



2025 Bushfire Area Access Strategy

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Please note that this document should be viewed alongside the Access Audit, which is a dynamic document and therefore not included as an appendix.

1.0 INTRODUCTION

Bushfire poses a serious threat to people, property and infrastructure in the Shire of Mundaring (the Shire). Landowners, the Shire and state agencies all have a duty of care to manage this risk in multiple ways from managing vegetation and fuel loads, bettering the resilience of new structures to improving access arrangements.

Avoiding potential entrapment is critical. In 2009, in response to community concerns regarding restricted escape routes following the disastrous fires and loss of life in Victoria, the Shire undertook an **Access Audit** to identify roads that did not provide two alternative routes for residents to evacuate in a bushfire emergency. The data collected was further updated in 2015 prior to the first version of the '*Shire of Mundaring Bushfire Area Access Strategy*' (**BAAS**) being prepared and endorsed (13 September 2016).

The aim of the Shire's *BAAS* was, and remains, **"to establish a framework to systemically rectify these unsatisfactory access arrangements"**, a task which has been undertaken by the Shire's Infrastructure Services team over intervening years.

In 2023 the Department of Planning, Lands and Heritage, through their Land Use Planning directorate, commenced a *"Strategic Review of Land Zoned Urban in Perth North Eastern Hills"*, which included a desktop analysis of vehicle emergency egress within the Shire of Mundaring. One outcome of the exercise was to prepare a draft *"Guide to Preparing a Bushfire Area Vehicular Access Strategy"* (BAVAS). The collective data was provided to the Shire in December 2023.

After inspecting this additional data, it became apparent that it was essential to incorporate all relevant local data into the **BAAS** review to ensure a more comprehensive report update and subsequent action plan.

1.1 Summary of relevant local data

1. **2009** Shire of Mundaring, Community Safety Access Audit (reviewed 2015)
As detailed above.
2. **2016** Shire of Mundaring, Bushfire Area Access Strategy
As detailed above.
3. **2017** Shire of Mundaring, Emergency Road Access Improvement Program
A summary of fifty-six locations with restrictions that could be relatively easily addressed by the Infrastructure Services team. This is an ongoing program.
4. **2018** Department of Fire and Emergency Services (DFES), Bushfire Risk Management System
This software system supports the Bushfire Risk Management Program, a statewide program led by DFES's Rural Fire Division to reduce bushfire risk in WA. The system enables the identification and risk rating of assets, through which the local Bushfire Risk Management Plan is developed. This Plan continues to facilitate access to financial support through the annual Mitigation Activity Funding Grant Program.
5. **2023** Department of Planning, Lands and Heritage (DPLH), Bushfire Areas Vehicular Access Strategy 2023 (draft)
"State Planning Policy 3.7 Planning for Bushfire Prone Areas and Planning for Bushfire Prone Areas Guidelines identify that the vehicle network is to allow for the community to evacuate to a suitable destination before a bushfire arrives at the site, while allowing emergency services personnel access to attend the site/hazard. Where the public road access to the subject site is via a no-through road, the access recommended is to be a maximum of 200 metres from the subject lot(s) boundary to an intersection where two-way access is provided". DPLH data, gathered whilst utilising the Shire of Mundaring for a pilot project, highlighted 244 potential entrapment points (some of which were already captured through the Shire's BAAS).
6. **2023** Main Roads WA, Road Classification
Local traffic counts plus arterial, class and criteria scores.

The locations are classified into four levels of complexity.

1. **Simple Road Restrictions:** where minor intervention/improvement is required to achieve multiple access options.
2. **Road Connections Not Formalised:** where more significant capital works are required.
3. **Access Way:** Emergency (EAW) or Pedestrian (PAW).
4. **Possible Entrapment, No Solution:** where physical improvement works would be impractical and/or cost prohibitive and where land tenure solutions may need to be devised.

