

City of Onkaparinga Bushfire Management Plan 2020-2024

Version 2.0

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1. Introduction

Bushfire cannot be eliminated from the landscape, and there are circumstances when fire cannot be controlled, however planning and preparedness activities can reduce the frequency, spread and impact of bushfire events.

This plan adopts the Prevention, Preparedness, Response and Recovery (PPRR) Framework of emergency management. Many of Council's normal operations contribute to prevention and preparedness, which are vital components in reducing the impact of bushfires on our community.

Bushfire preparedness requires a partnership approach and is a shared responsibility between government agencies, the private sector, non-government organisations, individuals and the wider community. Every land owner has a responsibility to undertake bushfire prevention and preparedness activities relevant to their location and situation.

This Plan is to be read in conjunction with the City of Onkaparinga [Crisis Management Arrangements](#), which is the overarching Emergency Management guidance for the organisation.

1.1 Objectives

The objectives of this plan are to:

- a. Document bushfire risk in the City of Onkaparinga
- b. Capture the current and future risk treatment strategies
- c. Identify those asset or land custodians responsible for managing the risks and reducing vulnerability to bushfire
- d. Support and inform vegetation fuel reduction activities
- e. Inform stakeholders of the potential bushfire risk within the City of Onkaparinga

1.2 Considerations in developing the Bushfire Management Plan

The 2019/20 bushfire season was unprecedented, resulting in devastating fires across Australia. This plan is produced partly in response to these fire events and to integrate the recommendations of subsequent reviews at State and National level. It also outlines the effective work that is undertaken every year by council to prepare land under its care and control.

The following considerations have been applied in the development of the Bushfire Management Plan (BMP):

- a. Protection and preservation of life
- b. Protection of critical infrastructure and community assets that support community resilience
- c. Protection of residential property as a place of primary residence
- d. Protection of assets supporting livelihoods, economic production and community financial sustainability
- e. Protection of cultural, environmental and conservation assets
- f. Compliance with relevant Acts, Regulations and Codes of Practice

1.3 Relevant Legislation

Document	Section	Comment
<i>Local Government Act 1999</i>	s.7 Functions of a Council	(d) to take measures to protect its area from natural and other hazards and to mitigate the effects of such hazards
<i>Fire and Emergency Services Act 2005</i>	s.105F Private Land and s.105G Council Land	Owners of...land must take reasonable steps to: <ul style="list-style-type: none"> a) prevent or inhibit the outbreak of fire on the land; and b) prevent or inhibit the spread of fire through the land; and c) protect property on the land from fire; and d) minimise the threat to human life from a fire on the land
See also Appendix 1 for full list of Acts, Regulations and Codes of Practice which influence bushfire management planning		

1.4 Fire Ban Districts and Fire Danger Season

The City of Onkaparinga is situated in both the Adelaide Metropolitan and Mount Lofty Ranges Fire Ban Districts. See Figure 1 below for a map of both districts and Figure 2 for their extent in the Onkaparinga council area.

Fire Danger Season (FDS) dates are set annually by the Country Fire Service (CFS) Chief Officer based on recommendations from the Adelaide and Mount Lofty Ranges Bushfire Management Committee. These dates are generally from the 1 December to the 30 April annually but may vary according to climate and weather conditions approaching and during the summer months.

