

Bush Fire Risk Management Plan

Planning together



Mosman / North Sydney / Willoughby

Bush Fire Management Committee

Local Government Areas of Mosman, North Sydney and Willoughby

Bush Fire Coordinating Committee – Policy No 01/2023

Commencing 2024

Approval

In accordance with the Rural Fires Act 1997, this Bush Fire Risk Management Plan has been prepared by the Mosman North Sydney Willoughby Bush Fire Management Committee and has been endorsed at the BFMC meeting on 26th October 2023 for submission to the Bush Fire Coordinating Committee.

Recommended



Cr. Roy Bendall

Chair

Mosman North Sydney Willoughby
Bush Fire Management Committee

Approved



Chair

Bush Fire Coordinating Committee

26/06/2024

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Chapter 1

Introduction

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1.1 Acknowledgement to Country

The Mosman North Sydney Willoughby Bush Fire Management Committee (BFMC) acknowledges and pays respect to the Traditional Owners of the lands on which we work, and the lands we travel through. We also acknowledge our Elders – past, present and emerging.

1.2 Introduction

A Bush Fire Risk Management Plan (BFRMP) provides information on the bush fire risks within your community. It also outlines how land managers along with fire authorities are going to effectively manage those risks through implementing various treatment strategies.

The development of a BFRMP is a legal requirement under section 52 of the *Rural Fires Act 1997* (NSW) (the Act). The BFRMP, including the accompanying appendices and spatial data, is prepared by the Mosman North Sydney Willoughby BFMC and is approved by the Bush Fire Coordinating Committee (BFCC).

A BFRMP is a strategic document that identifies community assets and values that may be at risk from bush fire and identifies coordinated multi-agency objectives and associated treatment strategies to reduce the risk over a five year period. Treatment strategies may include such actions as hazard reduction burning, mechanical clearing, targeted community engagement programs and ignition prevention activities. The treatment strategies are implemented by the member agencies / organisation of the BFMC and are monitored and reported on an ongoing basis.

This document (including its appendices) and the accompanying maps form the BFRMP for the Mosman North Sydney Willoughby BFMC area. It covers both public and private land and is to be reviewed and monitored annually.

This BFRMP is applied in conjunction with the BFMCs Fire Access and Fire Trail (FAFT) Plan and Operations Coordination Plan to provide a comprehensive approach to risk mitigation and operational preparedness.

1.3 Aim and objectives

The aim of this BFRMP is to reduce the risk of adverse impacts of bush fires on life, property, infrastructure and environmental, economic, cultural, agricultural and community assets.

The objectives of this BFRMP are to:

- Objective 1:** Reduce the number of human induced bush fire ignitions and their potential to cause damage to life, property, infrastructure and environmental, economic, cultural, agricultural and community assets.
- Objective 2:** Manage fuel to reduce the rate of spread, intensity and impact of bush fires on life and assets while minimising damage to environmental and cultural values.
- Objective 3:** Increase the community's resilience to bush fires by improving its preparedness, response and recovery.
- Objective 4:** Provide advice and strategies to plan, prepare and implement activities to effectively contain fires with the potential to cause damage to life, property, infrastructure and environmental, economic, cultural, agricultural and community assets.

1.4 The Planning Process

The Australia/New Zealand Standard AS/NZS 31000: 2018 Risk Management was used to guide the bush fire risk assessment process. This is outlined in Figure 1 below.



Figure 1: Overview of the risk assessment process

Chapter 2

Risk Assessment

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2.1 Assets

An asset is something that is valued by the community. There are four main categories of assets considered in the BFRMP, each with subcategories.

2.1.1 Human settlement

- Residential areas including urban-bushland interface areas and rural properties; and
- Special Fire Protection areas including schools, hospitals, nursing homes, and tourist facilities.

2.1.2 Economic

- Agricultural – includes crops, bulk grain storage, grazing, horticulture, intensive animal production, livestock, fencing and major machinery sheds;
- Commercial – includes commercial services, Defence facilities, research facilities and ports and water transport;
- Electrical - including transmission lines, substations and electricity generation plants;
- Forestry assets – native forests, hardwood and softwood plantations;
- Industrial – includes general purpose factories, food processing factories, major industrial complexes, abattoirs, oil refineries and sawmills;
- Infrastructure – airports, communication towers, roads, railways, waste treatment plants, water treatment plants;
- Mining – combustible, non-combustible and underground;
- Recreational – community recreational facilities and major sporting and recreation complexes; and
- Water catchments.

2.1.3 Environmental

- Threatened Flora and Fauna – includes iconic species such as koalas and the Wollemi pine, threatened species, threatened ecological communities (TECs), and threatened populations at risk of extinction in NSW;
- Fire sensitive vegetation communities – includes regulated wetlands, RAMSAR wetlands and rainforests vegetation communities;
- Land covered by statutory conservation and biodiversity agreements;
- World Heritage and national and state heritage listed areas;

- Land with geological significance – includes land with high erosion potential, or geotechnical risk, karst landscapes and sand dunes;
- Environmentally significant land identified by an Environmental Planning Instrument - includes Local Environmental Plans (LEPs) and State Environmental Planning Policies (SEPPs); and
- Other locally important assets – including vegetation identified as bushfire refugia, bush regeneration areas, Assets of Intergenerational Significance (AIS).

Note: not all of these assets have quantitative risk assessment methodologies.

2.1.4 Cultural

- Aboriginal heritage – including items recorded in the Aboriginal Heritage Information Management System and predictive site locations from the Aboriginal Sites Decision Support Tool (ASDST);
- Non-indigenous cultural heritage – items and places from the State Heritage Inventory, Section 170 Heritage and Conservation Register and the Historic Heritage Information Management System.

Assets across all four categories have been identified using geographic information system (GIS) data including land use classifications and cadastre (Lot boundaries), as well as local knowledge.

