

Design Guidelines
**Settlement Planning
at the Bushfire Interface**



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Environment,
Land, Water
and Planning

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Introduction

Purpose

The Design Guideline: Settlement Planning at the Bushfire Interface (Guideline) has been developed to assist in the creation of responsive settlement planning outcomes that minimise the risk to people from bushfire and build better resilience within the community.

The Victorian State planning policy for bushfire in Victorian planning schemes (Clause 13.02-1S) provides the broad framework for the integration of bushfire policy and provisions into planning schemes.

With Clause 71.02-3 'Integrated decision making', the State policy for bushfire prioritises the protection of human life in planning decision making. It also places a strong emphasis on proactively planning settlements to enhance their resilience to the impacts of bushfire and grassfire.

Strategic bushfire landscape considerations

The primacy of human life in planning decision making requires planning authorities, responsible authorities, landowners and developers to carefully consider the strategic matters set out in Clause 13.02-1S, including for settlement planning.

The policy assists in identifying areas that are suitable for development focusing on strategic and landscape bushfire considerations including:

- the likely size and intensity of a bushfire and whether it may result in neighbourhood-scale destruction
- the availability of alternative locations for settlement growth and new development
- access to enable people to move away from a bushfire hazard and options for where people can get to safe areas during a bushfire
- emergency management response to bushfire and structural fires.

The process for this assessment can be done using Clause 13.02-1S as a framework and the Planning Permit Applications Bushfire Management Overlay-Technical Guide 2017 (pages 9-19).

Key Terms

- **Bushfire**
A fire often occurring in bushland and grassland areas, but which can also consume houses or agricultural resources.
- **Bushfire Hazard**
A source of potential harm or a situation with a potential to cause loss.
- **Bushfire Impacts**
The effects of a bushfire on people and the natural and built environment.
- **Bushfire Risk**
The likelihood and consequences of a fire starting, spreading and impacting on people, property and the environment.
- **Ember Attack**
Occurs when small burning, twigs, leaves and bark are carried by the wind and land on or around houses.
- **Radiant Heat**
Is the heat created from a fire. The best protection is distance.

When do the guidelines apply?

A bushfire landscape hazard landscape and site assessment must be undertaken before using this Guideline.

This assessment will:

- help to determine the suitability of the location/site for future development
- assist in identifying issues that may need to be addressed in a planning proposal, including the design response and improving the resilience of the existing community.

Whilst the principles adopted in the Guideline can be applied within any bushfire landscape, they have been developed to typically address an appropriate design response in a landscape where it has been assessed as Type 1 or 2 in the landscape bushfire assessment.

What do the guidelines apply to?

The Guidelines can be applied to:

- Preparing settlement, structure and land-use framework plans for new and existing communities
- Preparing planning scheme amendments that alter policies, zones and overlays in bushfire areas
- Planning for subdivision and development in bushfire prone areas that require consideration under Clause 13.02 (Use and development control in bushfire prone areas)
- Planning Permit applications under Clause 44.06 Bushfire Management Overlay (BMO) in planning schemes, especially for subdivisions. However, it is important to recognise that these applications have specific objectives that need to be complied with in the first instance.

The Guidelines should not be used for planning applications under the BMO to develop a lot with a single dwelling.



What about existing communities?

The Guidelines, while representing good practice, are relevant when there is opportunity to enhance the resilience of existing communities through a planning process or decision.

For example, when settlement and structure plans are being prepared, they should consider opportunities for how the resilience of existing communities can be strengthened, and what new bushfire protection measures could be applied. The Guidelines can assist in these circumstances.

Also, settlement planning should always consider any fire prevention/mitigation and emergency management activities that may occur in the community to ensure a whole of settlement approach to reduction in bushfire risk. These activities can be undertaken by the local council, fire authority or other agencies.

Structure of the guidelines

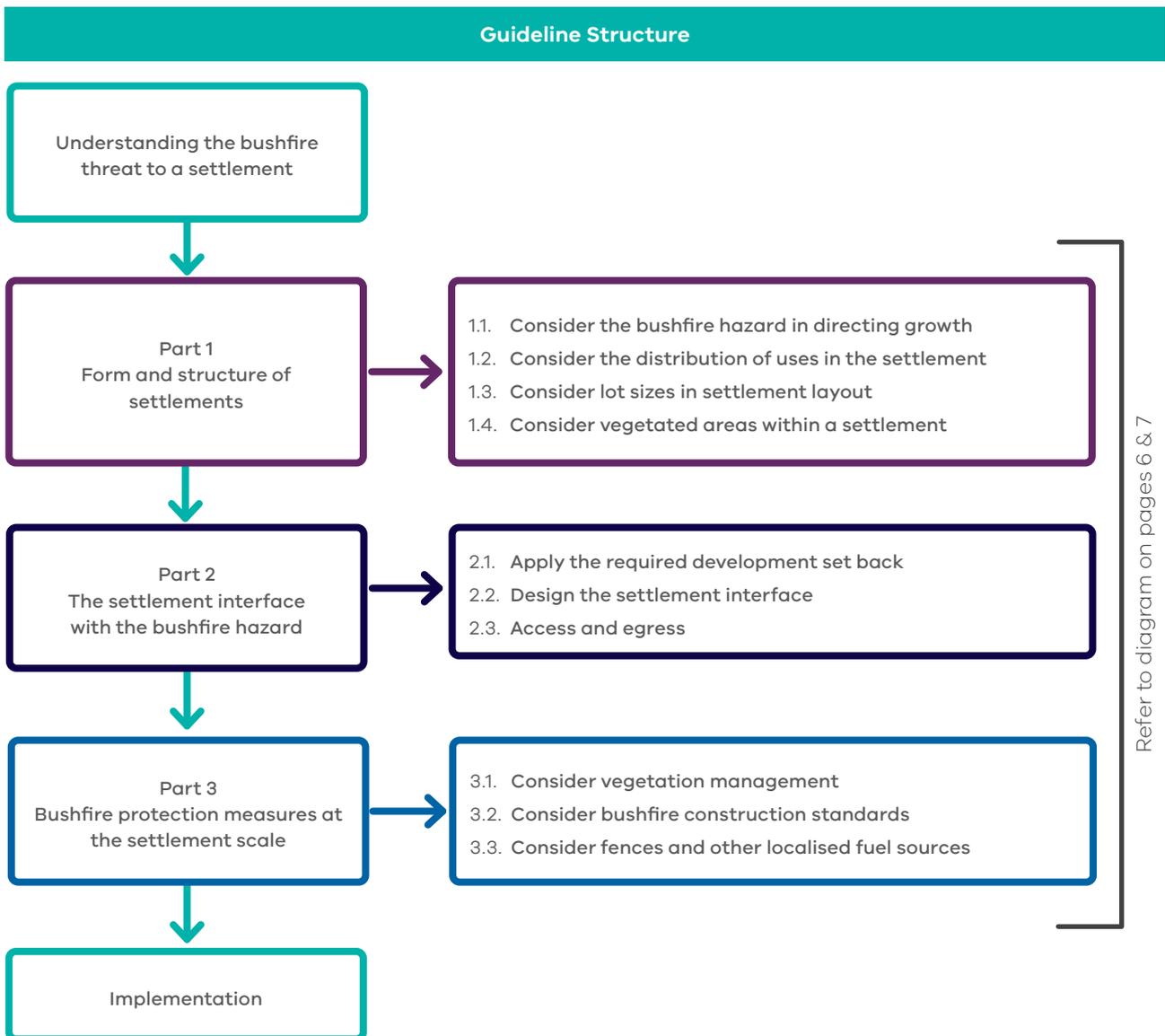
Settlement design advice is provided in three parts, preceded by an explanation on the way a bushfire behaves and how it can threaten a settlement, and concluding with a discussion on implementation.

