] [1112] [1213] [1314] [1415] 57 Inspect APZ and maintain as required DE;LGA;DECC; NSWFB;RFS Inolini [1112] [1213] [1314] [1415] 38 (High) 42			Tree-line properties McCullys	Community		Implement community engagement								
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70 Communities - High Prepareoness 2 IMT s DECC NSWFB;RFS [1011] [1112] [1213] [1314] [1415] 3B (High) 42 Communications Tower - Muswellbrook Common Hazard Reduction 3 Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program Aboriginal Land Council Implement BFMC HR Strategy program Aboriginal Implement BFMC HR Strategy program in SFAZ or LMZ DL;LGA;DECC; NSWFB;RFS Implement BFMC HR Strategy program Aboriginal Implement BFMC HR Strategy program Aboriginal Implement BFMC HR Strategy program Aboriginal Implement BFMC HR Strategy program Aborig			Endangered Ecological	Dreperada est		Develop management guidelines for			DL;LGA;	540447	[4440]	[4040]	[4044]	[4 4 4 57
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OD (High) Hazard Reduction Interfection Interfection <t< td=""><td>3B (High)</td><td>42</td><td>Muswellbrook Common</td><td>Hazard Reduction</td><td>2</td><td>in SEAZ or I MZ</td><td>NSWER RES</td><td></td><td></td><td>[1011]</td><td>[1112]</td><td>[1213]</td><td>[1314]</td><td>[1415]</td></t<>	3B (High)	42	Muswellbrook Common	Hazard Reduction	2	in SEAZ or I MZ	NSWER RES			[1011]	[1112]	[1213]	[1314]	[1415]
Image: Note of the state o		42			3			Local				[1213]		
Image: Non-stand maintainImage: Stand mai								Aboriginal						
3C (High) 77 Coal Loading Facilities Hazard Reduction 63 Inspect APZ and maintain as required Private RFS [1011] [1112] [1213] [1314] [1415] 4 (Medium) 0 Baerami Homestead 0 Baerami Homestead 0 <td></td> <td></td> <td></td> <td></td> <td>57</td> <td>Inspect APZ and maintain as required</td> <td>Other</td> <td>Land Council</td> <td>RFS</td> <td>[1011]</td> <td>[1112]</td> <td>[1213]</td> <td>[1314]</td> <td>[1415]</td>					57	Inspect APZ and maintain as required	Other	Land Council	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
4 (Medium) 0 Baerami Homestead	3C (High)	77	Coal Loading Facilities	Hazard Reduction	63	Inspect APZ and maintain as required	Private		RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	4 (Medium)	0	Baerami Homestead											

