



**NEIGHBOURHOOD SAFER PLACE –
BUSHFIRE PLACE OF LAST RESORT
ASSESSMENT GUIDELINE**

June 2016

INTRODUCTION

Reducing the impact of bushfires is a shared responsibility between government, emergency service organisations and the community. The community plays an integral role in taking the necessary steps to prepare their property and to implement their bushfire plan. It is also critical for those living in high bushfire risk areas to have a backup plan should their primary plan fail or be unable to be implemented. A backup plan should identify shelter and last resort options available to them, including those that individuals have personally assessed as being a safer option relative to their potential situation if caught in a fire event.

A Neighbourhood Safer Place also known as a Bushfire Place of Last Resort (NSP-BPLR), in the near vicinity (neighbourhood) may as a last resort provide improved protection (a safer place) from the immediate life threatening effects of a bushfire. They are not part of shelter in place or evacuation strategies, they are places of last resort where a person's prospects of survival may be better than other places, but they do not guarantee safety.

An NSP-BPLR is an area or premises that provide separation distance from the bushfire hazard and protection from direct flame contact and radiant heat. It is an existing location and not a purpose-built, fire-proof structure. An NSP-BPLR may be an open space such as a local sports field, foreshore or park, or it may be located within a community facility such as a hall or sports pavilion.

This assessment guideline has been prepared and approved by the Country Fire Authority (CFA) pursuant to the *Country Fire Authority Act 1958 (CFA Act)*, Part IIIA, Section 50E. The guideline sets out the criteria and other considerations by which an appropriately trained CFA Officer assesses the suitability of an NSP-BPLR and is not intended for use by the general public.

BACKGROUND

The 2009 Victorian Bushfires Royal Commission (VBRC) Final Report stated that the people who left their homes sheltered in a variety of locations, for example, other houses or buildings; bunkers, reserves and ovals; pubs; in-ground swimming pools, cars and dams. Some people reported that these were pre-planned alternatives and, in some cases, helped people survive. However, the VBRC also heard examples of fatalities in very similar locations. This serves to highlight the fact that these *ad hoc* locations do not guarantee safety (VBRC Final Report Vol. 2: pg. 19).

The VBRC also stated that “many people did not have a well-thought-out plan and were left to make their own decisions without the benefit of assistance from the authorities [and] for these people, the lack of alternatives, the provision of shelters, refuges or evacuation, became critical as a fall back option” (VBRC Final Report Summary: pg. 5). It also “considered that a revised bushfire safety policy should provide information about places in which to shelter and support for individuals in identifying such places” (VBRC Final Report Vol. 2: pg. 21).

The Victorian Government established Neighbourhood Safer Places in response to the recommendations from the VBRC regarding the need for a range of community shelter and relocation options in the event of a bushfire threat. Bushfire safety policy was revised and updated to include bushfire safety options as a priority area for protection and shelter during emergencies. The Bushfire Safety Policy Framework (September 2013) identifies a range of options, both personal and communal, where people may seek shelter from a bushfire. These options include:

- Leave early
- A well-prepared home
- Community Fire Refuges¹
- Private shelters (or bunkers)
- Private places of shelter
- Evacuation
- Last resort shelter options - Neighbourhood Safer Place and other last resort options

Not all options will afford the same degree of protection from a bushfire and not all options will be available in all circumstances. CFA continues to support municipal councils in the establishment of NSP-BPLR as a last resort option for communities living in high bushfire risk areas.

¹ Community Fire Refuges have been described in the Emergency Management Victoria (EMV) Community Fire Refuge Policy (June 2015). This policy provides the framework for identifying, establishing, managing and maintaining community fire refuges in areas of extreme risk where other bushfire survival options are limited. The practices and procedures associated with community fire refuges are beyond the scope of this document.

CONCEPT

An NSP-BPLR is a location that;

- is a place of last resort in the near vicinity for individuals to access during a fire event affecting their neighbourhood, without the need to take a high risk journey beyond their neighbourhood;
- eliminates direct exposure to flames from a fire front and manages radiant heat to survivable levels; and
- should only be accessed when personal bushfire plans (for individual properties) cannot be implemented or have failed.

An NSP-BPLR does not guarantee the survival of those who assemble there.

Those who gather at an NSP-BPLR must remain vigilant and monitor the fire. Active defence against the effects of bushfire (heat and embers) and possible consequential spot fires may be necessary.