Part 1 considers how the form and structure of the settlement enhances resilience, ensuring that life-safety considerations are factored in early to the settlement planning process.

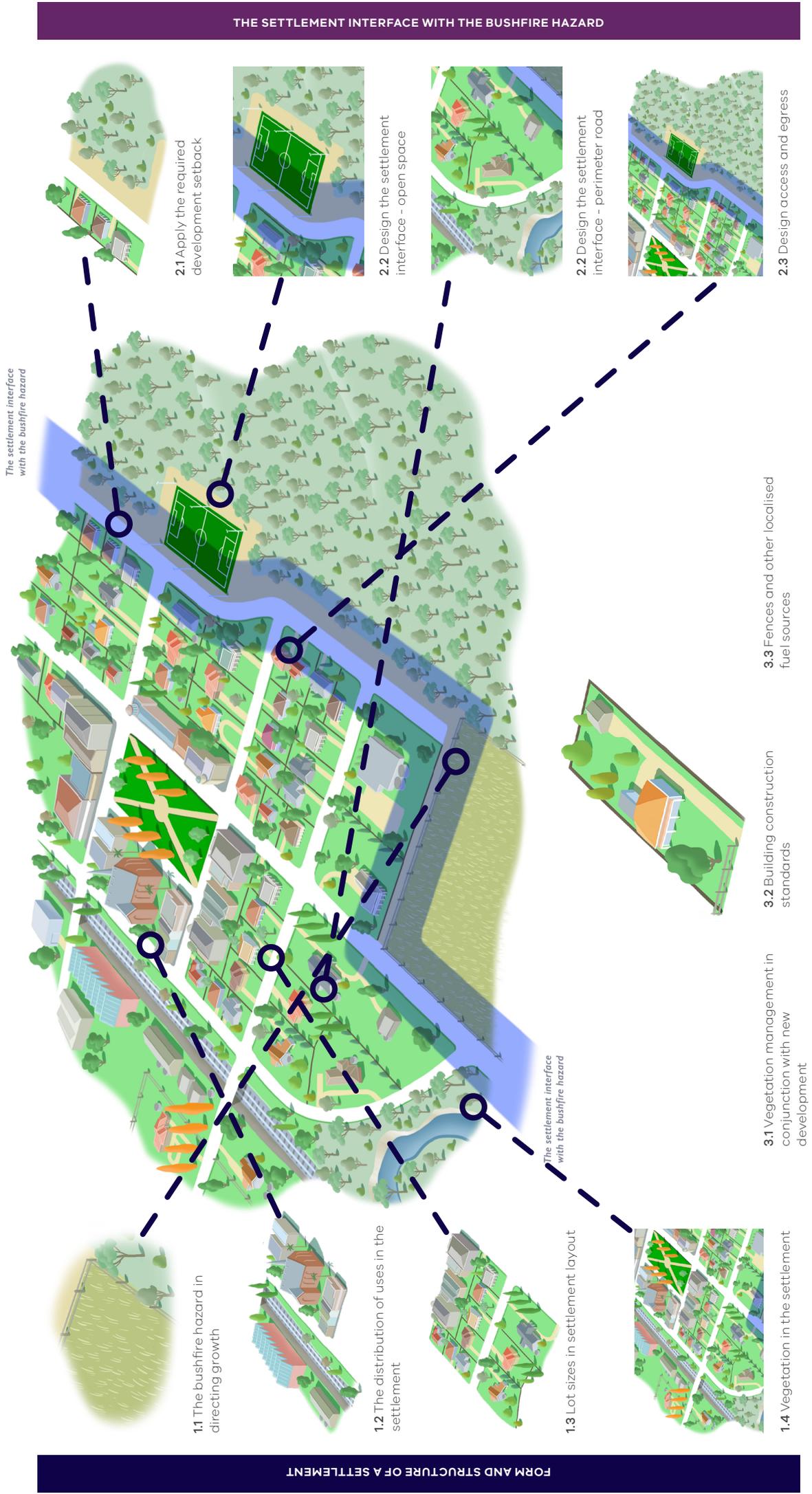
Part 2 considers how settlement planning can deliver a bushfire ready interface between settlement areas and the bushfire hazard.

Part 3 considers bushfire protection measures at the settlement scale to ensure that they are consistently applied throughout settlement plans and proposals.

Refer to diagrams in Figure 1 and Figure 2.



Settlement planning for bushfire



BUSHFIRE PROTECTION MEASURES AT THE SETTLEMENT SCALE

Figure 1: Settlement planning for bushfire

Understanding the bushfire threat

Landscape scale bushfire threats

Vegetation, topography and weather conditions are the three major characteristics that contribute to landscape scale bushfire threat.

The intensity and duration of a bushfire is largely influenced by these factors. These broader landscape characteristics strongly impact how a fire is likely to act and its probable size, intensity and destructive power and therefore its level of risk and potential to impact people and safety. In some circumstances the risk from a large bushfire cannot be mitigated, which is why development should be avoided in the areas of highest risk.

How bushfire may threaten a settlement

Bushfires are complex and many factors contribute to their behaviour and the threat they can pose. For the purpose of addressing bushfire through the planning scheme, there are three main factors to be considered at the settlement scale.

1. Flame contact and radiant heat
2. Ember Attack
3. Bushfire 'fuels' in vegetated areas

1. Flame contact and radiant heat

The settlement interface with the bushfire hazard is where a moving bushfire front will create flame contact and radiant heat that are harmful to human life and likely to destroy buildings.

Part 2 of the Guidelines provides direction on how to design the settlement interface to mitigate the impact of flame contact and radiant heat from a moving fire front.