Priority (Risk	Asset			Treatment		Responsible		Support					
Rating)	ID	Asset Name	Strategy	ID	Action Description	Agencies	Other RA	Agencies	1011	1112	1213	1314	1415
		Baerami School of Arts											<u>. </u>
		Bengalla Homestead											I
		Blunt's Butter Factory											1
		Brogheda											1
		Carellen Holiday Cottages											1
		Dalmar											
		Elamara											
		Grazing Lands North MDA											
		Grazing Lands South MDA											
		Kerrabee Homestead											
		Mount Arthur Underground											
		Negoa Homestead											
		Pomany											
		The Old Dairy at Baerami											
		Two Rivers Wines											
		Vinevards North MDA											
		Vinevards South MDA											
	43	Martindale Church Hall											
	44	Darley (Woodlands) Stud											
	45	Rosemount Estate Winery											
	46	Dartbrook Underground											
					Indate and review bush fire risk		Macquarie						
	47	Bavswater Power Station	Other	58	management plan	Other	Generation	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
					Update and review bush fire risk		Macquarie						_
	48	Liddell Power Station	Other	58	management plan	Other	Generation	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	49	Rural properties Bureen											
					Implement BFMC HR Strategy program	DL;LGA;DECC;							
	50	Castlerock Rural Properties	Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
	51	Kayuga											
	52	Muscle Creek Rural Properties											<u> </u>
					Implement BFMC HR Strategy program	DL;LGA;DECC;							
	53	Rural Properties Giants Creek	Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
	54	Rural Properties Albano &											1
	54	Bowmans Creek											
	50	Rural Properties Daiswinton											
	56	Rural Properties Hebden											
	57	Substation	Hazard Reduction	50	Inspect APZ and maintain as required	Other	Australia	RES	[1011]	[1112]	[1213]	[1314]	[1415]
	51	Energy Aust Sandy Hollow				Other	Fneray			[1112]	[1213]	[1314]	
	58	Regulator	Hazard Reduction	60	Inspect APZ and maintain as required	Other	Australia	RFS	[1011]	[1112]	[1213]	[1314]	[1415]
	59	St Heliers Prison							[]	[]	[]	[]	<u>[:::=]</u>
					Implement BFMC HR Strategy program	DL;LGA:DECC:							
	60	Sandy Hollow Tourist Park	Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
	61	Lake Liddell Camping Area											e
				1	Implement BFMC HR Strategy program	DL;LGA;DECC;	ſ						
	62	Yarramin Winery	Hazard Reduction	3	in SFAZ or LMZ	NSWFB;RFS			[1011]	[1112]	[1213]	[1314]	[1415]
	63	Roseglen Wines											
	64	Baramul Stud											
	65	Denman recreation area											
	66	Denman wetland area											·

Priority (Risk	Asset			Treatment		Responsible		Support					
Rating)	ID	Asset Name	Strategy	ID	Action Description	Agencies	Other RA	Agencies	1011	1112	1213	1314	1415
	67	Muscle Creek											
		Industrial Estate, Muswellbrook											
	68	Common										I	
	69	Transmission tower - NBN TV											
	70	Martindale homestead											
		Endangered Ecological			Develop management guidelines for			DL;LGA;					
	74	Communities - Medium	Preparedness	2	IMT's	DECC		NSWFB;RFS	[1011]	[1112]	[1213]	[1314]	[1415]
NA (Low)	0	Fairview											
		Former Post Office Kerrabee											
		Hillcrest											
		Kayuga Homestead											
		Muswellbrook City											
		Old Kerrabee Homestead											
		Overdene											
		Riverview											
		Rosebrook											
	71	Denmon	Hozard Reduction	61	Maintain APZ as per LPMA bush fire			DES	[1011]	[1110]	[1010]	[1214]	[1/15]
	/1	Denman	Hazard Reduction	61			Enormy	RF5			[1213]	[1314]	[1415]
	72	Substation	Hazard Reduction	62	Inspect APZ and maintain as required	Other	Australia	RES	[1011]	[1112]	[1213]	[1314]	[1415]
	12	Locally Important Environmental		02			Australia					[1014]	
	75	Assets											1

Appendix 4: Maps

Map Number	Map Title				
1	Muswellbrook North Assets				
2	Muswellbrook South Assets				
3	Time Since Fire				
4	Bush Fire Frequency				



Muswellbrook BFMC Bush Fire Risk Management Plan 2011

North - Map Display Area Map 1 of 2

This Bush Fire Risk Management Plan (BFRMP) has been prepared by the Muswellbrook Bush Fire Management Committee (BFMC) pursuant to section 52 of the Rural Fires Act 1997.

The aim of this BFRMP is to reduce the adverse impact of bush fires on life, property and the en-

The objectives of this BFRMP are to: - reduce the number of human-induced bush fire ignitions that cause damage to life, property or the - manage list to reduce the spread and intendary of bush fires while minimising environmental/ecold - induce the community's vulnerability to bush fires by improving its preparedness, and - efficiently contain fires with a plential to cause damage to life, property and the environment.

This map forms part of the BFRMP for the Muswellbrook BFMC, covering the local government area(s) of Muswellbrook. It should be viewed in conjunction with the accompanying BFRMP document which provides further details on the BFRM carea, the assess assessed and the risk assessment process used.