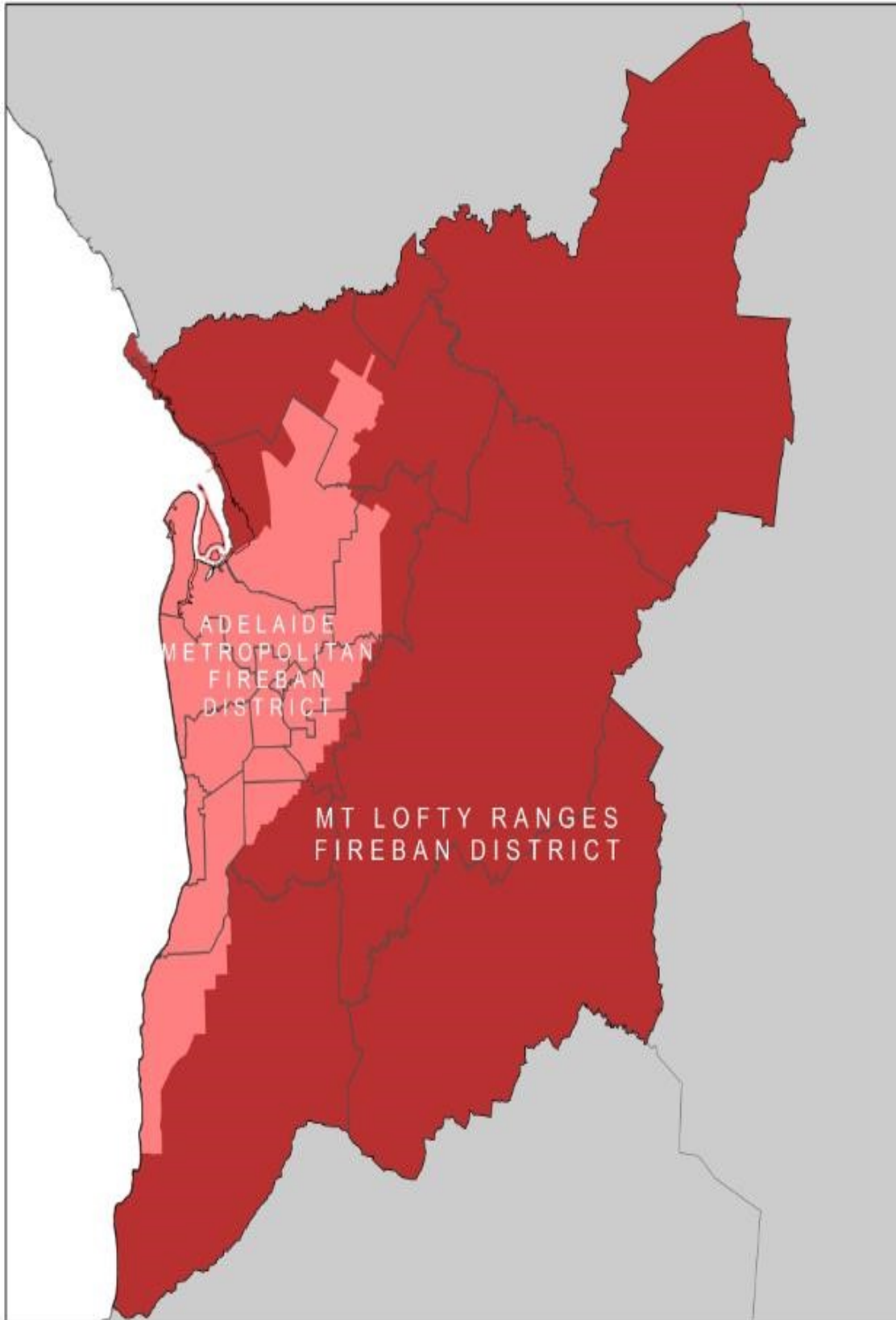


Figure 1. Adelaide Metropolitan and Mt Lofty Ranges Fire Ban Districts Map

Fire Ban District Map

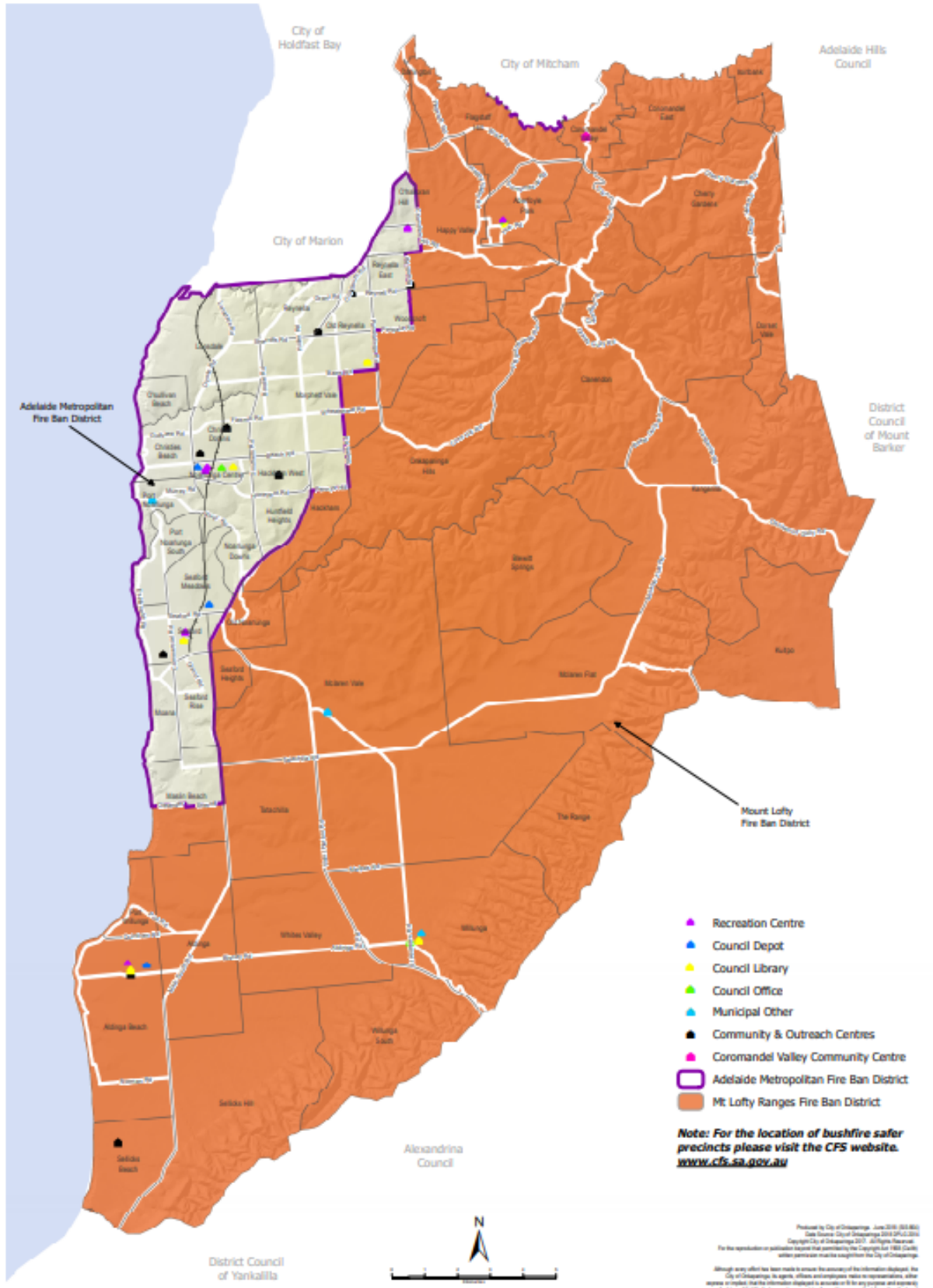


Figure 2. City of Onkaparinga Fire Ban Districts

1.5 Overview

This plan addresses Prevention, Preparedness, Response and Recovery activities across three land tenures, and describes our approach to bushfire management on each:

- Council Land
- Private Land
- Crown/Other land (often owned by state government agencies)