2. Ember attack

Land on the settlement interface and land throughout a settlement may be exposed to ember attack.

Ember attack occurs when small burning twigs, leaves and bark are carried by the wind, landing throughout a settlement and igniting fuel sources. Fuel sources typically include vegetation but can also include buildings and sheds.

When ignited from embers, these fuel sources can generate flame contact and levels of radiant heat that are harmful to human life and can destroy buildings. Ember attack is the most common way that structures catch fire during a bushfire. Refer to Parts 1 & 3 on how to manage the threat from ember attack within a settlement.

3. Bushfire 'fuels' in vegetated areas

'Fire runs' is the term given to describe how a bushfire will likely 'run' or move through a landscape. Fire runs are fuelled by vegetation and can be ignited where there is a continuous fuel path. This path may be from a forest and lead to a settlement. If the fuels at the interface are not managed it enables deeper penetration of a moving fire front or ember attack potential.

Vegetated areas within a settlement, such as nature reserves, river corridors and areas of remnant vegetation, can create a larger fire run by creating a continuous fuel path within or through a settlement.

Therefore, large vegetated areas may contribute to the fire run potential and therefore the risk to human life.

Refer to 1.4, 2.2, 3.1 and Attachment 1 on how to manage the threat from vegetated areas within a settlement.

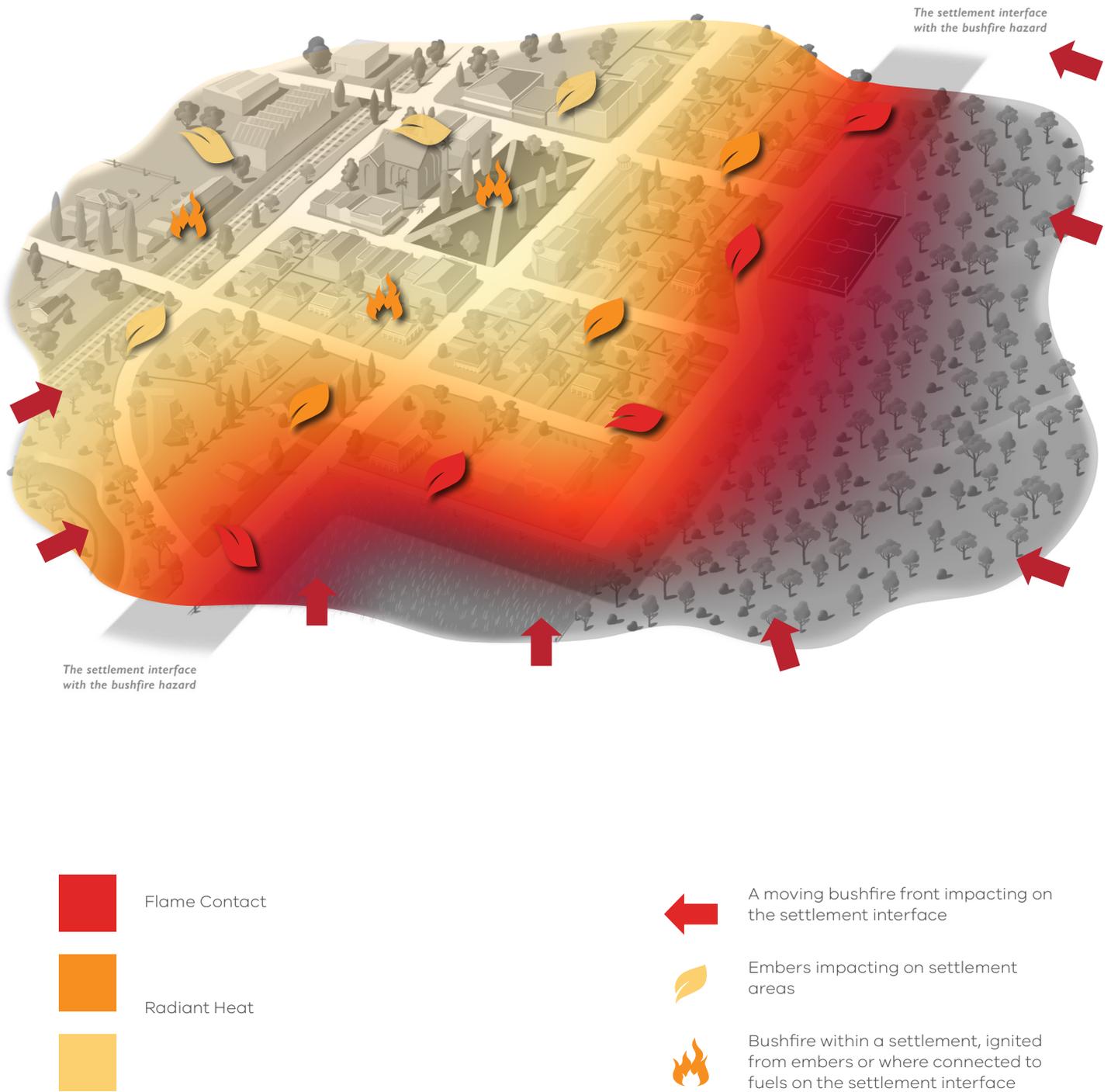


Figure 2: How bushfire may threaten a settlement

Part 1: Form and structure of settlements

Bushfire should be considered in the broader planning of the settlement. This enables resilience to be incorporated in the form and structure of the settlement from the outset. Taking these considerations into account early in the settlement planning process optimises implementation along with other settlement planning considerations.

There are four key considerations:

- 1.1 The bushfire hazard in directing settlement growth**
- 1.2 The distribution of land uses in the settlement**
- 1.3 Lot sizes in settlement layout**
- 1.4 Vegetated areas within a settlement**

The dynamic nature of bushfire and the unique characteristics of a settlement, including its location in the wider landscape, means that the design considerations are prompts to guide settlement planning. They are to be based on context and analysis at the detailed settlement planning stage.

1.1: The bushfire hazard in directing settlement growth

Settlement planning should direct growth to locations that are less exposed to a bushfire.

Settlement growth should be directed to locations that avoid bushfire risk where possible, including the highest risk aspect(s) where large bushfires will occur. Victoria's dominant bushfire weather usually arises from the north-west and the south-west. It is under these conditions that Victoria experiences bushfires that have the most impact on settlements and communities. Directing growth to the east of existing settlements avoids the highest risk aspects and enables the existing settlement to provide a buffer for new development.

Settlement growth should also be directed to locations that avoid the most hazardous vegetation. While all vegetation can burn in a bushfire, some vegetation such as forests generate more severe bushfires than others. Considering the different types of bushfire hazard and directing growth to relatively lower risk vegetation types can be an effective approach to settlement planning.