2.2 Neighbourhood Safer Places

A Neighbourhood Safer Place (NSP) is defined by section 62C of the *Rural Fires Act 1997* as “land or a building designated as a neighbourhood safer place”. NSPs provide a place of last resort for people during a bush fire. All designated NSP locations for NSW are available at www.rfs.nsw.gov.au.

The Mosman North Sydney Willoughby BFMC considered the number and location of Neighbourhood Safer Places (NSPs) within the BFMC area. All NSPs in Mosman North Sydney Willoughby BFMC area require ongoing treatment by the applicable land owner to ensure that the asset remains viable as a place of last resort for people during a bush fire. Therefore, all NSPs within the BFMC area are required to be treated and have been included in the Fuel Management Register.

2.3 Risk Identification and Analysis

This BFRMP is underpinned by a risk quantification methodology based on fire behaviour modelling (Phoenix RapidFire). The fire simulation process applies an ignition model, local historical weather and historical fire information to determine where fires are most likely to occur in the landscape. A Bayesian Decision Network model is used to quantify the bush fire risk to each asset in the landscape based on relevant vulnerability criteria.

Bush fire risks may also be identified during the process from qualitative assessment methodologies. For example where expert local knowledge identifies a significant area of concern, challenges in firefighting or locally significant values.

The risk maps for each asset category are provided in Appendix 3.

For a detailed description of the methodology used for assessing bush fire risk, please see BFCC Policy 01/2023 - Bush Fire Risk Management and supporting documents, available on the NSW RFS website: www.rfs.nsw.gov.au.

Chapter 3

Treating Risk

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3.1 Treatments

The purpose of risk treatment is to reduce the likelihood and/or harmful consequences of bush fire to the community and environment, through a process of selecting and implementing risk treatment options that modify the characteristics of the hazard, the community or the environment. There are three types of treatments considered in the BFRMP:

1. BFMC Wide Treatments;
2. Focus Area Treatments; and
3. Fuel Management Treatments.

BFMC members and land managers routinely implement risk treatment strategies in accordance with legislative requirements, policy and asset management. For example, vegetation management, restrictions on development in bush fire prone areas, bush fire education and fire suppression activities. We refer to these as BFMC Wide Treatments. These activities occur outside the BFRMP and reduce the bush fire risk to assets and communities throughout the BFMC area.

The risk assessment process applied in this BFRMP assists BFMCs in identifying strategic Fuel Management Treatments and Focus Area Treatments.

Fuel Management Treatments include hazard reduction burns and vegetation clearing. These are designed to protect life, property and the environment from intense bush fires. While they will not completely stop bush fires from starting and spreading, these treatments can help protect firefighters, assist with containment strategies and reduce the potential damage to community assets and environmental values.

Focus Areas are groups of assets in the landscape that the BFMC has identified as having significant or unacceptable risk. The BFMC has specifically identified Focus Area Treatments for these areas and they prioritise these treatments over all others.

3.1.1 BFMC Wide Treatments

BFMC wide treatments are activities which are undertaken to reduce the overall bush fire risk within the BFMC area.

The following table identifies the BFMC wide treatments applicable to the Mosman North Sydney Willoughby BFMC area.

TREATMENT	DESCRIPTION
Plan of Operations	Under Part 3 Division 4 Sections 52 and 53 of the <i>Rural Fires Act 1997</i> , BFMCs are required to prepare and submit to the BFCC a Plan of Operations and must review the Plan every two years. The Plan of Operations details the co-ordinated firefighting arrangements and fire management practices and ensures that each BFMC member is able to execute its role and specific responsibilities.
Treatments in the Fire Access and Fire Trail Plan Treatment Register	Under section 52 of the Act, BFMCs must develop a Fire Access and Fire Trail (FAFT) Plan for their area and must review the FAFT Plan every five years. Fire trails are an important part of ensuring firefighters can access fires and safely contain them. Fire trails may also be used as fire control lines for hazard reduction burns, however this is not their primary purpose. In accordance with the NSW RFS Fire Trail Standards the BFMC may prepare a Treatment Register which sets out a schedule of works for the construction and maintenance of fire trails. The Standards provide that the Treatment Register is updated annually by 31 May each year and typically forms part of a FAFT Plan. Treatments contained within the FAFT Plan Treatment Register (as amended from time to time) are BFMC Wide Treatments under this BFRMP.
Ignition Prevention Plan	The BFMC will develop an Ignition Prevention Plan (IPP). The purpose of the IPP is to provide firefighting authorities, NSW Police and Local Authorities with localised strategies to prevent ignitions. In particular, deliberate or careless ignitions and illegal fires.
Land & Asset Management	There are organisational plans, standard policies, Regulations and procedures for the management of assets and/or land managed by BFMC members. For example vegetation clearance around power lines, maintenance of public land, and agency-specific fire management plans.
Local Environmental Plans	Local Environmental Plans (LEPs) guide planning decisions for local government areas. They do this through zoning and development controls, which provide a framework for the way land can be used. LEPs can be used to exclude development in significant bush fire risk areas or in areas where bush fire protection measures cannot be incorporated.
Environmental Approval for all Hazard Reduction	Land management agencies will obtain environmental approval (through the Bush Fire Environmental Assessment Code, or other approval process) to undertake any activities that have the potential to impact the environment e.g. hazard reduction burning or vegetation removal. The environmental assessment process considers flora, fauna, threatened species, cultural assets, soil erosion, riparian areas, biodiversity fire regimes, weeds and air pollution (smoke).
Bush Fire Prone Land Mapping and Planning for Bush Fire Protection	Section 10.3 of the <i>Environmental Planning & Assessment Act 1979</i> requires the land subject to a BFRMP to be mapped in accordance with Guide for Bush Fire Prone Land Mapping. Bush Fire Prone Land Maps are used as a trigger mechanism to ensure that new development is approved in accordance with Planning for Bush Fire Protection (PBP). PBP sets planning specifications which aim to increase the likelihood of structures surviving a bush fire, and in combination with Australian Standard 3959 Building in Bush Fire Prone Areas which specifies building standards.