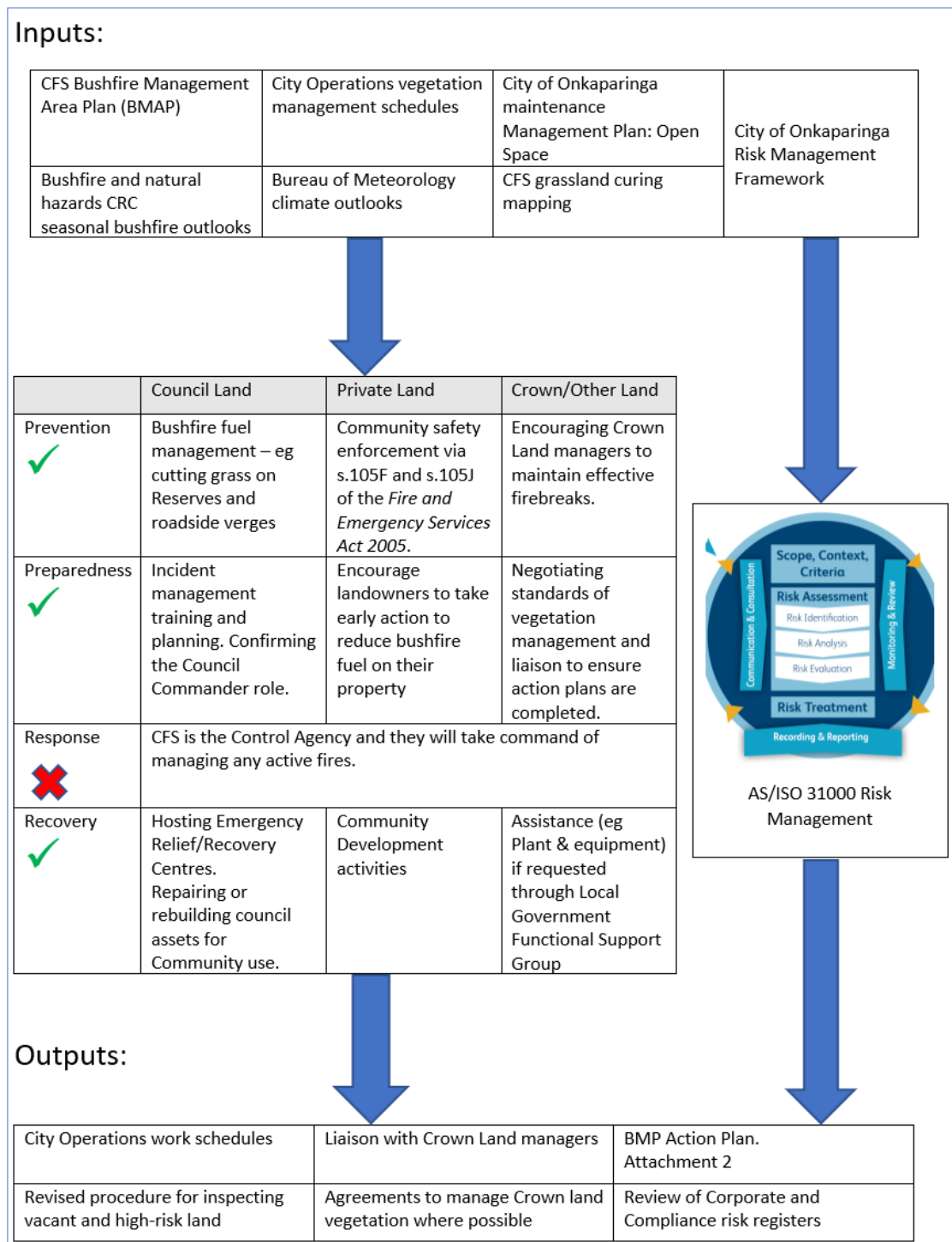


Figure 3. Overview of the Bushfire Management Plan

2. Inputs into the Plan

2.1 Country Fire Service Bushfire Management Area Plan (BMAP)

The City of Onkaparinga is situated within the Adelaide and Mount Lofty Ranges Bushfire Management Areas. This plan uses the CFS [Bushfire Management Area Plan](#) (BMAP) as a primary input. The BMAP provides an assessment of bushfire risk in the council area and is an evolving document which is managed by the Adelaide and Mount Lofty Ranges Bushfire Management Committee. We use this BMAP to identify those areas of land that present the highest risk and prioritise our prevention and preparedness activities in those areas.

2.2 Climate and weather inputs

2.2.1 The impacts of climate change

Climate change is likely to exacerbate the likelihood and consequence of bushfires and affect those already especially vulnerable to this risk. Decreases in rainfall and higher evaporation rates will mean less soil moisture and less run off in rivers, streams and reservoirs. Changes in climate will have a range of impacts – for example on water resources, bushfire frequency and intensity, primary production, infrastructure and the health of our landscapes. It is also likely to increase the average number of high fire danger days experienced across the region every summer. As well as the direct environmental impacts of climate change there is also the interaction with other drivers of change such as population growth in these areas. Our demand for water may also increase because of warmer temperatures and as our population grows.

2.2.2 Wind and weather patterns

Weather conditions play a significant role in the likelihood of a bushfire occurring and its behaviour and intensity should it occur. During summer a succession of high-pressure systems track from west to east, usually five to seven days apart. The centres of these high-pressure systems generally pass to the south of Adelaide. As these high-pressure systems move to the east, wind direction turns north-east to northerly, often bringing a stream of dry and hot air across the council area. The region experiences occasional thunderstorms and lightning in spring and summer that may be dry or wet and cause gusty and variable winds.

2.2.3 Australian seasonal bushfire outlook

Australian [seasonal bushfire outlook](#) and other hazard information from the [Bushfire and natural hazards Cooperative Research Centre](#) and other sources will be made available to staff and Elected Members via Weekly News and promoted through our public website for the community to receive.

2.2.4 Climate Outlooks

The Bureau of Meteorology [climate outlooks](#) are issued periodically and provide current information and intelligence on a range of weather and climate forecasts.

3. Land tenure

3.1 Council Land

Bushfire preparedness on Council land is predominantly addressed through vegetation management and bushfire fuel reduction on reserved, road verges and unmade road reserves. The Maintenance Management Plan: Open Space guides the standard of vegetation management applied to differing parcels of land under council's ownership or care and control.

Council's responsibilities exist in the prevention, preparedness and recovery phases, with response activities during a bushfire being conducted by the CFS as the Control Agency.

3.2 Private Land

Council encourages landowners to take early action to reduce vegetation and bushfire fuel on their properties, reducing the risk of bushfire to the community. Council enforces the general duty of all landowners under the *Fire and Emergency Services Act 2005* (FES Act) to prepare their properties prior the fire danger season.

Section 105F of the FES Act provides for council to issue hazard reduction notices to landowners requiring them to reduce fine fuels and other hazardous vegetation within a 21-day timeframe. An expiation for failing to comply with the requirements of the s.105F Notice can be applied if the landowner does not reduce the identified hazard by the expiry date of the notice. The State Government increased the value of the expiation fee amount in March 2021 from \$315.00 to \$473.00.

S.105J of the FES Act entitles council to undertake works in default and clear fire hazards, with the costs of such clearances being charged to the landowner as a debt against the property. Council undertakes this action to reduce bushfire risk on private land if the owner fails to comply with a s.105F hazard reduction notice by the expiry date.

3.3 Crown/Other Land

Council's mitigation approach to Crown lands involves influencing landowners to prepare their lands prior to fire danger season. We seek assurances from State Government Departments that they have conducted risk assessments on land they own and have maintained vegetation fuel loads to an appropriate standard, particularly reduced fuel zones (firebreaks) inside their boundaries to prevent the spread of fire outside of their land. S.105 of the FES Act does not enable council to issue hazard reduction notices to State Government departments so this influencing work is done at the staff level throughout the year.

On occasion council does maintain Crown land under informal agreement by slashing vegetation around City or township boundaries, partly for amenity effect and partly to reduce fuel loads. Ongoing work is required to formalise agreements with these landowners and progress cost recovery for our additional maintenance.

4. Roles and responsibilities

4.1 Council

4.1.1 Fire Prevention Officers

Council is required by the FES Act to appoint at least one Fire Prevention Officer (as of 2021 there are two, within the Planning and Regulatory Services Division) who are responsible for:

- a. assessing the extent of bushfire hazards within the relevant council area
- b. assisting the council in providing advice and information to any bushfire management committee
- c. providing advice to owners of property in respect of bushfire prevention and management
- d. carrying out any other functions assigned to the fire prevention officer by the regulations.

Prior to the fire danger season, council Fire Prevention Officers (FPOs) undertake an inspection program of all vacant land in the council area and other high-risk properties, specifically those properties that have been served a s.105F hazard reduction notice in the preceding two years. The program involves:

- a. Sending correspondence to owners of vacant and high-risk land in early October each year. This proactively advises owners of the requirement to reduce vegetation and bushfire fuel hazards on their property prior to the inspection program.
- b. First inspections of properties are conducted throughout November, with those properties who are not compliant with the requirements of the FES Act being issued a s.105F hazard reduction Notice, specifying the actions required to be completed within a 21-day timeframe.
- c. Compliance inspections are conducted throughout the first two to three weeks of December, with those properties still not compliant with the FES Act and the s.105F Notice receiving an Expiation Notice (fine). Council-engaged contractors will also be deployed to conduct works in default, with the costs of this work also charged to the landowner. This work is done by council purely to reduce bushfire risk in the community.

During the fire danger season, FPOs respond to customer requests about properties that may present a fire hazard and can also issue Schedule 9 and 10 permits for hazardous activities if required.

Outside of the fire danger season, FPOs administer the vegetation pile burning permit process. This allows residents in specified areas to burn bushfire fuel safely, in accordance with the [Vegetation Pile Burning Code of Practice](#). Details of this process are available on council's

website here: <https://www.onkaparingacity.com/Payments-and-permits/Permits/Fire-management-non-fire-danger-season>

4.1.2 City Operations

The City Operations Division has responsibility for vegetation management and bushfire fuel reduction on council land, specifically reserves and road verges. Staff undertake a scheduled year-round program of vegetation management.

Specific bushfire prevention activities are timed to be complete by the start of the fire danger season (anticipated to be 01 December annually) or when the fuel load has fully cured and will not regrow after slashing. Examples of the programming and types of treatment undertaken are provided at section [5.5.1 Council Preparedness](#).