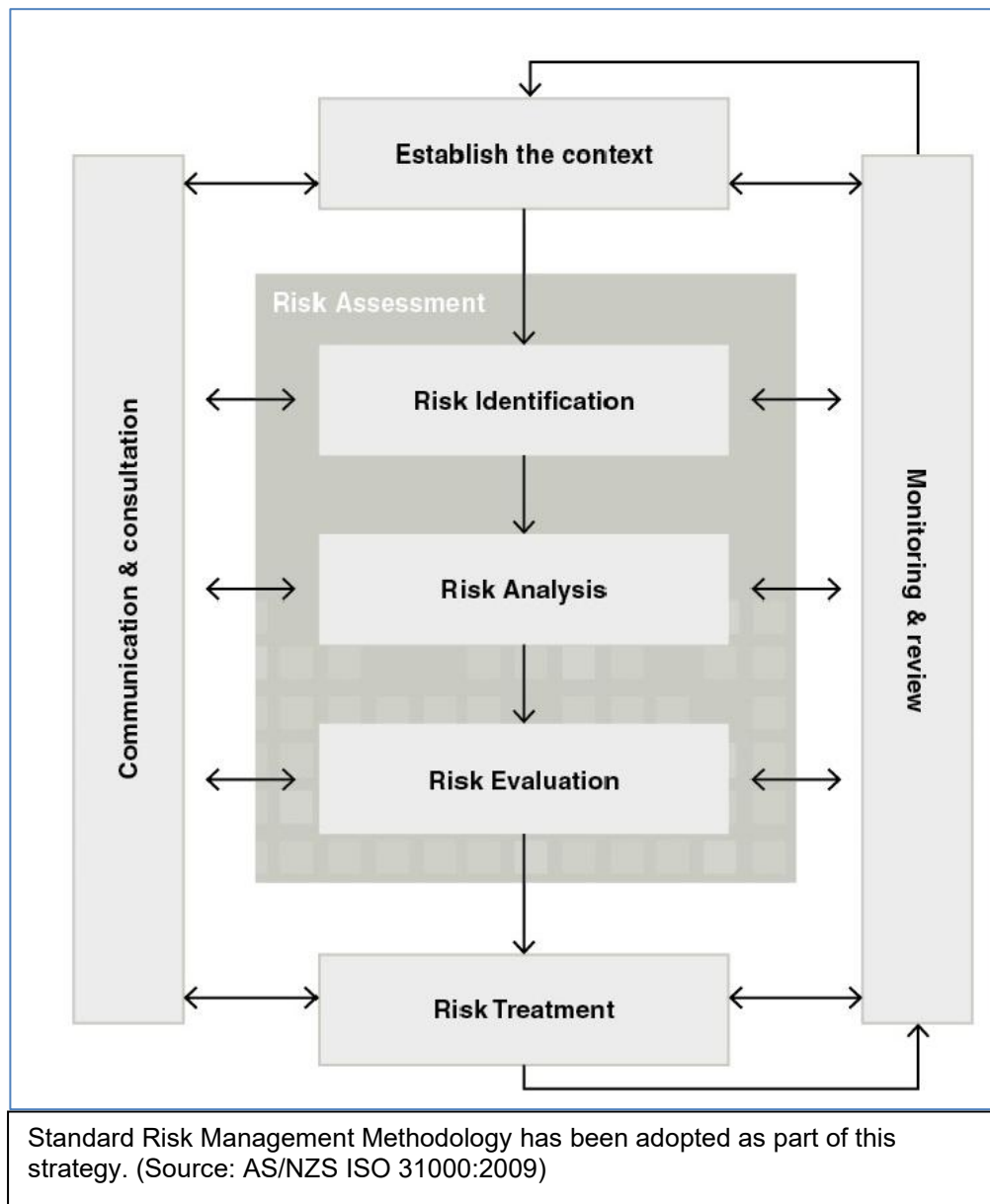
The Strategy Statements that follow will guide the implementation of the BAAS.