Not all communities will have an NSP-BPLR in the local area, as potential sites may not meet specific criteria identified in this document and further risk assessment criteria held within a council's Municipal Neighbourhood Safer Places Plan (MNSPP). Some communities may not have the fire risk profile to indicate a need for an NSP-BPLR.

Accessing an NSP-BPLR or any other last resort option should not be part of a primary bushfire survival plan. All last resort options are inherently dangerous.

An NSP-BPLR should not be confused with Community Fire Refuges¹, Relief Centres, Recovery Centres, Assembly Areas, or Informal Places of Shelter, each of which have a different and specific purpose.

LIMITATIONS

An NSP-BPLR has a number of limitations:

- Limited capacity
- Limited parking
- No guarantee of safety
- It may not cater for animals
- Emergency services will not necessarily be present
- It does not provide amenities (e.g. food, drink, toilets, medical services)
- It may not cater for particular special needs (e.g. infants, elderly, ill or disabled)
- There are risks to people travelling through a fire affected environment on foot or in a vehicle to an NSP-BPLR
- There are risks to people accessing, sheltering and leaving an NSP-BPLR during the passage of the fire front
- It is not an appropriate destination when leaving the area early
- It is not assessed to be a place of shelter from other types of emergencies (e.g. to escape rising floodwaters or as a shelter from severe weather events), and
- It may be in the open and therefore provides no shelter from the elements, such as high temperatures from the sun, high wind, or smoke, ash and embers from the fire.

CFA NEIGHBOURHOOD SAFER PLACE ASSESSMENT

The criteria, by which CFA assesses an NSP-BPLR, provides a framework to assist councils to identify locations within their municipality as places of last resort for people to gather to shelter from the immediate life threatening effects of a bushfire.

CFA's NSP-BPLR bushfire hazard assessment (site assessment) is to determine if potential sites identified by municipal councils meet criteria within this guideline. The critical criteria, established through fire industry and agency partner collaboration to ascertain the suitability of an NSP-BPLR is the potential radiant heat load from a fire event directly impacting the site; a maximum allowable radiant heat load for sites that are open spaces and those that are buildings. An NSP-BPLR should provide protection to people from lethal levels of radiant heat through an appropriate separation distance between the fire hazards, particularly vegetation, and the site of the NSP-BPLR.

The site assessment provides factual information on the bushfire hazard (vegetation type and slope) which is identified according to classifications contained in Australian Standard AS3959-2009. Exclusions apply where the site presents non-vegetated areas (e.g. waterways, roads, rocky outcrops) or low threat vegetation (e.g. cultivated garden). The potential radiant heat load is determined based on data captured at time of assessment, considering the requirement under the CFA Act section 50I for council to maintain, and section 50J to review NSP-BPLR in its municipal district by the 31 August each year.

The site assessment is evidence and risk based, on site specific attributes. Where there is a clear delineation between the edge of unmodified vegetation and the managed area that enables the proposed or existing NSP-BPLR site, the potential radiant heat load is calculated using the NSW Rural Fire Service Site Bushfire Attack Assessment Methodology (Douglas and Tan, 2005). Isolated flammable elements (such as shrubs, grass, isolated trees, etc.) may be present within the separation space so long as such elements do not add to a fire's rate of spread nor significantly contribute to the radiant heat impacting on the NSP-BPLR.

Where the vegetation adjoining any proposed or existing NSP-BPLR site is significantly modified and/or fragmented (e.g. urban development), a fire tends to pass through the landscape via multiple ignitions of isolated flammable elements and relatively small localised vegetation patches. In this scenario the appropriate CFA Officer may escalate assessment, following CFAs procedure. Escalation may include procuring further fire behaviour analysis to determine combined impact of localised flaming sources of heat; a collegial determination of compliance result according to maximum radiant heat load criteria. Escalation process may also be applied where initial site assessment outputs indicate non-compliance and negligible variation to criteria parameters. The CFAs delegated authorising officer may develop a position of compliance based on review of evidence and informed professional judgement. This determination may be through (but not limited to) findings from a broader landscape assessment and/or implementation of alternative solutions, recommended by appropriate practitioners, intended to meet the criteria. The escalation process acts as a peer review to ensure that relevant information, relating to potential bushfire behaviour, is considered.