	All new development on Bush Fire Prone Land will be assessed in accordance with PBP.
Hazard complaints	It is the duty of land owners to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, their land. Under section 66 of the <i>Rural Fires Act 1997</i>, a Bush Fire Hazard Reduction Notice can be issued, directing a hazard be removed. This Notice can be issued to private and public landowners. If the Bush Fire Hazard Reduction Notice is not complied with, the NSW RFS will remove the hazard, and may pursue the cost from the landowner. Under Section 73 and Section 74E of the Act, the NSW RFS Commissioner may direct hazard reduction works to be undertaken.
Community engagement	This includes state-wide public awareness initiatives as well as local community interactions between fire agencies, land managers and local communities.
BFMC Bush Fire Danger Period	The <i>Rural Fires Act 1997</i> sets the statutory Bush Fire Danger Period. A Fire Permit is required for burning activities during the Bush Fire Danger Period in Rural Fire districts and at all times in Fire and Rescue (FRNSW) districts around the state. Fire Permits help ensure fire is used safely during the Bush Fire Danger Period. A permit imposes conditions on the way a fire is lit and maintained, and can only be issued by authorised Permit Issuing Officers. The permit provides landholders who intend to burn, with the conditions they are to adhere with to ensure adequate and appropriate measures are in place, and that fires remain under control.
Firefighting response	All firefighting authorities in NSW have legislation, regulations, policies and procedures for responding to bush fire events within their area of jurisdiction.
Prosecution of arsonists / offenders	Under the <i>Rural Fires Act 1997</i> persons may be prosecuted for a range of offences. These offences include: • deliberately setting fire to the land of another person without consent; • lighting a fire without notifying the relevant authority; • 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.

Table 1: BFMC Wide Treatments

3.1.2 Fuel Management Treatments

Hazard reduction is an important component of managing bush fire risk. Hazard reduction involves removing or reducing the fuel (vegetation) in order to modify the potential fire behaviour, to reduce extreme bush fire behaviour and associated impact to firefighters and to community assets and values, to assist in fire suppression and to enable appropriate fire regimes to be implemented.

The BFRMP Fuel Management Register is a list of hazard reduction activities that the Mosman North Sydney Willoughby BFMC has identified as strategic treatments in the BFRMP. The fuel management treatments include prescribed burns, vegetation removal in BFMC-managed asset protection zones and the development or maintenance of fire breaks.

All hazard reduction activities listed in the Fuel Management Register are proposed to be completed within the five-year term of BFRMP, however, those activities that are linked to a Focus Area will be treated as a priority.

See Appendix 2 for the Mosman North Sydney Willoughby BFMC Fuel Management Register.

3.1.3 Focus Area Treatments

The management of bush fire risks involves a coordinated approach from fire authorities, landowners, land managers, planning authorities, local councils and the community. Even with the combined resources of these stakeholders, it is still not possible or practical to actively treat all bush fire risks across the landscape. It is therefore important for communities and BFMCs to determine what areas will form the focus for the application of specific treatment strategies in this BFRMP.

Focus Areas were determined through an analysis of the quantitative risk assessment data, but also consider factors such as the social vulnerability of the community, access and egress and local significance.

There are four Focus Areas within the Mosman North Sydney Willoughby BFRMP. These are:

- Castle Cove / Middle Cove / Castlecrag;
- Chatswood West / Lane Cove North;
- Mosman; and
- Wollstonecraft / Waverton

These are areas that have been specifically identified as having an unacceptable risk and require additional, targeted treatment strategies within the five-year BFRMP.

There are four key objectives available to manage the bush fire risk to Focus Areas and each objective has a number of associated Treatment Strategies (

KEY OBJECTIVE	FOCUS AREA TREATMENT STRATEGY
Fuel Management Reduction or modification of bush fire fuel with the intent of slowing the spread of bush fire and aiding firefighting operations.	Asset Protection Zone
	Ignition Management Zone
	Strategic Fire Advantage Zone
	Land Management Zone
	Fire Break; Linear

	Fire Break; Transport Corridor
	Grazing Program
Ignition Prevention Prevention or reduction of bush fire ignitions (arson & accidental).	Community Engagement; Risk Awareness
	Fire Break; Linear
	Fire Break; Transport Corridor
	Access Restriction; addressed in BFMC Ignition Prevention Plan
	Patrol; addressed in BFMC Ignition Prevention Plan
Community Preparedness Measures to enhance community preparedness for bush fire in order to reduce risk to life and assets.	Community Engagement; Risk Awareness
	Community Engagement; Planning
	Community Engagement; Preparation
	Community Engagement; Community Resilience
	Community Engagement; Community Response
Response Area specific response requirements in addition to standard procedures.	Operational Readiness Arrangements; addressed in BFMC Plan of Operations
	Neighbourhood Safer Place; addressed in BFMC Plan of Operations
	Pre-Incident Plan; addressed in BFMC Plan of Operations
	Fire Access or Fire Trail; addressed in BFMC FAFT Plan

Table 2). The BFMC has identified the most appropriate objectives and treatment strategies for each Focus Area. The Focus Area treatment strategies selected by the BFMC will be addressed annually as part of the BFMC Annual Works Program.

KEY OBJECTIVE	FOCUS AREA TREATMENT STRATEGY
Fuel Management Reduction or modification of bush fire fuel with the intent of slowing the spread of bush fire and aiding firefighting operations.	Asset Protection Zone
	Ignition Management Zone
	Strategic Fire Advantage Zone
	Land Management Zone
	Fire Break; Linear
	Fire Break; Transport Corridor
	Grazing Program
Ignition Prevention	Community Engagement; Risk Awareness
	Fire Break; Linear
	Fire Break; Transport Corridor

Prevention or reduction of bush fire ignitions (arson & accidental).	Access Restriction; addressed in BFMC Ignition Prevention Plan
	Patrol; addressed in BFMC Ignition Prevention Plan
Community Preparedness Measures to enhance community preparedness for bush fire in order to reduce risk to life and assets.	Community Engagement; Risk Awareness
	Community Engagement; Planning
	Community Engagement; Preparation
	Community Engagement; Community Resilience
	Community Engagement; Community Response
Response Area specific response requirements in addition to standard procedures.	Operational Readiness Arrangements; addressed in BFMC Plan of Operations
	Neighbourhood Safer Place; addressed in BFMC Plan of Operations
	Pre-Incident Plan; addressed in BFMC Plan of Operations
	Fire Access or Fire Trail; addressed in BFMC FAFT Plan

Table 2: Key Objectives for Treatment Strategies.