In lower risk landscapes where extreme fire behaviour is unlikely, directing settlement growth to the higher risk areas within an existing settlement may enhance settlement-wide resilience. New development with contemporary bushfire protection measures (for example, bushfire building construction standards and vegetation management requirements) can provide protection to areas that may have been designed with less emphasis on bushfire and life safety considerations.

Directing new growth to higher risk areas should be carefully considered. **Consulting with the relevant fire authority as part of strategic and settlement planning is crucial.**

1.2: The distribution of land uses in the settlement

Vulnerable uses

Development that may be occupied by vulnerable people should be located away from the settlement interface and in some landscapes may not be suitable at all. Vulnerable people may be less capable of managing their own risk before, during and after a bushfire. Appropriately locating vulnerable use development will also help the emergency response during a bushfire (for example, evacuation).

What is vulnerable development?

Vulnerable development includes residential aged care facility, residential building, retirement village, child care centre, education centre, hospital, leisure and recreation facility and a place of assembly.

Hazardous Uses

Hazardous uses, such as a petrol station, can potentially present a significant risk during a bushfire and can become sources of fires well beyond the settlement interface. They can also create toxic smoke and plumes.

These types of uses should be located away from the settlement interface and away from locations exposed to a north-west or south-west bushfire. Locating them on the eastern side of a settlement means that winds would tend to push smoke away, rather than towards more populated areas.

See [Part 2](#) of the Guidelines for further advice on uses that may be appropriate on the settlement interface.

1.3: Lot sizes in settlement layout

A key bushfire risk to many settlements is from ember attack. Ember attack may ignite fuel sources and create many smaller fires throughout the settlement. Lot sizes are an important mechanism to support the management of fires ignited from ember attack. Different lot sizes support different bushfire outcomes.

Residential lots

Smaller urban lots, for example less than 800sq.m in size, are less likely to enable fuel sources (including vegetation) due to the limited area of open space. They contribute positively to achieving lower-fuel settlements. However, smaller lots result in structures closer to together, increasing the risk of structure to structure fire.

Larger lots, for example 0.2ha- 4ha in size, have the capacity for more localised fuel sources (particularly vegetation) due to more extensive open space areas. They require more extensive management by individual landowners. They also tend not be large enough for landowners to have specialised equipment (for example, tractors) that would make management more practical. Houses, however, are separated further apart minimising the risk of structure to structure fire.

An optimum lot size of between 800sq.m-1,200sq.m provides a good balance. This minimises available open space for fuel sources while enabling a good separation between individual structures (ideally more than 10m).

Many parts of Victoria encourage the provision of low-density and rural living lots of 0.2ha and above. They are often justified in locations that do not have reticulated services or as a transitional land use from rural to urban (for example, on the edges of settlements).

These style of lots present a unique bushfire risk as they have not historically resulted in a well-planned settlement interface or an edge to the bushfire hazard. Bushfires and grassfires can penetrate larger lots and create bushfire pathways into denser residential areas. This can include a moving bushfire front entering a settlement. They may also make it more difficult for firefighting (for example, for the setting up of containment lines) and for the monitoring and enforcement of vegetation management on private land.

Where lots larger than 800sq.m - 1,200sq.m are provided, the guidance in this document should be fully considered, especially [Part 2: Designing the settlement interface](#). This will ensure a well-planned settlement interface is created along with an edge to the bushfire hazard.

Commercial and industrial lot sizes

At the settlement planning stage lot sizes for non-residential lots could be relevant. However, the future form of development is more variable and usually subject to further planning approvals. It is important however that [Part 1.2](#) of the Guidelines is fully considered in locating land identified for industrial and commercial zoning.



Figure 3: Lot sizes in settlements

1.4: Vegetated areas within a settlement

Vegetated areas within a settlement such as parks, nature reserves and river corridors can create a bushfire hazard. Settlement planning around vegetated areas requires careful consideration. There are a number of possible approaches.

Vegetation management

Vegetated areas can be managed so that fuels are consistent with the vegetation management requirements for bushfire. This involves either removing fuels or ensuring that new fuels are not introduced as part of settlement planning.

Create settlement interfaces with vegetated areas

Areas that will not be managed for bushfire purposes effectively have their own interface with the bushfire hazard. [Part 2](#) of the Guidelines can be applied to these areas, including the application of setbacks and managing the vegetation.

How to define if open spaces have enough fuels to create a hazard?

A bushfire hazard site assessment is an application requirement for certain types of applications under planning schemes. It uses parts of AS3959-2009 Building in a bushfire prone area (Standards Australia) to assess the bushfire hazard. Open spaces within settlements are a bushfire hazard where the vegetation cannot be assessed as excludable under the bushfire hazard site assessment.



Figure 4: Vegetated areas within a settlement

Part 2: The settlement interface

Strategic settlement planning should deliver a bushfire ready interface between settlement areas and the bushfire hazard. The purpose of the interface is to create an edge to the hazard where a moving bushfire front will not continue into the settlement. From this edge, development can be set back and designed to mitigate the impacts of bushfire.

There are three key considerations:

2.1 Apply the required development setback

2.2 Design the settlement interface

2.3 Design access and egress

2.1: Apply the required development setback

New development should be set back from the bushfire hazard. The setback is determined based on the type of vegetation and slope under the vegetation. Permanently occupied development, such as dwellings, are not permitted in the setback area.

What setback applies?

Planning scheme provisions specify the setback required between development and the bushfire hazard. The setback varies depending on three factors:

1. Whether the planning proposal forms part of a planning scheme amendment or a planning permit application
2. The type of use proposed - different setback requirements apply for different uses based on the potential vulnerability of future occupants
3. Landscape bushfire considerations where the settlement is subject to Clause 44.06 Bushfire Management Overlay in planning schemes.

It will be important for planning and responsible authorities to identify the setback that applies, using the applicable parts of the planning scheme.