2.0 STRATEGY STATEMENTS

1. Access improvement priorities will be based on a risk management approach which aims to deliver genuine gains in community safety and brings access into accordance with *Guidelines for Planning in Bushfire Prone Areas* Version 1.4, December 2021, (the Guidelines) as much as practicable and may be staged over a period of time;
2. In **Simple Road Restriction** scenarios, removal of any road restriction preventing vehicle through movement such as boulders, bollards or gates not formally approved through section 3.50 of the Local Government Act are to be removed as soon as practical and residents notified at least 2 weeks prior to works commencing;
3. In **Road Connections Not Formalised** scenarios (including unmade and proposed roads), where connections do not meet the Guidelines, treatment options meeting the Guidelines shall be developed in conjunction with residents. Where valid objections are received and modifying treatment options cannot substantially address the issues raised, the matter shall be forwarded to Council for resolution;
4. In **Access Way** (Emergency EAW or Pedestrian PAW) scenarios, where public / Shire land is available and / or already in use, and the access way does not meet the Guidelines, treatment options meeting the Guidelines shall be developed in conjunction with residents. Where valid objections are received and modifying treatment options cannot substantially address the issues raised, the matter shall be forwarded to Council for resolution;
5. In **Possible Entrapment, No Solution** scenarios, (where areas exist and infrastructure solutions cannot be readily achieved), the Shire will advise those landowners and encourage them to discuss informal (interim) solutions to alternative access options until such time as formal tenure changes can be established.
6. The **Access Audit** related to this Strategy will be dynamic and subject to regular updates;
7. Capital works required to address identified locations will continue to be contained in the Capital program for Bushfire Access Improvements and budgeted within the Shire's Corporate Business Planning process;
8. The **Access Audit** and this Strategy should be reviewed every 5 years, having regard to the access standard benchmarks set by the Guidelines, and/or any successor document;
9. New subdivisions will continue to be subject to achieving compliance with contemporary standards which may require the ceding of land for thoroughfares and/or a fair and reasonable contribution at the time of subdivision to improve existing non-compliant roads deemed necessary for access
10. For any new subdivision / development plan any required access ways will be provided at the cost of the developer.

3.0 RISK MANAGEMENT PROCESS

The process of setting priorities and preferred access treatments will follow the Standard Risk Management Methodology (Australian Standards: AS/NZS ISO 31000:2009).



3.1 Context

The threat of bushfire risk is one that residents have repeatedly expressed concern about to the Shire, both directly and through Shire Community Perception Surveys.

Since 2009, a number of reviews have been commissioned following major bushfire incidents, which have included recommendations supporting the improvement of access and egress arrangements for residents in the event of an emergency.

2009 Victorian Bushfires Royal Commission

In the case of bushfires, roads and roadsides can be important fuel breaks, so road managers need to reduce the fuel levels in preparation for the fire season. Roads are also essential for people seeking to escape fires and for emergency services seeking access to fires. Since the 2009 fires land and road managers and the CFA have identified high-risk roads and are carrying out fuel-reduction work to reduce the future risks of bushfire.

A Shared Responsibility – Report of the Perth Hills Bushfire February 2011

(No. 39 (c)) *“State and Local Governments [should] examine options to retrospectively bring these areas into compliance with Planning for Bushfire Protection Guidelines.”*

January 2016 Waroona Fire Special Inquiry

Access is mentioned in relation to traffic management during, and after, the incident. It is reasonable to conclude that multiple access options could only positively affect these processes.

Royal Commission into National Natural Disaster Arrangements 2020

12.20 It is important that accessibility [of evacuation routes] is considered in planning, and that efforts are made to ensure these routes are resilient for the purposes of a natural disaster. These routes are important not just as a means to evacuate communities, but also to provide access to communities for first responders, for the purposes of recovery and to ensure continuity of supply chains during and after a disaster.

The Guidelines) outline, amongst other things, current expectations regarding standards and design requirements for public roads and Emergency Access Routes. These public thoroughfares need to be freely available and safe for public use in the event of a bushfire.

The Shire’s *Local Planning Strategy* (LPS) was endorsed by Council in February 2014, it also specifically identifies the need to improve access arrangements in established areas.

...“Much of the existing residential and rural residential development within the Shire of Mundaring, particularly in areas subdivided some decades ago, fails to meet...key [bushfire access safety] requirements, leaving many residents with potentially inadequate escape routes and emergency vehicles with inadequate access for firefighting and evacuation purposes.”

(Local Planning Strategy 2014)

Relevant strategies adopted by Council within the Local Planning Strategy include:

In all new subdivisions, and where possible in all new developments, ensure adequate vehicular access to, from and within bushfire prone areas, both for escape by residents and for access by emergency vehicles particularly firefighting appliances	4.6.3.3 5.1
Conduct an audit of the adequacy of vehicular access/egress in bushfire prone areas throughout the Shire	4.6.3.3 5.1
Use the audit referred to in the point above to prepare a strategy for improving access/egress identified as inadequate and progressively implement that strategy, which may involve actions including: - construction of new roads - opening of closed roads - widening of existing roads - removal of barriers within road reserves	4.6.3.3 5.1
Adopt a position that the Shire values, and places strong emphasis on, the protection of vegetation for environmental and aesthetic reasons, but where there is a conflict between vegetation protection and bushfire safety, Council will make decisions having regard to bushfire safety objectives	5.1

The Shire has in the past, for one reason or another, physically closed or obstructed roads with gates and boulders. The Shire, as the managing authority of thoroughfares, has a legal obligation under Section 3.52 (2) of the *Local Government Act (1995)* to keep thoroughfares or streets open:

“Except to the extent that it is authorised by law to close them or restrict their use, a local government is to ensure that thoroughfares are kept open for public use.”