For more information on Treatment Strategies see Annex B of BFRMP Guidelines of BFCC Policy 01/2023.

See Appendix 1 for the Mosman North Sydney Willoughby Focus Area descriptions, Key Objectives and Treatment Strategies.

3.2 Bush Fire Management Zones

Bush Fire Management Zones were identified within the Mosman North Sydney Willoughby BFMC area and have been mapped as part of the Fuel Management Register. These zones identify the fire management intent for a specific area. The five categories of Bush Fire Management Zones are:

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

See Annex C BFRMP Guidelines of BFCC Policy 01/2023 for further information on bush fire management zones including a description of the zones and their purposes.

3.3 Relationship with other Plans

Under section 52 of the Rural Fires Act 1997, each BFMC must prepare and submit to the Bush Fire Coordinating Committee a draft of each of the following:

- A bush fire management plan (defined to be both a BFRMP and a fire access and fire treatment plan (FAFT Plan); and
- A Plan of Operations.

These BFMC planning documents should complement each other, however, a FAFT Plan prevails over the BFRMP to the extent of any inconsistency in accordance with section 59A(4) of the Rural Fires Act 1997.

Treatments contained within the FAFT Plan Treatment Register (as amended from time to time) are BFMC Wide Treatments under this BFRMP.

Additionally, an Ignition Prevention Plan will be prepared for the BFMC. Other plans such as Community Protection Plans, agency specific Fire Management Strategies, or private property fire plans may be prepared, however as this BFRMP has been prepared in accordance with the Act, all other plans are subordinate to it.

Chapter 4

Communication and Consultation

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4.1 Communication and Consultation

Community participation is an integral part of risk management. The BFMC undertook consultation with the community during the development phase of the BFRMP as outlined in Appendix 4. The Communication 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. This involved member agencies engaging with their stakeholders to ensure their views are represented in the BFRMP and that they understand their own responsibility in risk management.

In accordance with section 57 of the Rural Fires Act 1997, the draft BFRMP was placed on public exhibition to provide an opportunity for the community to have formal input, and that input has been taken into account and reflected in the BFRMP.

This plan will be available from the RFS web site and must also be available for public inspection at, and be able to be obtained free of charge from, the office of the local authority for the area to which it relates during ordinary office hours.

Chapter 5

Performance Monitoring and Review

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5.1 Monitoring and Review

This BFRMP must be reviewed and updated within each successive five-year period from the constitution of the BFMC. The Mosman North Sydney Willoughby BFMC will also review this BFRMP as necessary to account for any changes in context or risk on account of changes to the BFMC area, organisational responsibilities or legislation; changes to the bush fire risk in the area; changes to the Treatment Register; or following a major fire event.

The BFMC is required to monitor progress towards the completion of treatment works listed in the BFRMP, and the timeliness of the works. This is done through an Annual Works Program and also an Annual Report. The BFRMP may also be audited at the request of the NSW RFS Commissioner or the BFCC.

Chapter 6

Appendices

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This BFRMP is supported by a number of appendices, including:

1. Focus Areas
2. Fuel Management Register (List)
3. Maps:
 - 3.1 Residential and Special Fire Protection Purpose Risk Current
 - 3.2 Economic Risk Current
 - 3.3 Aboriginal Predicted Sites Risk Current
 - 3.4 Environmental Risk Current
 - 3.5 Fuel Management Register & Focus Areas
4. Communication Strategy