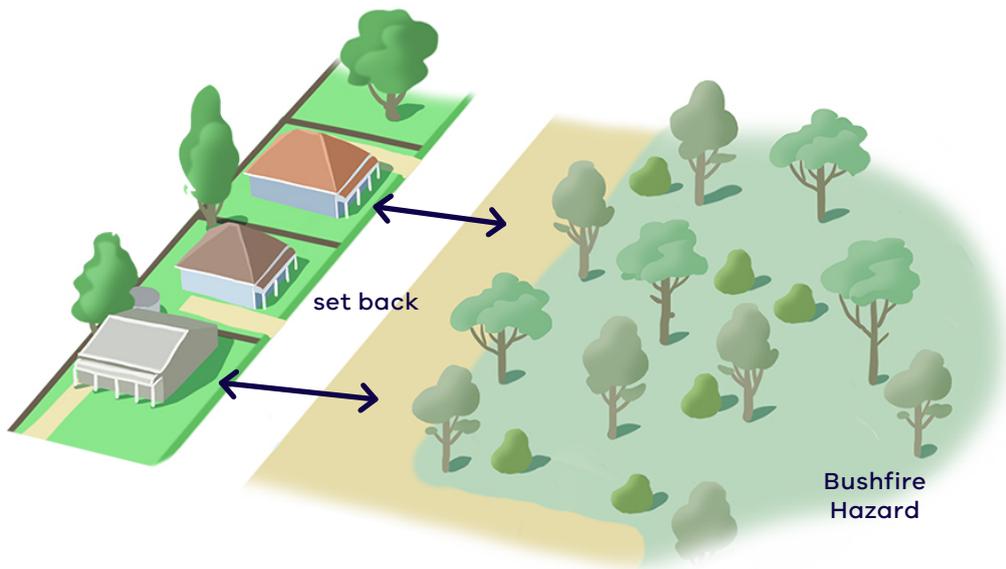


Figure 5: Apply the required setback from the hazard

2.2: Design the settlement interface

Once the required setback from the bushfire hazard is determined, the interface can then be designed. A number of design considerations can be used to reduce bushfire risk.

Vegetation management

Any vegetation in the setback area needs to be managed to prevent a moving bushfire front entering the settlement. Creating a separation from the bushfire hazard is the main means of achieving this.

Often, there is a desire to protect vegetation to meet broader policy objectives. However, this is not the basis for not managing the vegetation for bushfire purposes. If the impact on existing vegetation is unacceptable under broader policy objectives, then settlement changes should not proceed. Clause 13.02-1S makes it clear that development should proceed only if the impacts on biodiversity are acceptable.

The management and maintenance of vegetation when planning for new development should always be discussed with Council when public land will be incorporated into the proposal. Where bushfire is a relevant consideration, the level of ongoing maintenance may be higher. Strategic planning applications should ensure this issue is captured in the preparation of relevant materials.

Attachment One provides guidance on approaches to managing vegetation in existing settlements.

Vegetation management for bushfire purposes

Table 6 in Clause 53.02 Bushfire Planning in planning schemes specifies the vegetation management requirements for bushfire. They are:

- Grass must be short cropped and maintained during the declared fire danger period
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period
- Flammable objects must not be located close to the vulnerable parts of the building (within 10 metres)
- Plants greater than 10 centimetres in height must not be placed within three metres of a window or glass feature of the building
- Shrubs must not be located under the canopy of trees
- Individual and clumps of shrubs must not exceed five square metres in area and must be separated by at least 5 metres
- Trees must not overhang or touch any elements of the building
- The canopy of trees must be separated by at least five metres
- There must be a clearance of at least two metres between the lowest tree branches and ground level.

Perimeter roads

Perimeter roads are the preferred design outcome on the settlement interface and where a site abuts or is near a bushfire hazard. A perimeter road enables a no fuel area to form all or part of the interface.

Typical roadside vegetation can usually comply with the vegetation management requirements for bushfire.

Perimeter roads also provide an effective location from which fire authorities can establish positions to attack a bushfire and for land managers to undertake fuel management activities.

Perimeter roads are sometimes required under the BMO. However, they should be considered in all settlement interfaces as appropriate. Where a perimeter road or similar (i.e carpark) is not incorporated into the design outcome, further details should be provided that demonstrates the risk will be managed.

Another benefit of a perimeter road is that it enables development to 'front' the bushfire hazard and orientates the rear of lots away from it. The rear of lots is often where introduced fuels create a localised bushfire hazard (for example, sheds, storage and unmanaged vegetation).

This can also enhance monitoring and enforcement efforts because private land closest to the hazard can be more readily monitored from the road.

Are perimeter roads important in lower density residential areas?

Yes. Proposals for lots larger than 800sq.m to 1,200sq.m on the settlement interface, for example, the Low Density Residential Zone and Rural Living Zone, should also consider a perimeter road.

Are perimeter roads important in non-residential development?

Yes. Perimeter roads perform the same function in non-residential developments such as industrial and business areas.

In integrated developments such as schools and reception centres, other site features can take the place of a perimeter road as part of the overall design (for example, sports ovals, parking areas).

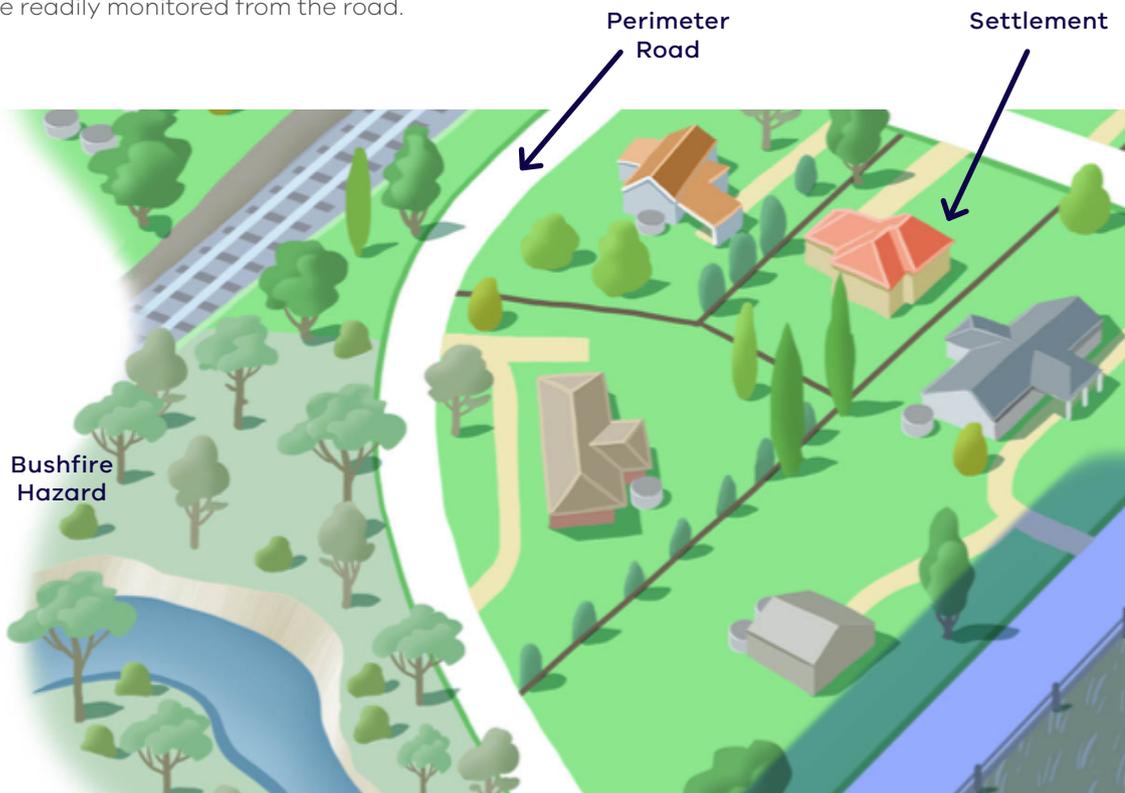


Figure 6: Perimeter roads on the settlement interface

Open space on the settlement interface

Open space can be integrated into the settlement interface and is an important design consideration. Open space excludes buildings that may be permanently occupied (such as houses).