4.2 Local Government Functional Support Group

The Local Government Functional Support Group (LGFSG) is a structure created from the revised *State Emergency Management Act 2004* and State Emergency Management Plan. Managed through the Local Government Association, it provides a coordinating function for Local Government entities throughout all phases of emergencies. Examples include the coordination of plant and equipment to support Hazard Leaders or Control Agencies, provision of water for aerial fire bombers or council staff to close roads or assess trees when requested by the CFS.

Our responsibility is to have a clearly defined 'Council Commander' with delegations to act on behalf of the council, including a financial delegation. The Council Commander is currently the Director, City Operations or their delegate.

4.3 Community

Bushfire prevention and preparedness is a shared responsibility of State and Local Government, Hazard Leaders and Control Agencies, landholders, and the broader community. This Plan promotes the concept that all members of the City of Onkaparinga community are responsible for the mitigation of bushfire risk and therefore need to understand and participate in bushfire prevention and preparedness. Specifically, legislation (FES Act 2005) states that owners of land must take reasonable steps to:

- a. prevent or inhibit the outbreak of fire on the land; and
- b. prevent or inhibit the spread of fire through the land; and
- c. protect property on the land from fire; and
- d. minimise the threat to human life from a fire on the land.

Information relevant to all members of the community on bushfire prevention and preparedness can be found here: <https://www.cfs.sa.gov.au/site/resources.jsp>

Council, through Elected Members, will contribute to content for community newsletters to promote appropriate bushfire fuel reduction and preparedness measures.

4.4 State Bushfire Coordinating Committee

The *FES Act 2005 Section 71A* outlines the functions of the State Bushfire Coordination Committee (SBCC). Some of these functions include:

- a. promoting the State-wide coordination and integration of policies, practices and strategies relating to bushfire management activities
- b. providing guidance, direction and advice to bushfire management committees
- c. preparing and reviewing the State Bushfire Management Plan and to ensure BMAPs are consistent with the State Bushfire Management Plan.

4.5 Adelaide Mount Lofty Ranges Bushfire Management Committee

The SBCC has established the Adelaide and Mount Lofty Ranges Bushfire Management Committee (AMLR BMC), and under the *FES Act 2005, Section 73A (1)* must prepare and maintain a BMAP for its Bushfire Management Area (BMA). The Senior Emergency Management Officer within Corporate Division is City of Onkaparinga's representative on this committee.

The key function of the AMLR BMC is to coordinate all relevant stakeholders with a responsibility for bushfire management within the BMA, to undertake a risk assessment process, and oversee the implementation of risk mitigation strategies. Its responsibilities include:

- a. Promoting the coordination of policies, practices and strategies relating to bushfire management activities within its area.
- b. Preparing and keeping under review a BMAP for its area and ensuring that the BMAP is consistent with the State Bushfire Management Plan.
- c. Initiating or preparing the development of plans, policies, practices or strategies to promote effective bushfire management within its area.
- d. Convening with local or regional forums to discuss issues associated with bushfire management within its area, including working with local communities to promote and improve effective bushfire management.

4.6 SA Housing Authority – Emergency Relief and Recovery Centres

Emergency relief is a functional service under the State Emergency Management Plan and SA Housing Authority is the agency responsible for the activation and management of Emergency Relief and Recovery Centres if they are required during and/or after a bushfire emergency.

If a bushfire reaches a threshold for activating an emergency relief or recovery centre(s), SA Housing's responsibilities include:

- a. Establishing emergency relief centres to provide residents affected by bushfire with short term shelter, information and personal support services such as food, temporary accommodation, basic first aid and referral to interpreter services and pet care. Relief centres are established during or in the immediate aftermath of the bushfire.
- b. Establishing recovery centres as a one-stop centre for affected people to receive financial assistance, gather information and seek referral to a wide range of recovery services. Recovery centres take over from emergency relief and can be in place over a much longer timeframe.

Council has pre-identified several sites that are suitable for hosting a relief and/or recovery centre and has shared these details with SA Housing.

If the Emergency Relief Functional Support Group (ERFSG) have notified council that they will not be opening an Emergency Relief Centre, or if they have not yet decided to open one, Council's Crisis Management Team will consider proactively opening one of our pre-identified sites to support affected residents. This will be considered in conjunction with other neighbouring councils and Non-Government Organisation service providers such as the Australian Red Cross, to ensure a coordinated effort to support residents who may be affected by a bushfire that will likely cross council boundaries. Such a venue could serve as a hub for residents to access council services and information, be referred to other services and provide a physical place to visit in the short term if their property is affected by the bushfire or if they are prevented from returning home by the CFS, for example due to road closures. The venue would not be able to support overnight accommodation or meals, as this is the role of the ERFSG. If the need for emergency accommodation for residents was identified, then council staff should escalate that to the LGFSG via our Crisis Management Team, Council Commander (or delegate) or the Senior Emergency Management Officer.

To preserve public safety, it is important not to encourage residents to travel through any dangerous areas while attempting to access an emergency relief centre, so the decision to open such a site independently of the Emergency Relief Functional Support Group will need consideration of the location and proximity of the bushfire and the likely direction of travel of affected residents. We will also publicise the opening of any Emergency Relief Centre via social media and/or media release as soon as practicable.

5. Risk Assessment

The City of Onkaparinga [Risk Management Framework](#) sets out the key principles that guide how risk management is integrated at all levels of the organisation as well as providing the processes and organisational arrangements for managing risk across the organisation. Bushfire risk management in this plan utilises the Risk Management Framework and AS/ISO 31000 Risk Management Standard to effectively manage risk.

5.1 Establishing the context

The 2019/20 bushfire season was unprecedented and there were devastating fires across Australia. Bushfires burnt under conditions that exceeded the limits of firefighting capacity. In South Australia, losses included Three lives, 196 homes, 68,000 livestock and approximately \$200 million in agricultural production.

The State Government's [Independent Review into South Australia's 2019-20 bushfire season](#) and the [Royal Commission into National Natural Disaster Arrangements](#) both propose a range of recommendations and where relevant, these have been considered in the preparation of this Plan. The recommendations of the Royal Commission that are relevant to Local Government have been summarised at Attachment 1 including the impact and risk to the organisation, and our conformance with the recommendations through our existing programs and services.

5.2 Risk Identification

Uncontrolled bushfire within the City of Onkaparinga or immediate surrounds is the primary risk identified in this plan. Both people (residents and visitors) and assets are at risk. Staff involved in bushfire management identify risk via several means, including using the CFS BMAP, which identifies specific areas that have been assessed as having an Extreme, Very High, High, Medium or Low risk rating. The BMAP further classifies assets as either human settlement, economic, cultural heritage or environmental.

Residents are also able to report hazards to council which assists in hazard identification at the property level. Commencing in 2020, residents were able to use a webform to report specific properties they believe to be a fire hazard and council Fire Prevention Officers will investigate.

This service is continuing to be available on council's website here:

<https://www.onkaparingacity.com/Services-and-projects/Reserves-trees-and-verges/Reporting-a-fire-hazard>

5.3 Risk Analysis

Risk analysis within the CFS BMAP is determined using several inputs, including:

- a. Vulnerability of assets and people.
- b. Vegetation type and its distance from the asset.
- c. Predominant slope of the vegetation in relation to the asset.
- d. Access and/or egress to and from the asset.
- e. Frequency of ignitions in the general area of the asset.