Appendix 1

Focus Areas

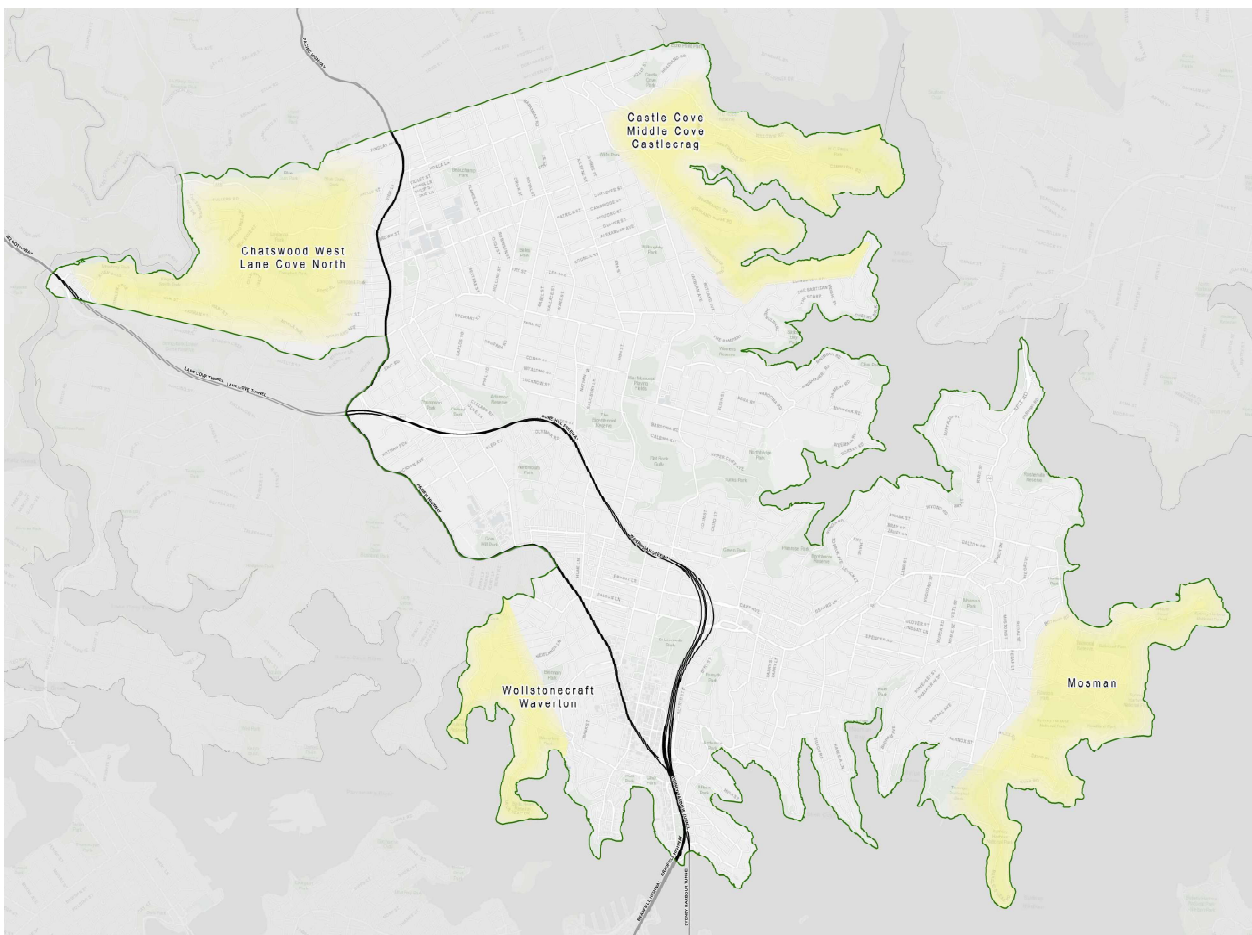
FOCUS AREAS

1.1 Castle Cove / Middle Cove / Castlecrag

1.2 Chatswood West / Lane Cove North

1.3 Mosman

1.4 Wollstonecraft / Waverton



1.1 Castle Cove / Middle Cove / Castlecrag

Risk Profile

The Mosman North Sydney Willoughby Bush Fire Management Committee (BFMC) has assessed the risk to residential, special fire protection purpose facilities (schools, healthcare, childcare etc), economic, environmental and cultural assets and has identified the areas of Castle Cove, Middle Cove and Castlecrag as a Focus Area.

The variation in vegetation types, topography, proximity to assets and potential for rapid impact in the event of a bush fire were prime considerations by the BFMC in defining this Focus Area.

The area is exposed to deliberate or accidental bush fire ignition and there is potential, during periods of elevated fire danger rating, for rapid impact upon nearby assets. This is particular along the urban areas that are immediately adjacent to areas with extended vegetation corridors and forests adjoining large reserves.

Small bush/grass fires have occurred frequently in this area, with no significant bush fires during the past 20 years. Access for emergency services to this area, along urban streets and tracks within the reserves is limited. This challenge may also impact movement of residents and visitors to the area during a bush fire emergency.

A number of residential homes and properties have been identified in the Highest Risk category within this area. There are also a number of Aboriginal Sites that have been identified as within the Highest Risk category. There are special fire protection sites (primarily schools) identified as being within the Moderate Risk category and environmental sites within the Low Risk category, within this area.

There are social and demographic factors contributing to the risk in this area, including a high proportion of aged residents. This may make the community more vulnerable to the impacts of bush fire.

The reserves within this area (from Echo Point in the north, via Fig Tree Cove, to Sugarloaf Point in the south) are visited by local residents and persons from further afield for recreation and other activities. These visitors may be vulnerable in the event of a bush fire if they have a lower risk awareness.

A key BFMC objective in the Castle Cove / Middle Cove / Castlecrag Focus Area is Community Preparedness. In particular, the preparation of Bush Fire Survival Plans for residents and fire awareness information to inform temporary visitors. The BFMC will achieve this through the provision of resources and the implementation of programs that will help residents and visitors to this area better understand their risk and prepare for bush fire.

As identified in the Fuel Management Register, the BFMC will implement hazard reduction burns to achieve a Strategic Fire Advantage Zone and for ignition prevention, as well as maintain Asset Protection Zones. To increase resilience within the Focus Area the BFMC will identify specific operational response strategies for the identified assets within this area.

The key Bush Fire Risk Management Plan Objectives and Treatment Strategies are listed in Table 1.

Castle Cove / Middle Cove / Castlecrag Focus Area - Treatment Strategies

Table 1		
BFMC OBJECTIVE	TREATMENT STRATEGY	REFERENCE
Community Preparedness	Community Engagement; Risk Awareness	CM.RA
	Community Engagement; Planning	CM.PL
	Community Engagement; Preparation	CM.PR
Fuel Management	Strategic Fire Advantage Zone; prescribed burns	CM.SF
	Asset Protection Zones	CM.AP
Response	Pre-Incident Plan; to be addressed in BFMC Plan of Operations	CM.PI
	Operational Readiness Arrangements; addressed in BFMC Plan of Operations	CM.OR

1.2 Chatswood West / Lane Cove North

Risk Profile

The Mosman North Sydney Willoughby Bush Fire Management Committee (BFMC) has assessed the risk to residential, special fire protection purpose facilities (schools, healthcare, childcare etc), economic, environmental and cultural assets and has identified the areas of Chatswood West and Lane Cove North as a Focus Area.

The variation in vegetation types, topography, proximity to assets and potential for rapid impact in the event of a bush fire were prime considerations by the BFMC in defining this Focus Area.

The area is exposed to deliberate and accidental bush fire ignition and significant potential for rapid fire development along the vegetation corridor, which is adjacent to urban areas. The area is also exposed to a potential large, uncontrolled fire from forested areas along Lane Cove River, to the North West. There has been one significant bush fire within 20 years in the vicinity, in 2011.