The vegetation in open space, and any landscaping plans or requirements, must be managed. Low-threat areas such as water bodies, sports fields, hard surface areas such as tennis and basketball courts, and parking areas are acceptable design outcomes.

The management of vegetation in public open space is the responsibility of the land manager, usually the local council. This provides a high level of certainty about its future management. It is a significant strength having all or part of the interface under public land management.

The management of vegetation in open spaces on private land is the responsibility of the landowner. Planning scheme mechanisms need to be used to secure management of the vegetation in perpetuity for these areas.

Exclude development from the setback area

There must be no buildings that can be permanently occupied within the setback area. The provision of perimeter roads and public open space areas help to achieve this.

Where land is proposed to be developed in the setback area buildings must be excluded from it. This might only apply to part of a lot. A mechanism that requires the setback area to be managed will need to form part of any proposal.

A building envelope (directing where to develop on a lot) or a building exclusion area (directing where not to develop on a lot) can be provided in these circumstances.



Figure 7: Open space in the settlement interface

2.3: Design access and egress

Considering access and egress in settlement planning ensures that people living close to the settlement interface can move away from the hazard to a place of relative safety. It will also enable fire-fighting units to advance towards a bushfire.

Elements of an effective road network include:

- Ensuring the spacing of roads leading away from the hazard are no more than 120 metres apart (on average)
- Designing road widths to meet planning scheme requirements and those of the relevant fire authority
- Providing multiple roads. At least two different roads leading away from the hazard edge should be available to each lot

- Ensuring travel to and from a location is not alongside a bushfire hazard and providing multiple access and egress routes within developed areas to minimise the use of perimeter roads in the event of a bushfire
- Effectively connecting roads to the broader road network within the settlement.

Access and egress need not always be on trafficable roads. Some access points may be provided for pedestrians and emergency vehicles only.

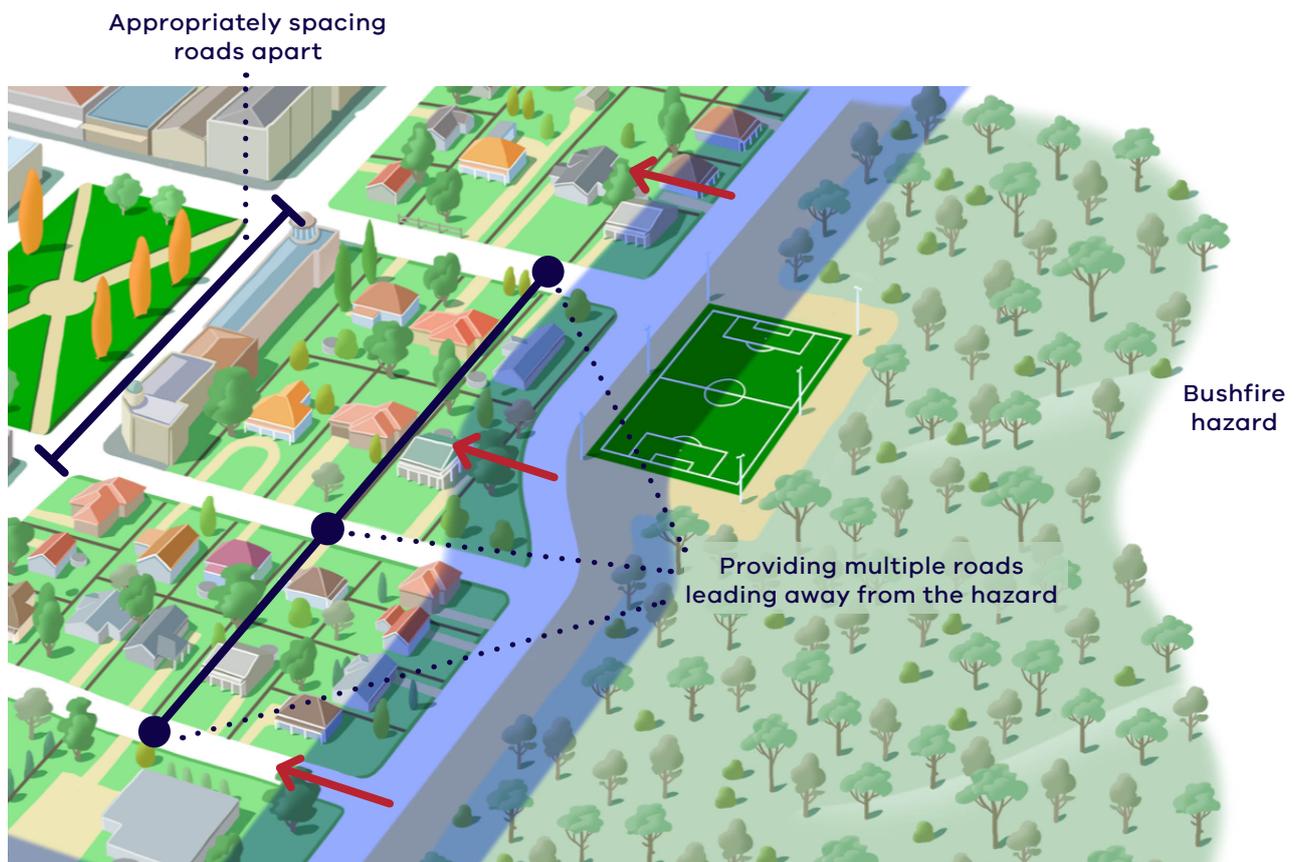


Figure 8: Access and egress on the settlement interface

Part 3: Bushfire protection measures across a whole settlement

Applying bushfire protection measures from a whole-of-settlement perspective enhances overall resilience. This ensures they are consistently applied and implemented in settlement plans and proposals.