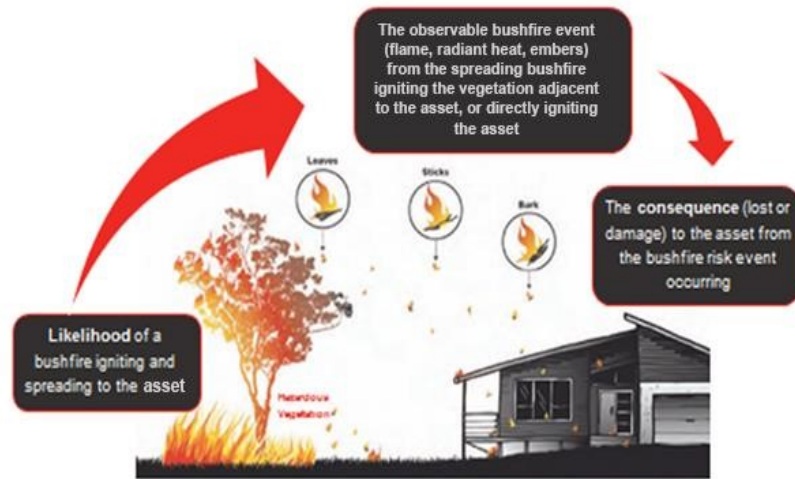


Figure 4. Bushfire risk

5.3.1 Likelihood

In determining the likelihood of a bushfire igniting and spreading and impacting an asset the following inputs are considered:

- a. Australian Incident Reporting System (AIRS) data for known ignitions to gain an understanding of fires that have occurred.
- b. Current land use data to assist in determining vegetation layers and activities associated with land use that could be potential ignition sources.
- c. The ability for fire to establish and spread and the density/type of vegetation within the landscape. Inputs include Bureau of Meteorology data relating to local weather conditions, vegetation classification and fuel structures to undertake basic fire behaviour modelling.

5.3.2 Consequence

The consequence of any bushfire event can be influenced by many factors. The susceptibility of a built structure being adversely impacted by bushfire is dependent on the type of construction and material used as well as its general condition. For example, concrete water tanks or steel towers have a very low susceptibility, whereas a heritage timber barn would have a very high susceptibility.

Bushfire Attack Level (BAL) is a measure of the radiant heat a building or structure is expected to be subjected to in the event of a bushfire on a day of Extreme fire danger rating. This measure is used by the AS3959 Australian Standard for the construction of buildings in bushfire-prone areas. The BAL is determined by classifying the type of vegetation around the building, the distance of the vegetation from the building, the slope of the land and the height

of the most exposed part of the building (typically the eaves). The higher the BAL, the higher the radiant heat will be at that site during a bushfire.

Assets below a BAL of 12.5 Kw/m² potentially reduce the ignition of the structure from radiant heat. It should be noted that this Standard does not consider the potential impact of spark and ember on structures.

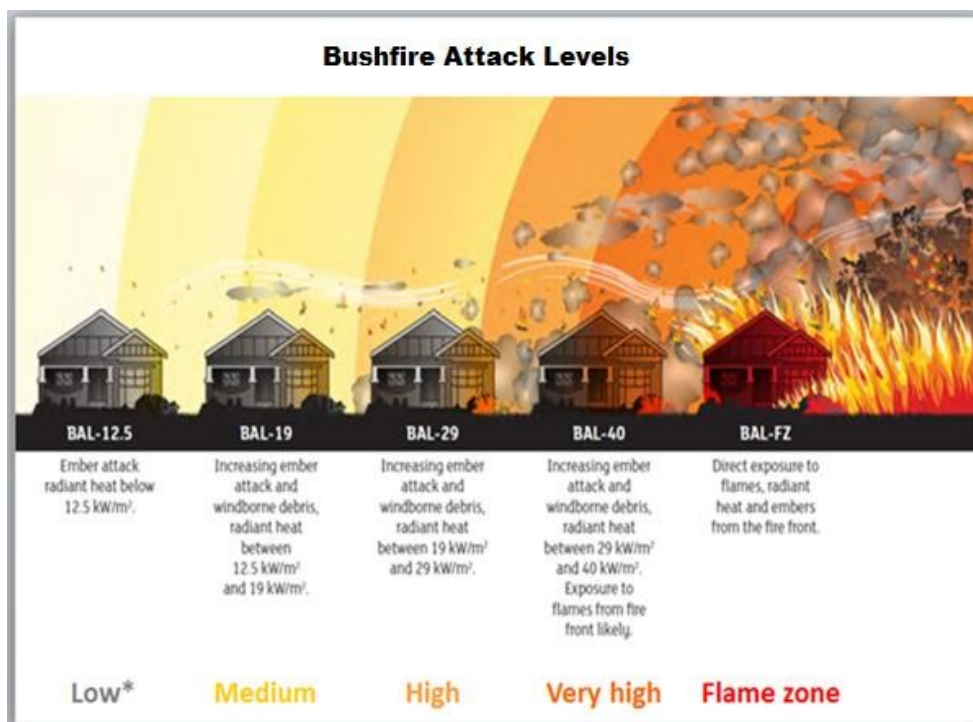


Figure 5. Bushfire Attack Levels

5.4 Risk Evaluation

The risk of uncontrolled bushfire is evaluated at Attachment 1 Bushfire Management Plan - Risk Assessment.

5.5 Risk Treatment

The risk of Bushfires cannot be eliminated; however, Council employs several controls to reduce the likelihood or consequence of bushfire and to increase community resilience, enhance the ability of firefighting agencies to access and suppress bushfires, limit the spread of bushfire and protect people, assets and the environment.

5.5.1 Council Preparedness

Council undertakes a range of fire prevention activities in the lead up to fire danger season every year, to reduce flammable vegetation on our land.

Reserve and Rural Roadside Fuel Load Management Principles:

- Roadside slashing and boom mowing are done to ensure vehicles parked on the side of the road don't ignite long grass contacting hot exhaust systems or vehicle undercarriages.
- Mowing and removal of roadside vegetation will not prevent deliberately lit fires.
- Roadside native vegetation performs important ecological functions and is often remnant biodiversity and tree canopy cover where adjacent farmlands have been cleared for grazing. Wholesale clearance of this vegetation is not permitted under Native Vegetation legislation.
- Dead trees on rural roadsides provide hollows and habitat for a variety fauna. Provided they are structurally sound these trees can remain in place for decades and could often survive a fire event.

Rural Roadside Tractor Slasher Mowing:

Roadsides that are easily accessible and level are cut by a council tractor slasher. A total of 249km of roadsides are assigned to tractor slashing every year. Slashing starts in late Spring once grasses have cured and takes approximately one month to complete.

Rural Roadside Boom Mowing

A total of 728km of rural roadsides every year are cut by boom mowing. A boom mower is used in areas where the slope gradient is too high to use a tractor slasher or where there are obstacles such as guard rails and trees. Boom mowing starts around September when grasses cure and die during warmer drier conditions and continue until roadsides have been cut at least once. Unseasonal late rains may cause a regrowth of areas already cut resulting in a need to recut in subsequent rounds. One cut takes approximately 6-7 weeks to complete and starts in the Southern parts of the council area where grass cures first and then progresses Northwards up into the hills.