A number of residential homes and properties have been identified in the Moderate Risk category within this area. There are also a number of Aboriginal Sites and Environmental Sites that have been identified as within the Low Risk category.

There are social and demographic factors identified for this area, including a high proportion of residents who are new to the area, along with aged residents. These factors may make the community more vulnerable to the impacts of bush fire.

The reserves within this area (from Blue Gum Creek in the north, via Swaines Creek, to Epping Road in the south) are locations frequented by persons from nearby and further afield for recreation, sport and other activities. These visitors may be vulnerable in the event of a bush fire if they have a lower risk awareness.

A key BFMC objective in the Chatswood West / Lane Cove North Focus Area is Community Preparedness. In particular, the preparation of Bush Fire Survival Plans for residents and fire awareness information to inform temporary visitors. The BFMC will achieve this through the provision of resources and the implementation of programs that will help residents and visitors to this area better understand their risk and prepare for bush fire.

As identified in the Fuel Management Register, the BFMC will maintain Asset Protection Zones and undertake prescribed burns to assist in reducing the impact of bush/grass fires in the vicinity.

To increase resilience within the Focus Area the BFMC will identify specific operational response strategies for the identified assets within this area.

The key Bush Fire Risk Management Plan Objectives and Treatment Strategies are listed in Table 2.

Chatswood West / Lane Cove North Focus Area - Treatment Strategies

Table 2		
BFMC OBJECTIVE	TREATMENT STRATEGY	REFERENCE
Community Preparedness	Community Engagement; Risk Awareness	CL.RA
	Community Engagement; Planning	CL.PL
	Community Engagement; Preparation	CL.PR
Response	Operational Readiness Arrangements; addressed in BFMC Plan of Operations	CL.OR
	Pre-Incident Plan; to be addressed in BFMC Plan of Operations	CL.PI
Fuel Management	Asset Protection Zones	CL.AP
	Strategic Fire Advantage Zone; prescribed burns	CL.SF

1.3 Mosman

Risk Profile

The Mosman North Sydney Willoughby Bush Fire Management Committee (BFMC) has assessed the risk to residential, special fire protection purpose facilities (schools, healthcare, childcare), economic, environmental and cultural assets and has identified Mosman as a Focus Area.

The variation in vegetation types, topography, proximity to assets and potential for rapid impact in the event of a bushfire were prime considerations by the BFMC in defining this Focus Area.

The area is exposed to deliberate or accidental bush fire ignition and there is potential, during periods of elevated fire danger rating, for rapid impact upon nearby assets. This is particular along the urban interface adjoining forested areas to the east. No significant bush fires have occurred in this area during the past 20 years. Access for emergency services to this area, along urban streets and tracks within the reserves is limited. This challenge may also impact movement of residents and visitors to the area during a bush fire emergency.

A number of residential homes and properties have been identified in the Moderate Risk category within this area. There are Special Fire Protection Purpose sites (SFPP), primarily education, aged care and tourist facilities, identified as in the Moderate Risk category. There are also a number of Aboriginal sites, Environmental sites and Economic sites identified as in the Low – Moderate Risk categories. There are a number of Historic sites that have been identified as within the Highest Risk category within this area.

There are social and demographic factors including a high proportion of residents who are aged, are new to the area or of non-English speaking backgrounds. These factors may make the community more vulnerable to the impacts of bush fire.

The reserves within this area (from Middle Head in the north to Bradleys Head in the south) are locations frequently visited by persons from nearby and further afield for recreation and other activities. These visitors may be vulnerable in the event of a bush fire if they have a lower risk awareness.

A key BFMC objective in the Mosman focus area is Fuel Management. As identified in the Fuel Management Register, the BFMC will maintain Asset Protection Zones and will implement hazard reduction burns to achieve Strategic Fire Advantage and for ignition prevention.

A key BFMC objective in the Mosman Focus Area is Community Preparedness. In particular, the preparation of Bush Fire Survival Plans for residents and fire awareness information to inform temporary visitors. The BFMC will achieve this through the provision of resources and the implementation of programs that will help residents/ visitors to this area better understand their risk and prepare for bushfire.

To increase resilience within the Focus Area the BFMC will identify specific operational response strategies for the Aboriginal, environmental assets and other assets of concern. The BFMC Fire Access and Fire Trail network will be reviewed and maintained.

The key Bush Fire Risk Management Plan Objectives and Treatment Strategies are listed in Table 3.

Mosman Focus Area - Treatment Strategies

Table 3		
BFMC OBJECTIVE	TREATMENT STRATEGY	REFERENCE
Fuel Management	Strategic Fire Advantage Zone; prescribed burns	MM.SF
	Asset Protection Zones	MM.AP
Community Preparedness	Community Engagement; Risk Awareness	MM.RA
	Community Engagement; Planning	MM.PL
	Community Engagement; Preparation	MM.PR
Response	Fire Trails; to be addressed in BFMC Fire Access and Fire Trail Plan	MM.FA
	Operational Readiness Arrangements; addressed in BFMC Plan of Operations	MM.OR
	Pre-Incident Plan; to be addressed in BFMC Plan of Operations	MM.PI

1.4 Wollstonecraft / Waverton

Risk Profile

The Mosman North Sydney Willoughby Bush Fire Management Committee (BFMC) has assessed the risk to residential, special fire protection purpose facilities (schools, health facilities, childcare), economic, environmental and cultural assets and has identified Wollstonecraft - Waverton as a Focus Area.

The variation in vegetation types, topography, proximity to assets and potential for rapid impact in the event of a bushfire were prime considerations by the BFMC in defining this Focus Area.

The area is exposed to deliberate or accidental bush fire ignition and there is potential, during periods of elevated fire danger rating, for rapid impact upon nearby assets. This is particularly the case along the urban interface adjoining forested areas to the west of Badangi Reserve and Gore Cove Reserve. No significant bush fires have occurred in this area during the past 20 years. Access for emergency services to this area, along urban streets and walking tracks within the reserves is limited. This challenge may also impact movement of residents and visitors from the area during a bush fire emergency.