Review Under the Rural Fires Act 1997 this plan must be reviewed and updated within each successive five year period following the constitution of the BFMC. The Musevellbrook BFMC will also review this plan as necessary. This may be triggered by a range of circumstances, including but on thimled to. - changes to the BFMC area, organisational reponsibilities or legislation; - changes to the but five risk in the area; or - following a major fire event. Acceste

following a may use even...
 Assets
 This BFRMP identifies the assets that are considered by the Muswellbrook BFMC and community to be at risk from bush free, assesses the bush free risk to each asset and assigns treatments designed to mitigate the risk. Assets in the BFMC area identified as requiring treatments are listed in the assets table. Other assets within the BFMC area that were assessed as not requiring treatments within the life of this plan are listed in the appendix to the BFRMP document. The Man Ref number "NA" denotes non-spatial assets.

Treatments poncife treatments assigned to assets in the Muswellbrock area are listed in the treatments table and linked to the assets which they are designed to protect. Standard BFMC wide treatments (i.e. not linked to a specific asset) which cour or an ongoing basi within the PFMC area are: reviewing the bush fire prone land map; eaving developments in the bush fire prone land comply with Planning for Bush Fire Protection; using the Local Environment Plan's (LEPs) to control development in areas with a bush fire risk; varying the standard bush the danger period as required;

nvestigation of bush fire cause; normal fire suppression activities

nent; and

Note on LMZ: All areas not specifically mapped as an APZ, SFAZ or FEZ are considered as LMZ for this risk management plan. For areas identified by an LMZ polygon on the map, please refer to the BFRMP document for the specific land management objectives.

Zone	Purpose	Suppression Objective(s)	Zone characteristics
Asset Protection Zone	To protect human life, property and highly valued public	To enable the safe use of Direct Attack suppression strategies within the zone.	As per RFS document Standards for Asset Protection Zones.
	assets and values.	To minimise bush fire impacts on undefended assets.	
Strategic Fire Advantage Zone	To provide strategic areas of fire protection advantage which will reduce the will reduce the protection of of bush fires, and reduce the potential for spot fire development; To aid containment of wildfires to existing management boundaries.	To improve the likelihood and safe use of: Parallel Attack suppression strategies within the zone. and/or Indirect Attack (back burning) in high to very high fire weather conditions within the zone. To reduce the likelihood of: Crown fire development within the zone. and/or Spot fire ignition potential from the zone.	Zone width related to suppression objectives and dependant upon: - Topography - Construction of adjacent firebreaks - Mosaic pattern of relativent - Location of adjacent firebreaks - Mosaic pattern of relativent Assess Overall Fluel Hazard (OFH) onciv vegetation communities read- nice vegetation communities read- plan. Management practices should aim the patterns so that the majority of the SFAZ has an OFH of less than high.
Land Management Zone	To meet relevant land management objectives in areas where APZs or SFAZs are not appropriate.	As per the land management and fire protection objectives of the responsible land management agency. To reduce the likelihood of spread of fires. To undertake mosaic burning	As appropriate to achieve land management e.g. heritage and/or fire protection e.g. broad scale mosaic burning objectives.
Fire Exclusion	To exclude bush	N/A	Variable dependant on size of fire



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Muswellbrook BFMC Bush Fire Risk Management Plan 2011

South - Map Display Area

Map 2 of 2

This Bush Fire Risk Management Plan (BFRMP) has been prepared by the Muswellbrook Bush Fire Management Committee (BFMC) pursuant to section 52 of the Rural Fires Act 1997.

The aim of this BFRMP is to reduce the adverse impact of bush fires on life, property and the envir

The objectives of this BFRMP are to: - reduce the number of human-induced bush fire ignitions that cause damage to [ife, property or the environment; - manage fuel to reduce the spread and intensity of bush fires while minimizing environmental@cological impacts; - reduce the community's vulnerability to bush fires by improving its preparedness; and - efficiently contain fires with a polential to cause damage to [ife, property and the environment.