Roadside Marker Sites:

Roadside Marker Sites (RMS) consists of high value remnant native vegetation that holds important biodiversity value. This maintenance is designed to treat weeds and apply selective brush-cutting to reduce fuel loads. We manage 128 RMS sites with a total length of 111.35km

Rural Roadside Maintenance

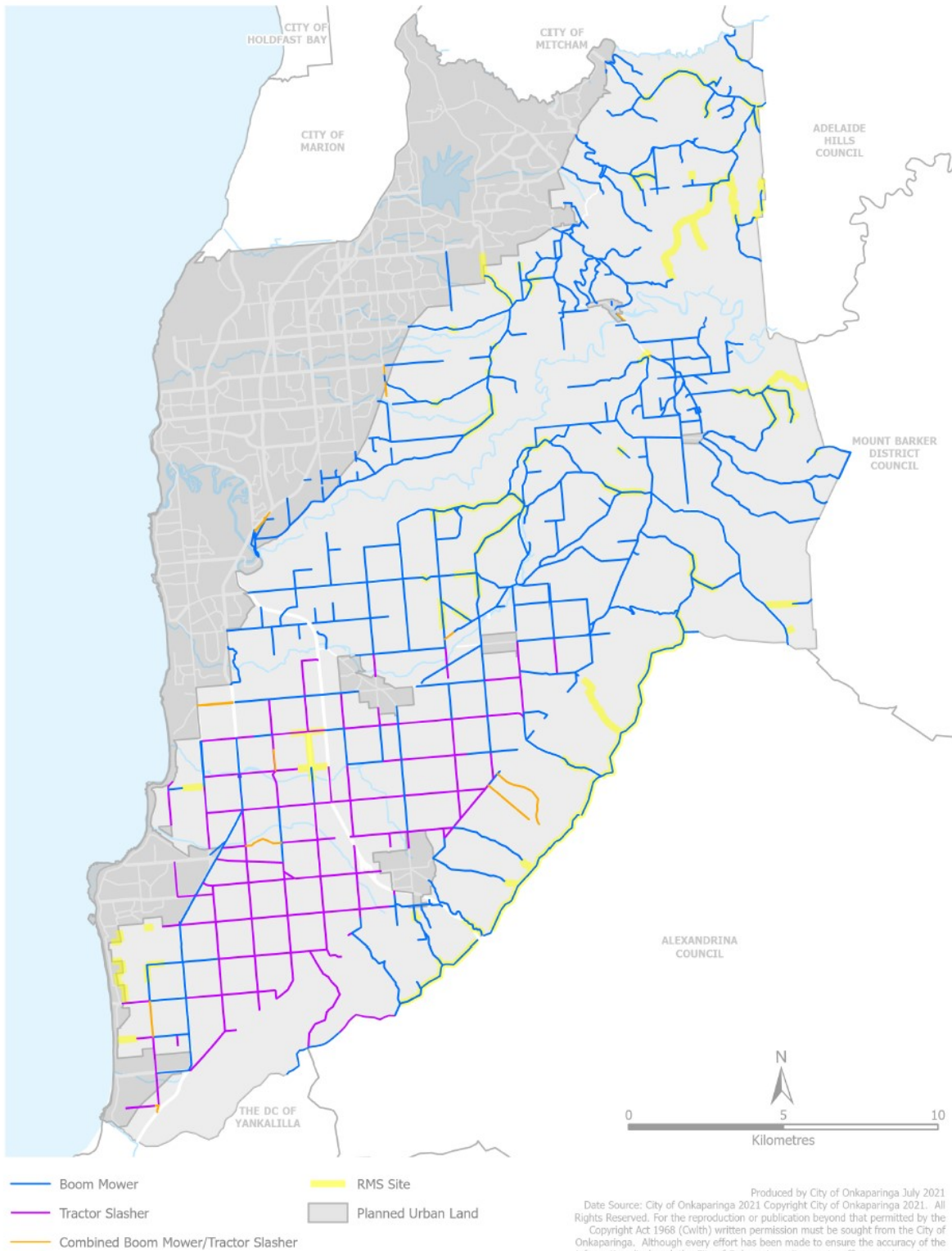


Figure 6. Rural Roadside Maintenance

Rural Roadside Pruning:

We contract tree canopy and shoulder clearance along selected roads throughout the McLaren Vale, McLaren Flat and Willunga region so trucks and grape harvesting machinery can have clear access during peak times around vintage. This is currently done on a three-yearly programme. Remaining rural roadsides are contracted to a four-yearly pruning program that ensures canopy and shoulder clearance requirements are met along our rural roads. These requirements are based on Department of Infrastructure and Transport guidelines for road clearance envelopes. While this pruning work is not critical for fuel load management it supports safe access for CFS assets during a fire event while also ensuring that compromised trees are removed before a fire causes them to fall onto escape routes.

Reserve mowing and fuel load reduction works

Our urban grassland and woodland reserves are mowed/ brush-cut for fire hazard reduction in accordance with the CFS Bushfire Management Area Plan (BMAP). Where the terrain permits, fence lines are sprayed, bush-cut and vegetation are cleared to create a 20-meter buffer from key assets and human settlements. Mowing and brush-cutting are programmed from September onwards when grasses and vegetation dries out.

The two figures below show the BMAP extreme and very high-risk areas for a portion of the council area, with our fuel reduction activities overlaid, showing that we do different types of fuel reduction (tractor slashing, boom mowing, brush cutting etc) depending on access and depending on the assessed risk of the area. 20-metre asset protection zones around dwellings which are also in the extreme or very high-risk areas are specifically targeted, demonstrating the use of the BMAP to guide our risk-based fuel reduction works.