A number of Economic sites have been identified in the Highest Risk category within this area. There are Aboriginal sites, Environmental sites and Historic sites identified as in the Low Risk category within this focus area. A number of residential homes and properties, including a high proportion of multi-unit dwellings (MUDs) have been identified within the Low Risk category.

There are social and demographic factors including aged residents and a high proportion of residents who are new to the area or do not have a vehicle. These factors may make the community more vulnerable to the impacts of bush fire.

The reserves within this area (from Smoothey Park/Gore Cove Reserve in the west, via Berry Island/Badangi Reserve across to Balls Head Reserve and Waverton Park in the east) are locations frequented by persons from nearby and further afield for recreation and other activities. These visitors may be vulnerable in the event of a bush fire if they have a lower risk awareness.

A key BFMC objective in the Wollstonecraft-Waverton Focus Area is Fuel Management. As identified in the Fuel Management Register, the BFMC will maintain Asset Protection Zones and will implement many hazard reduction burns.

Another key objective is Community Preparedness; in particular, the preparation of Bush Fire Survival Plans for residents and fire awareness information to inform temporary visitors. The BFMC will achieve this through the provision of resources and the implementation of programs that will help residents and visitors to this area better understand their risk and prepare for bush fire.

To increase resilience within the Focus Area the BFMC will identify specific operational response strategies for the economic, Aboriginal, environmental assets and other assets of concern.

The key Bush Fire Risk Management Plan Objectives and Treatment Strategies are listed in Table 4.

Wollstonecraft / Waverton Focus Area - Treatment Strategies

Table 4		
BFMC OBJECTIVE	TREATMENT STRATEGY	REFERENCE
Fuel Management	Strategic Fire Advantage Zone; prescribed burns	WW.SF
	Asset Protection Zones	WW.AP
Community Preparedness	Community Engagement; Risk Awareness	WW.RA
	Community Engagement; Planning	WW.PL
	Community Engagement; Preparation	WW.PR
Response	Operational Readiness Arrangements; addressed in BFMC Plan of Operations	WW.OR
	Pre-Incident Plan; to be addressed in BFMC Plan of Operations	WW.PI

Appendix 2

Fuel Management Register

Table 2.1 Asset Protection Zones				
ID	Asset Protection Zone Name	Focus Area	Priority	Responsible Agency
AP.1	Avian Cres APZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
AP.2	Blue Gum Park APZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
AP.3	Fullers Park - Site 1 APZ	Chatswood West/ Lane Cove North	1	National Parks and Wildlife Service
AP.4	Greville St APZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
AP.5	Bampi APZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
AP.6	Bampi PI APZ	Castle Cove /Middle Cove/ Castlecrag	1	Willoughby City Council
AP.7	Harold Reid Reserve APZ	Castle Cove/ Middle Cove/Castlecrag	1	Willoughby City Council
AP.8	Harold Reid Reserve South APZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
AP.9	Beuna Vista St APZ	Mosman	1	National Parks and Wildlife Service
AP.10	Bradleys Head - Site 1 APZ	Mosman	1	National Parks and Wildlife Service
AP.11	Bradleys Head - Site 2 APZ	Mosman	1	National Parks and Wildlife Service
AP.12	Bradleys Head - Site 3 APZ	Mosman	1	National Parks and Wildlife Service
AP.13	Bradleys Head - Site 4 APZ	Mosman	1	National Parks and Wildlife Service
AP.14	Cross St APZ	Mosman	1	National Parks and Wildlife Service
AP.15	Georges Heights APZ	Mosman	1	Harbour Trust
AP.16	Middle Head - Site 1 APZ	Mosman	1	National Parks and Wildlife Service
AP.17	Middle Head - Site 2 APZ	Mosman	1	National Parks and Wildlife Service
AP.18	Middle Head - Site 3 APZ	Mosman	1	National Parks and Wildlife Service
AP.19	Middle Head Rd APZ	Mosman	1	Harbour Trust
AP.20	Tea Rooms and Heritage Fort APZ	Mosman	1	Harbour Trust
AP.21	Bridge End FMAZ APZ	Wollstonecraft/ Waverton	1	North Sydney Council
AP.22	Gore Cove FMAZ APZ	Wollstonecraft/ Waverton	1	North Sydney Council

Table 2.1 Asset Protection Zones				
ID	Asset Protection Zone Name	Focus Area	Priority	Responsible Agency
AP.23	Rowlison Pde FMAZ APZ		2	North Sydney Council
AP.24	The Boulevarde FMAZ APZ		2	North Sydney Council
AP.25	Tunks East FMAZ APZ		2	North Sydney Council
AP.26	Tunks Park Amenities APZ		2	North Sydney Council
AP.27	Tunks West FMAZ APZ		2	North Sydney Council