There are three key considerations:

3.1 Vegetation management

3.2 Building construction standards

3.3 Fences and other localised fuel sources

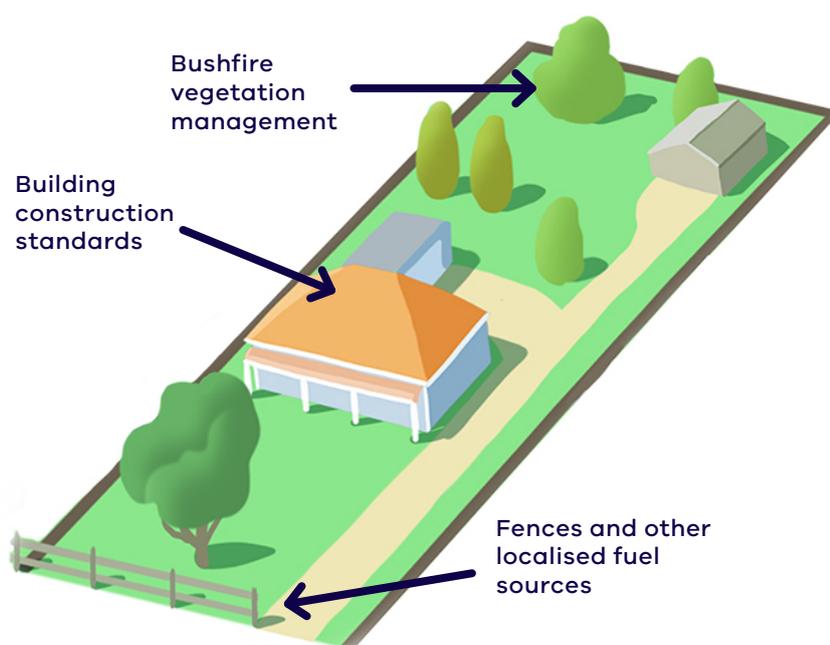
3.1: Vegetation management

Ensuring that vegetation will be managed to a certain standard within a settlement, particularly where there is exposure to ember attack, is a key consideration in reducing bushfire risk and building a more resilient community. In particular, proper vegetation management and maintenance will help reduce the potential for localised fires from ember ignition.

Factors that affect whether vegetation management is required across all, part or none of the settlement include the:

- location of the settlement
- type, location, slope and extent of nearby bushfire hazard
- level of landscape scale bushfire risk.

An assessment of these factors, in addition to the consideration of the likely forms of bushfire attack will be needed. Where a site is likely to be affected by ember attack, it is typically recommended that vegetation across the settlement or within an appropriate part of the settlement is managed to reduce localised bushfire risks. Where the settlement is located within a BMO, vegetation is required to be managed.



Vegetation management can be applied to private and public land. For private land, vegetation management will be an on-going obligation in conjunction with future use and development. Strategic planning proposals should ensure planning controls or other mechanisms are put in place to ensure that these obligations can be adequately implemented.

For public land or future public land, vegetation management becomes the responsibility of the public land manager. This includes roads and open spaces within a settlement. It also includes areas that may be provided, either formally or informally, as places where people will gather during a bushfire.

Figure 9: Bushfire protection measures at the settlement scale

3.2: Building construction standards

Building construction standards for new development are an important part of bushfire settlement planning. Specific building construction standards, referred to as bushfire attack levels, seek to mitigate the impact of flame contact, radiant heat and ember attack on a structure.

Building construction standards are required in areas subject to the BMO and Bushfire Prone Areas.

It may be necessary at the settlement scale to consider how bushfire construction standards are to be applied depending on the proposed form and structure of the settlement. For example, the construction standard may need to be considered at the settlement scale where:

- There is a need for enhanced protection from ember ignited localised fires
- Smaller lots sizes are proposed and additional protection to mitigate structure to structure fires is necessary.

Clause 13.02-1S seeks minimum radiant heat benchmarks for urban growth and development. Whilst all strategic planning applications must meet these minimum benchmarks, where the above circumstances apply, a higher level of building construction is likely to result in improved community and personal safety outcomes. The use of certain planning tools such as section 173 agreements or additional policy controls, i.e. Design and Development Overlay, may be required to ensure that requirements can be easily implemented.

3.3: Fences and other localised fuel sources

Gardens and landscaping provide opportunities for additional fuels to be introduced into settlements, particularly around structures such as dwellings. Designing and planting for bushfire can help reduce the effects of fire.

Fencing is also a potential source of fuel. Some fence types if ignited by bushfire create high levels of radiant heat. If a dominant feature of an area, they can create a potential hazard to people during a bushfire.

Other fence types have less potential to become a hazard.

Colourbond fences are ideal as they slow the spread of bushfire through a settlement and act to attenuate radiant heat.

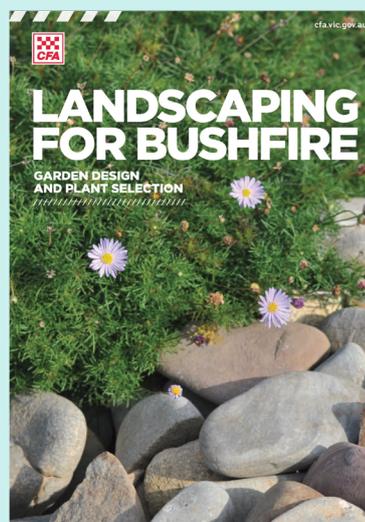
Post and wire fences won't inhibit fire spread, but do not substantially add to fuel loads. They are also easier for firefighting access.

Timber fences and brush fencing add to fuel loads throughout a settlement and are discouraged.

Landscaping for bushfire

The type, quantity and condition of fuel has a very important effect on bushfire behaviour. The survivability of buildings, and of those who occupy and shelter in them, can be significantly enhanced or endangered by the type of plants around the building.

Landscaping for Bushfire (CFA, 2011) has been developed by the Country Fire Authority in response to Recommendation 44 of the Victoria Bushfires Royal Commission. It provides a valuable resource to assist settlement planning.



Implementation

Effective settlement planning depends on implementing bushfire protection measures at all stages of the planning process. This section provides direction on implementing the design measures set out in the Guidelines.

Giving effect to bushfire requirements

Settlement and structure plans

The Guidelines are best applied early in the settlement planning process. For example in the preparation of local policies for settlements, township strategies and structure plans for identified potential urban growth areas. Settlement and structure plans provide the ability to prioritise bushfire in the planning and design of settlements and its integration into broader planning considerations. This can include associated processes such as community consultation.