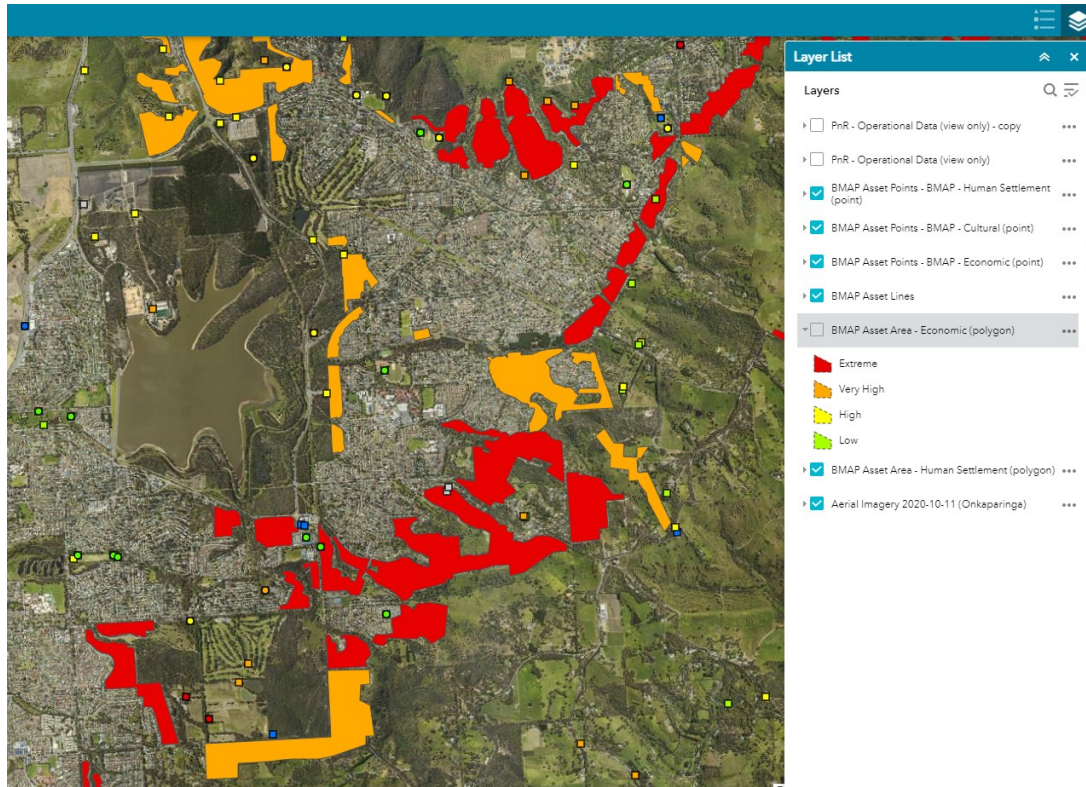


Figure 7. Excerpt from GIS layer showing extreme and very high-risk areas

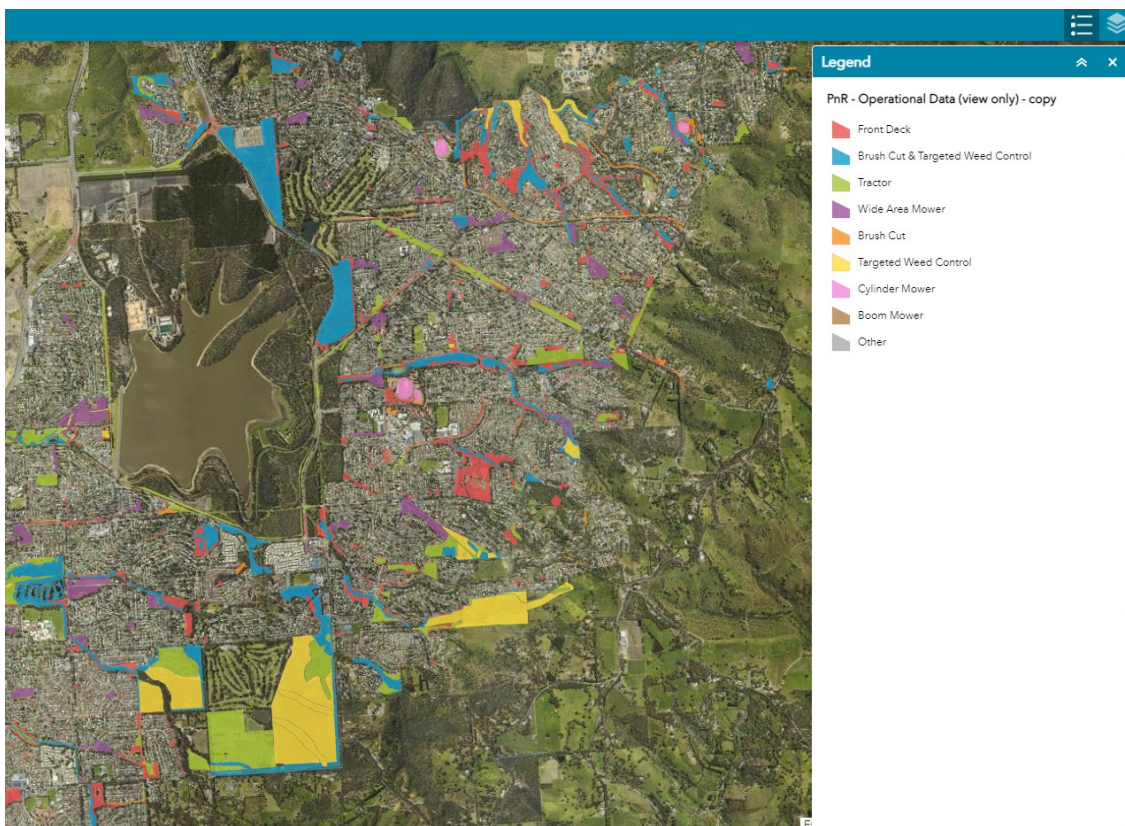


Figure 8. Excerpt from GIS overlaying different fuel reduction treatments

Attachment 2 Bushfire Management Plan - Action Plan lists risk treatments that are proposed after the risk assessment process.

5.5.2 Private Property Preparedness

Private property preparedness relates to action taken by landholders to reduce the risk of bushfire impacting on a house or other building. The primary focus of property preparedness should be the reduction of fuel hazards around the property and the elimination of ignition sources in areas surrounding or on structures, by:

- a. reducing or removing hazardous vegetation and fine fuels (long dead grass, dried leaves etc.)
- b. removing other flammable materials and liquids
- c. reducing the risk of impact from windblown spark and embers, flame contact and intense heat radiated from bushfires.

If the occupants plan to stay and defend their home during a bushfire, having a well-prepared property is essential. Information and fact sheets on property preparedness are available here: http://www.cfs.sa.gov.au/site/resources/fact_sheets.jsp

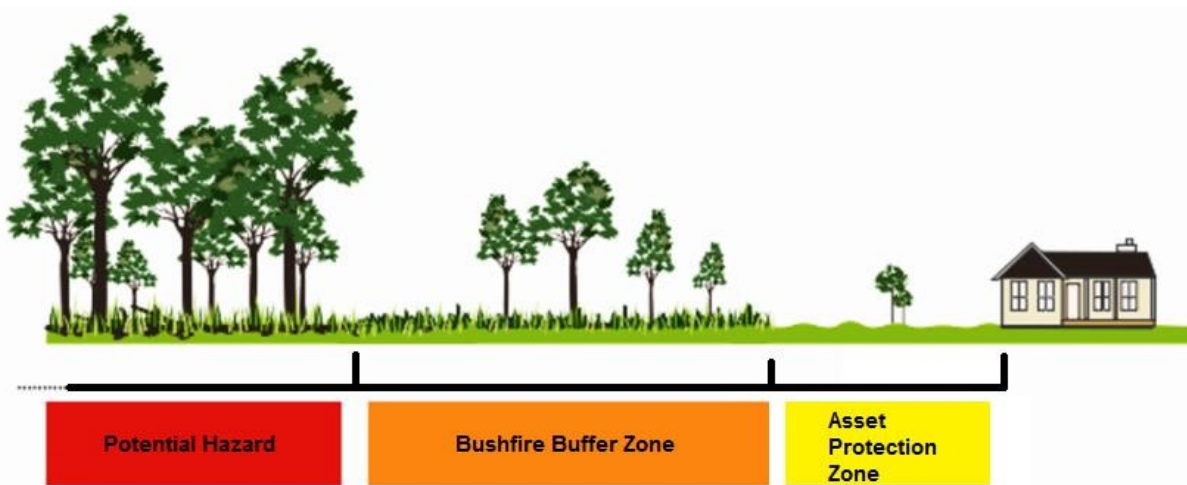


Figure 9. Property preparedness zones

The clearance of native vegetation on private land is governed by the Native Vegetation Act 1991 and Regulations 2017. The Department for Environment and Water has information, factsheets and an explanation of any clearance approvals that may be required on their website here: <https://www.environment.sa.gov.au/topics/native-vegetation/clearing>. Specific topics include native vegetation clearance relating to fences, tracks, burnt trees and fuel breaks. The Native Vegetation Council and SA CFS also publish a guide called '*Managing Native Vegetation – How to reduce the impact of bushfire and the steps you need to take*', available from the same website.