Table 2.2 Prescribed Burns

ID	Name	Strategy*	Focus Area	Priority	Responsible Agency
SF.28	Blue Gum Park HR	SFAZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
SF.29	Melrose PI HR	SFAZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
SF.30	Mowbray Scout Hall HR	SFAZ	Chatswood West/ Lane Cove North	1	Willoughby City Council
SF.31	Castle Cove Reserve (Holly St) HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.32	Clive Park Reserve (Minimbah Rd) HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.33	Explosives Reserve Lower Loop Track HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.34	Harold Reid Reserve HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.35	Power Box HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.36	Sunnyside Cres HR	SFAZ	Castle Cove/ Middle Cove/ Castlecrag	1	Willoughby City Council
SF.37	1801 Fort HR	SFAZ	Mosman	1	National Parks and Wildlife Service
SF.38	Balmoral (Unmade Amaroo Cres) HR	SFAZ	Mosman	1	Mosman Council
SF.39	Bradleys Bushland HR	SFAZ	Mosman	1	Mosman Council
SF.40	Chowder Bay HR	SFAZ	Mosman	1	Harbour Trust
SF.41	Chowder Bay Rd South HR	SFAZ	Mosman	1	National Parks and Wildlife Service
SF.42	Chowder Head HR	SFAZ	Mosman	1	National Parks and Wildlife Service
SF.43	Clifton Gardens HR	SFAZ	Mosman	1	National Parks and Wildlife Service
SF.44	Commonwealth Ave HR	SFAZ	Mosman	1	Harbour Trust
SF.45	Georges East HR	SFAZ	Mosman	1	Harbour Trust
SF.46	Headland Childcare HR	SFAZ	Mosman	1	Harbour Trust
SF.47	HMAS Penguin Stage 1 HR	SFAZ	Mosman	1	Department of Defence
SF.48	HMAS Penguin Stage 2 HR	SFAZ	Mosman	1	Department of Defence
SF.49	HMAS Penguin Stage 3 HR	SFAZ	Mosman	1	Department of Defence
SF.50	Lawry Plunkett HR	SFAZ	Mosman	1	Mosman Council
SF.51	Taylors Bay HR	SFAZ	Mosman	1	National Parks and Wildlife Service
SF.52	Badangi Reserve Point HR (Oyster Cove)	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council

Table 2.2 Prescribed Burns

ID	Name	Strategy*	Focus Area	Priority	Responsible Agency
SF.53	Balls Head Carpark HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.54	Balls Head Foreshore HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.55	Balls Head West HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.56	Balls Head Western Rd HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.57	Berry Island East HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.58	Berry Island West HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.59	Bridge End HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.60	Carradah Foreshore HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.61	Gore Cove North HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.62	Gore Cove Reserve HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.63	Tryon Ave Corner HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.64	Tryon Ave HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.65	Waverton Park East HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.66	Waverton Park Larkin St HR	SFAZ	Wollstonecraft/Waverton	1	North Sydney Council
SF.67	Artarmon Reserve - Epacris Burn HR	SFAZ		2	Willoughby City Council
SF.68	Bogota Ave HR	SFAZ		2	North Sydney Council
SF.69	Brightmore North East HR	SFAZ		2	North Sydney Council
SF.70	Brightmore Reserve Oval HR	SFAZ		2	North Sydney Council
SF.71	Flat Rock Gully, Small St HR	SFAZ		2	Willoughby City Council
SF.72	Forsyth Park Bent St HR	SFAZ		2	North Sydney Council
SF.73	Matora Ln North HR	SFAZ		2	North Sydney Council
SF.74	Primrose Park (Zig Zag Trk) HR	SFAZ		2	North Sydney Council
SF.75	Primrose Park North HR	SFAZ		2	North Sydney Council

Table 2.2 Prescribed Burns					
ID	Name	Strategy*	Focus Area	Priority	Responsible Agency
SF.76	Primrose Park South HR	SFAZ		2	North Sydney Council
SF.77	Quakers Hat Bushland HR	SFAZ		2	Mosman Council
SF.78	Reid Park HR	SFAZ		2	Mosman Council
SF.79	Sirius Cove Reserve HR	SFAZ		2	Mosman Council
SF.80	Spit West HR	SFAZ		2	Mosman Council
SF.81	The Scarp HR	SFAZ		2	Willoughby City Council
SF.82	Tunks East HR	SFAZ		2	North Sydney Council
SF.83	Tunks Park West HR	SFAZ		2	North Sydney Council
SF.84	Tunks West Interface HR	SFAZ		2	North Sydney Council
SF.85	Wonga Rd HR	SFAZ		2	North Sydney Council
SF.86	Wyargine Point HR	SFAZ		2	Mosman Council

*Strategy: SFAZ (Strategic Fire Advantage Zone)

Table 2.3 Neighbourhood Safer Places*			
Title	Type	Location	LGA
Gore Hill Oval	Open Space	Pacific Highway, St Leonards	Willoughby
Chatswood Park	Open Space	Orchard Road, Chatswood	Willoughby
Northbridge Plaza Carpark	Open Space	Harden Avenue, Northbridge	Willoughby
Willoughby Leisure Centre Car Park	Open Space	2 Small Street, Willoughby	Willoughby
Willoughby Park	Open Space	Warrane Road, Willoughby East	Willoughby

*This list is current at the date of BFRMP approval. Visit the RFS website for live, up to date information on Neighbourhood Safer Place locations: www.rfs.nsw.gov.au

Appendix 3

Maps

- 3.1 Residential and Special Fire Protection Purpose Risk Current
- 3.2 Economic Risk Current
- 3.3 Aboriginal Predicted Sites Risk Current
- 3.4 Environmental Risk Current
- 3.5 Fuel Management Register & Focus Areas



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Appendix 4

Communication Strategy

Date	Target Audience	Method of communication	Method of notification	Key messages/ purpose	Resources required	Responsibility
April 2022 – March 2023	Senior Firefighters	Internal FRNSW consultation	Email	Introduction to next generation methodology. Data validation.	Venue. Facilitator(s). PowerPoint presentation. Maps.	FRNSW Zone Command
May 2023 – June 2023	General Public	- BFMC website - Social media	Social media	Introduce BFRMPs. Community issues. Identify assets. Asset assessment. Discuss treatment options. Community responsibilities.	Social Media package distributed by Agencies. BFMC website. BFMC members' websites.	BFMC Members
May 2023 – June 2023	General Public	Print media	Newspaper notice	Introduce BFRMPs. Community issues. Identify assets. Asset assessment. Discuss treatment options. Community responsibilities.	Public Notice. Hardcopies displayed and available at Council chambers and FRNSW FCC / FRNSW stations.	FRNSW Zone Command



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Bush Fire Management Committee

Bush Fire Coordinating Committee – Policy No 01/2023

Adopted by the Bush Fire Coordinating Committee – Minute No 104.11