This map forms part of the BFRMP for the Muswellbrock BFMC, covering the local government area(s) of Muswellbrock. It should be viewed in conjunction with the accompanying BFRMP document which provides further details on the BFMC area, the assess assessed and the risk assessment process used.



Review
Under the Rural Fires Act 1997 this plan must be reviewed and updated within each successive five year period
following the constitution of the BFMC. The Muswellbrock BFMC will also review this plan as necessary. This may be
triggered by a range of circumstances, including but not limited to:
- charges to the BFMC area, organisational reported by the result of the BFMC area in the area, or
- clowing a major free event.
- Statistical area of the area of the BFMMP is a substrated by the Muswellbrock BFMC and community to be at risk from
but fires, assesses the but fire risk be calculated the assigns treatments designed to miligate the risk. Assets in the
BFMC area identified as requiring treatments are listed in the assets table. Other assets within the BFMC area that
were assessed as on frequiring treatments are listed in the assets.

document. The Map Kert muther fix. Vencines intrinspense assess. **Treatments**Specific treatments assigned to assets in the Muswellbrock area are listed in the treatments lable and linked to the
assets which have a designed to protect. Standard eMN wide treatments (i.e. not linked to a specific asset) which
cocur on an ongoing basis which the BFNG area are.

• ensuing developments in the bunck. Standard eMN wide treatments (i.e. not linked to a specific asset) which
use the Local Environment Plank (LEPA) to control development in areas with a bush fire risk;
• varying the standard bush fire danger periods
• prosecution of atomistal offendes
• prosecution of atomistal dimensiones
• assessing the cocal Environment Plank (LEPA) to control development in areas with a bush fire risk;
• varying the standard bush fire danger periods
• prosecution of atomistal offendes
• assessing and atomistal dimensiones
• assessing and atomistal dimensiones
• assessing and atomistal dimensiones
• assessing and another and there of administration of the standard there is the danger periods
• prosecution of a stocal coordination Plan;
• assessing and managing compliance with strategic fire-fighting resource allocation management systems;
• preparation of a SS2 Operations Coordination Plan;
• the management plank or plane to management; ad
• bash fire taxed compliants.

Note on LMZ: All areas not specifically mapped as an APZ, SFAZ or FEZ are considered as LMZ for this risk management plan. For areas identified by an LMZ polygon on the map, please refer to the BFRMP document for the specific land management objectives.

Zone	Purpose	Suppression Objective(s)	Zone characteristics
Asset Protection Zone	To protect human life, property and highly valued public	To enable the safe use of Direct Attack suppression strategies within the zone.	As per RFS document Standards for Asset Protection Zones.
	assets and values.	To minimise bush fire impacts on undefended assets.	
Strategic Fire Advantage Zone	To provide strategic areas of fire protection advantage which will reduce the speed and intensity of bush fires, and reduce the potential for spot fire development; To aid containment of wildfires to existing management boundaries.	To improve the likelihood and safe use of: Parallel Attack suppression strategies within the zone. and/or Indirect Attack (back burning) in high to very high fire weather conditions within the zone. To reduce the likelihood of: Crown fire development within the zone. and/or Spot fire ignition potential from the zone.	Zone width related to suppression objectives and dependant upon: - Topography - Spacing propensity - Location of adjacent firstreaks - Mosaica pattern of treatment Assess Overall Fuel Hazard (OFH) once vegatalizer communities reads- plan. Management practices should aim active mosaic fuel reduction patients so halt the migriphy of the SFAC has an OFH of less than high.
Land Management Zone	To meet relevant land management objectives in areas where APZs or SFAZs are not appropriate.	As per the land management and fire protection objectives of the responsible land management agency. To reduce the likelihood of spread of fires. To undertake mosaic burning	As appropriate to achieve land management e.g. heritage and/or fire protection e.g. broad scale mosaic burning objectives.
Fire Exclusion	To exclude bush	N/A	Variable dependant on size of fire



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