5.5.3 Asset Protection Zones

An Asset Protection Zone (APZ) is a reduced fuel area surrounding a built asset or structure, which is managed to minimize fuel loads, inhibit fire travel and reduce the effects of radiant heat, flame, ember and smoke attack on the asset. Radiant heat is the most common cause of death during bushfires and affects people (health and decision making), animals and structures, whilst ember attack on properties is the leading cause of building loss during a bushfire.

Introducing an APZ will provide separation between a bushfire hazard and the asset, minimising direct flame contact and reducing the effects of radiant heat. They may apply to a group of similar properties or along a boundary where the hazard exists. They may also be used within the boundary of a property to inhibit fire spreading onto the property. The required separation distance between vegetation and asset for an APZ is specified in the SBCC APZ Standard, based on Australian Standard AS 3959 for building in bushfire prone areas. The distance required between the asset and the vegetation is to reduce the Bushfire Attack Level below 12.5 KW/m².

Property owners can generally reduce, modify or remove native vegetation within 20m of a building (including overhanging limbs). Significant trees may be protected under the Development Act 1993.

5.5.4 Bushfire Buffer Zones

A Bushfire Buffer Zone (BBZ) is a reduced fuel area that aims to provide a buffer to reduce the spread, intensity, ember attack and potential spotting from a bushfire. The works associated with the establishment of a BBZ are focussed on selectively reducing the amount of fine fuel vegetation, predominantly grasses and understory. These zones minimise continuous fuel structures between surface and canopy fuels.

5.5.5 Community Engagement

Community education and engagement activities can extend from simple information provision to extended training programmes. These activities are undertaken by many different groups including CFS, MFS, SAPOL and the Australian Red Cross. The type of programme or information that can be provided is dependent on the audience and their level or risk. Community engagement programmes have the potential to achieve positive outcomes at both the individual resident and community levels.

5.5.6 Prescribed Burning

Prescribed burning is the controlled application of fire under specified environmental conditions to a predetermined area and at the time, intensity and rate of spread required to attain planned resource management objectives. Prescribed burning by expert personnel from the Department of Environment and Water was carried out in 2020/21 and further work is being considered.

5.5.7 Planning and Development Policy and Standards

A key objective of planning and development policy is to consider protection from bushfire to ensure the safeguarding of human life and preventing the loss of assets including infrastructure, cultural heritage and ecological assets. Current planning policies relating to bushfire risk, contained in relevant Development Plans, may be reviewed as part of future Development Plan amendments.

5.5.8 Staff Work Health Safety considerations

Actual bushfires or conditions where fire danger indices are Severe, Extreme or Catastrophic present specific risks to staff working outside of council buildings or facilities. Staff working outside or travelling between work sites are required to comply with internal Work Health Safety (WHS) controls which are established for their safety. Such controls include WHS policies and procedures which direct what type of activities can be performed during declared emergencies or on fire danger days. Individual dynamic risk assessments must be completed by each staff member in conjunction with a Supervisor before commencing duties on a day of Severe or above fire danger, with additional considerations for any activities on a Catastrophic fire danger day, with approval required by an experienced senior leader.

Relevant staff receive SMS notification the evening prior of total fire bans or fire danger days of Severe or above, to allow early planning for modified service provision. Examples of services that may be affected on fire danger days include:

- a. Waste collections will start at 5.30am or earlier to keep drivers out of the hottest times of the day.
- b. Limits on use of power tools and equipment such as mowers during total fire bans. We comply with CFS advice via this [Factsheet](#).
- c. Activities involving driving vehicles off-road are restricted to prevent ignition of long grass by hot engine parts.
- d. Postponement of works in the direct sun when the ambient temperature reaches 38°C. Staff can undertake alternative duties or work at an appropriate indoor site.

5.5.9 Operation NOMAD

The potential and actual harm caused to the community from arson igniting bushfires continues to be an important area of focus for South Australian Police (SAPOL). Operation Nomad is a crime prevention programme using targeted SAPOL activities to reduce the incidence and severity of fires in South Australia caused by deliberate, reckless or careless human behaviour. The focus of the SAPOL operation is guided by the multi-agency Fire Prevention Strategic Alliance.

6. Outputs of the Plan

- a. Attachment 1. Bushfire Management Plan - Risk Assessment. This is completed with consideration for how it may influence or be included in Corporate or Operational risk registers.
- b. Attachment 2. Bushfire Management Action Plan. This describes current and future bushfire preparedness activities and their progress to completion.
- c. Other outputs of the plan include ongoing work to communicate with owners of private land and Crown land prior to and during the fire danger season.

7. Document Control

Author (to whom changes are to be recommended):			
Position		Name	
Senior Emergency Management Officer		Neal McDonald	
Stakeholders (audience – engagement groups):			
Elected Members			
Director Group			
Internal staff: Fire prevention officers, Parks and natural resources, Spatial information services.			
External agencies: Country Fire Service, Metropolitan Fire Service, Department for Environment and Water, Local Government Functional Support Group.			
Reviewed by:			
Position		Date reviewed	
Strategic Directions Committee		6 October 2020	
Approved by (document owner):			
Position / Group	Name	Approval date	Approval DSID number
Chief Executive Officer	Scott Ashby	10 November 2020	5329847
Current version:			
Current version number	Release date	Review cycle	
Version 2.0		Review every 2 year/s from the Approval date	

		Risk calculation: Consequence rating- Major Likelihood rating- Possible Overall risk rating- High	
History:			
Date	Author	Version	Nature of change
30/10/2020	Neal McDonald	V 1.0	Initial version
7/07/2021	Neal McDonald	V 2.0	Inclusion of update from Cherry Gardens bushfire in January 2021 and update per Notice of Motion at SDC meeting of 6 April 2021. Updated links after transition to ECM Cloud.
Related documents: (internal documents that need to be reviewed when this document is amended)			
Title of document			Document number
Crisis Management Arrangements			DSID 3291265
WHS-GUI-0011 - Response to Declared Fire Danger Days V1.0			DSID 4458454
Document location:			
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8. Appendix

Appendix 1: Acts, Regulations and Codes influencing bushfire management planning:

Local Government Act 1999 Section 7

Fire and Emergency Services Act 2005 Section 105

Native Vegetation Act 1991 (SA) Section 29

Native Vegetation Regulations 2017 (SA)

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) Section 18 and 269

National Parks and Wildlife Act 1972 (SA)

Wilderness Protection Act 1992 (SA)

Crown Land Management Act 2009 (SA)

Country Fire Service vegetation pile burning Code of Practice

9. Attachments

Attachment 1. Royal Commission into National Natural Disaster Arrangements – Recommendations relating to Local Government [DSID 5491361](#)

Attachment 2. Risk Assessment - Bushfire in the City of Onkaparinga [DSID 5321635](#)

Attachment 3. Action Plan – Bushfire Preparedness for fire danger season [DSID 5321647](#)