Considering the variable nature and unpredictable intensity of bushfire and the primary purpose of an NSP-BPLR being the protection of human life from a fire event, the assessment methodology applied is based on a *worst case scenario*. This is why compliance to critical criteria is established on a fire scenario occurring under Code Red conditions, equating to a Forest Fire Danger Index (FFDI) of 120, without active fire fighter protection. In cases where the proposed NSP-BPLR is located in an area where the FFDI is determined to be lower when applying acceptable return periods, the setting within the assessment tool may be changed to reflect township specific FFDI in consultation with CFAs delegated authorising officer. Evidence such as FFDI history is required to be reviewed prior to change to this input.

The CFA site assessment criteria do not take into account other potential hazards or risk concerns outside the vegetation radiant heat assessment. Following receipt of a compliant site assessment report from CFA, council undertake a further risk assessment which may be initiated through the Municipal Fire Management Planning Committee (MFMP) as a subcommittee of the Municipal Emergency Management Planning Committee (MEMPC). This risk assessment considers criteria outlined in the MNSPP which may include: the environment surrounding the NSP-BPLR; access/egress; other uses of the site; building accessibility (if applicable); traffic management; etc. Council may seek advice from CFA personnel, and other interested parties (e.g. Vicpol), on other bushfire related matters. CFAs delegated authorising officer may independently identify other hazards or risk concerns in the immediate or broader landscape and provide recommendations to council through the MFMP/MEMPC due process. Council must also secure consents and rights of access from the landholder where land is not council owned or managed, and agreed terms where CFA compliance is based on grassland management during the Fire Danger Period (FDP).

RADIANT HEAT CRITERIA

- 1 If an NSP-BPLR is an OPEN SPACE the maximum potential radiant heat impacting on the site should be no more than **2kW/m²**;
By way of example this equates to greater than 310 metres* separation distance from the outer edge of the NSP-BPLR to a forest fire hazard.
- 2 If an NSP-BPLR is a BUILDING, the maximum potential radiant heat impacting on the building should be no more than **10kW/m²**;
By way of example this equates to greater than 140 metres* separation distance from the outer edge of a building to a forest fire hazard.

*It is acknowledged that for NSP-BPLR abutting less than extreme fuel hazards the separation distance may be reduced so long as the criteria for maximum radiant heat impact are met.

ADDITIONAL MANAGEMENT OF A NEIGHBOURHOOD SAFER PLACE IN GRASSLAND AREAS

Grasslands have a distinct place in the NSP-BPLR framework, due to;

- the potential for rapid growth of grasslands in conditions of adequate warmth and moisture; and
- the requirement under section 50J of the CFA Act for councils to review their NSP-BPLR by 31 August each year.

Councils may identify a suitable NSP-BPLR site in a grassland area that can only meet the assessment criteria with active management of the site, over the FDP, with treatments including slashing, mowing or grazing.

In these circumstances CFA may certify the site as meeting the assessment criteria provided that appropriate, specified and prescribed treatments are in place throughout the FDP. This must include prescriptions for management of the grassland secured by agreed terms entered into by the landholder. The landholder may be the council, a public authority, an agency or a private person. Evidence of agreement noting specific treatments and prescriptions must be provided to CFA with notification of designation or continued designation as part of review.

The identified treatment of the grassland must be included within the Municipal Fire Management Plan. Council has the role of facilitation and, if required, enforcement of the treatment(s) during the FDP. Fire Prevention Notices should not ordinarily be an appropriate method for achievement of management prescriptions in NSP-BPLR. The objection and appeal provisions, pursuant to the CFA Act and associated with Fire Prevention Notices, could mean significant delays in achieving compliance. This method should only be used as a last resort by councils where a private landholder has reneged on their agreed conditions and the grassland condition constitutes, or may constitute, a danger to life or property from the threat of fire. Where compliance according to agreed terms during the FDP cannot be met within an immediate time frame, council must follow due process to decommission the NSP-BPLR.

REVIEW OF A DESIGNATED NEIGHBOURHOOD SAFER PLACE

In accordance with section 50J of the CFA Act, a municipal council must, by 31 August in each year, conduct a review of each designated NSP-BPLR in its municipal district to determine if it is still suitable to be designated as an NSP-BPLR. This council review, or review on a designated site at any time of year, must include a request on CFA for reassessment.

On receiving a request, CFA must assess the NSP-BPLR in accordance with the CFA Assessment Guideline criteria. As part of a review reassessment, the appropriate CFA Officer may determine from local knowledge and evidence gathered that a site status is unchanged from previous assessment and therefore continues to satisfy the assessment criteria.

In these circumstances, CFA may certify that the NSP-BPLR continues to meet the assessment criteria in the CFA Assessment Guideline and provide any advice pertaining to grassland management (where applicable).