Content in planning schemes

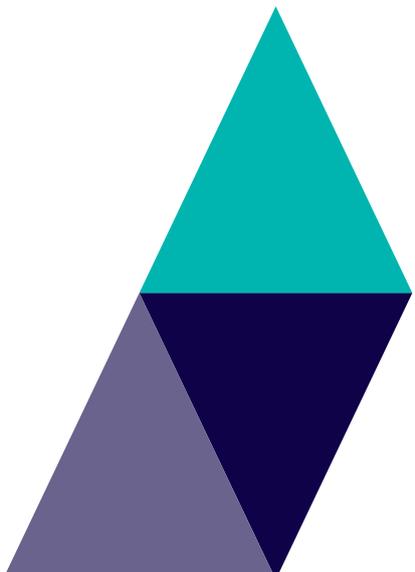
Planning schemes will often need to include detailed bushfire requirements. Especially, where settlement and structure plans specify the outcomes that need to be given statutory effect. Content in planning schemes may also be required to demonstrate that new risk being created through a planning scheme amendment results in 'no net increase in risk'

An area-based planning scheme tool can be used to specify bushfire content in planning schemes - for example, an Urban Growth Zone, Design and Development Overlay, Development Plan Overlay or local content in the Planning Policy Framework. Planning authorities should determine the most suitable mechanism for achieving this in conjunction with the relevant fire authority.

Section 173 agreements

Section 173 agreements provide a useful mechanism to ensure bushfire requirements need only be considered once and are secured early in the settlement planning process. They may be particularly useful at the planning scheme amendment stage where a site-specific amendment is proposed. The requirement for a section 173 agreement could be included as part of a planning scheme amendment.

For example, use of a section 173 agreement means bushfire does not need to be reconsidered in a planning permit application following a planning scheme amendment.



Compliance and monitoring of vegetation management

The strong emphasis on vegetation management creates a compliance and monitoring obligation on landowners and responsible authorities. It is important that planning decision-making fully understands the implications of ongoing vegetation management.

The use of perimeter roads and open space in the settlement interface can be used to minimise the need for obligations being placed on private land.

Planners should seek the advice of council municipal fire prevention experts to ensure the management and compliance obligations associated with changes to settlements can be effectively managed. The municipal fire prevention plan should be adjusted to plan for and reflect the additional management requirements arising from settlement planning.

Excluding development from the setback area

Part 2.2 of the Guidelines considers excluding development in the setback area of the settlement interface.

Planning mechanisms are required to give effect to this outcome and a tiered approach can be most effective.

Settlement and structure plans

Settlement and structure plans should identify (using a plan) the hazard on the settlement interface. The setback required from the hazard can also be included in the plan, along with perimeter roads, public open spaces or other settlement interface design features being used.

Planning scheme amendments

A planning scheme amendment that enables new development on the settlement interface must ensure that development will not be located within the required setback area. This must not be deferred to subsequent planning approvals as permit triggers may not exist under the BMO. Further, there are different setback requirements for new development enabled through a planning scheme amendment. This makes it essential to specify the setback as part of a planning scheme amendment.

Section 173 agreements may be particularly useful at the planning scheme amendment stage where a site specific amendment is proposed. Requiring a section 173 agreement could be included as part of the suite of planning provisions proposed for the land subject to the planning scheme amendment.

Planning permits

Development can be excluded from the setback area through a building envelope (directing where to develop on a lot) or a building area (direction where not to develop on a lot).

If the planning permit is to subdivide the land, the requirement should be included for each lot within a section 173 agreement. This will secure its implementation and make it binding on future landowners once lots are subdivided.

Using existing planning scheme setbacks for bushfire purposes

Planning scheme provisions such as Clause 54 (single dwelling on a lot) and Clause 55 (two or more dwellings on a lot) contain minimum setback requirements. Where these are in place there is no need for a building envelope to be applied as the planning scheme does not permit development to encroach into the setback areas in any event. However, if the setback required for bushfire purposes is larger than the planning scheme specified minimum setback, then a separate mechanism is required.

Attachment 1: Vegetation management in existing developed areas

Proposing development in existing settlements (for example, the subdivision of existing lots) may make the management of vegetation more difficult. The vegetation in these areas can often consist of extensive canopy tree cover and middle or lower storey vegetation. This can include exotic species and gardens with naturally higher fuel loads intermixed with houses and urban infrastructure like roads. These areas can facilitate the deeper penetration of bushfire into a settlement.

Planning for existing areas in a settlement can be complex. Land in different ownership and being redeveloped at different times, makes the coordination of development across the settlement difficult. The redevelopment of land must still achieve effective bushfire outcomes, including the management of vegetation on the settlement interface and, where necessary, across the broader settlement.

Existing vegetation is often highly valued by the community for its neighbourhood character and environmental attributes. It is important that planning and responsible authorities engage with communities on what the vegetation implications are when progressing with change. The future management of vegetation may conflict with other community or planning scheme objectives for said vegetation. This will impact on a proposal proceeding or not. Where a conflict arises it is often an indication that the development proposal should not proceed.

Settlement planning in this scenario requires a vision that encompasses the management of bushfire and the prioritisation of human life. The following are suggested steps to guide settlement planning in these scenarios.

Step 1. A vision for change

A vision that clearly establishes how the vegetation characteristics of the area will change is an essential first step to ensure that the change required is understood. The vision should be subject to community consultation.

It is important that the vision addresses the consequences of settlement changes. Generally, new development will result in the urbanisation of settlements over time. Existing vegetation that does not comply with vegetation management requirements will be modified so that it does comply. A managed garden setting will be created as a result.





Step 2. Vegetation protection controls adjusted

Existing vegetation controls need to be altered or removed so they do not conflict with bushfire objectives. Settlement planning that proposes redevelopment while concurrently seeking to retain and protect vegetation is unlikely to meet the state planning policy that emphasises life safety.

Planning scheme amendments should include permit exemptions to ensure:

- the management of vegetation is not subject to further review where implementation needs to be reconsidered
- There is no scope for a planning permit to manage vegetation to be rejected when proposed with a new development.

Planning scheme exemptions for vegetation management

Permit exemptions for vegetation management for bushfire may need to be included in planning scheme schedules to local vegetation provisions.

A native vegetation precinct plan under Clause 52.16 Native Vegetation Precinct Plan in planning schemes may need to accompany an amendment where Clause 52.17 Native Vegetation in planning schemes would otherwise trigger a planning permit for vegetation management.

Step 3: Managing fuels through settlement transition

The redevelopment of existing areas will transition over time. There may be areas progressing with development (sometimes individual lots) and some areas where no change is occurring.

For those areas being developed, vegetation management requirements through planning approvals will provide certainty. Where there are proposals for the re-subdivision of existing lots, modifying the vegetation should occur before a statement of compliance is issued.

This ensures that, in the first instance, vegetation management is delivered.

For those areas not being developed, an elevated risk continues. This risk cannot be managed through the planning system (as no obligation is created on land not under development) and will need to be mitigated by the council's fire prevention function.

The municipal fire prevention plan should be adjusted to reflect the additional management requirements arising from further redevelopment in existing areas. This should occur before a planning decision is made so that the commitments involved can be fully considered at the same time as new risk is being considered.

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