If this provision of the *LG Act (1995)* is found to be contravened, the local government must rectify the situation so that it can resume its compliance with section 3.52(2) as soon as practical.

Since the Shire’s and WAPC’s adoption of the Shire’s Local Planning Strategy, the State has introduced a new *State Planning Policy 3.7 – Planning in Bushfire Prone Areas* and a new iteration of the Guidelines (Version 1.4).

Hence, the Shire’s BAAS is based on a set of rational, consistent and interlocking documents / statutes / recommendations that exist at both State Government and local government level which highlight the duty of care obligations the Shire has in resolving existing unsatisfactory access arrangements.

3.2 Risk Identification

To achieve genuine improvements, the Shire must direct its limited resources to best effect. The Shire manages 982 roads within the Shire, 612km of these are sealed whilst 77km remains unsealed. Some perform an important district function, while others are locally significant.

The **Access Audit** completed in 2009, and reviewed in 2015, was considered sufficient at the time to initially prioritise immediate problem areas and develop cost-effective treatment solutions.

The 2024 **Access Audit** followed the following process:

1. Inclusion of all existing data:
 - Shire of Mundaring, Community Safety Access Audit 2015
 - Shire of Mundaring, Bushfire Area Access Strategy 2016
 - Shire of Mundaring, Emergency Road Access Improvement Program (ERAIP) *ongoing*
 - Department of Fire and Emergency Services, Bushfire Risk Management System (BRMS) *ongoing*
 - Department of Planning, Lands and Heritage, Bushfire Areas Vehicular Access Strategy 2023 (desktop data)
 - Main Roads WA, Road Classification 2023
2. Field assessments of potential entrapment points to verify data.
3. Desktop review of collated data, detailing impacted properties, identifying where the data was collected, the bushfire risk rating of the location and which stakeholders should be liaised with regard to further works.
4. Addition of Aboriginal Cultural Heritage information relating to each road.
5. Prioritisation of works through a focus on the road score (classification and traffic count) plus the number of properties impacted multiplied by the BRMS Risk Rating.

3.3 Engagement

Engagement with affected residents is critical and will promote a general understanding of the Shire's approach.

It is acknowledged that the audit should be dynamic, responding to and accommodating current concerns or situations brought to the Shire's attention.

It is important that residents are kept informed of the Shire's initiative to improve access routes around their area, both in terms of the potential nuisance or inconveniences caused by construction works, but also so they are acutely aware of the improvements and any new options for escape in an emergency situation.

3.3.1 Simple Road Restriction

As identified above, the Shire, as the managing authority of thoroughfares, has an obligation under Section 3.52 (2) of the *Local Government Act (1995)* to keep thoroughfares open.

Where road restrictions have been removed, no option for a permanent restriction to be reintroduced shall be considered.

Where issues result from the removal of a road restriction such as changes in traffic patterns that cause traffic issues which are confirmed through traffic surveys, then traffic management treatments will be developed in consultation with residents and implemented when budgets allow. Where significant consensus cannot be reached a report will be prepared for Council resolution.

3.3.2 Road Connections Not Formalised

Where improvements relate to connecting, widening or completing portions of road and/or proposed roads in existing road reserves, the Shire will inform surrounding residents of the proposed works and the preferred treatment.

Where various treatment options are available, the Shire will invite comment from landowners to help inform the preferred treatment solution. As well as informing residents, inviting comment could potentially enrich the Shire's understanding of the challenges in the locality and identify some cost-effective alternatives.

Where significant consensus cannot be reached on the treatment option a report will be prepared for Council resolution.

3.3.3 Access Way (Emergency EAW or Pedestrian PAW)

Where improvements relate to widening or completing designated access ways, the Shire will inform surrounding residents of the proposed works.

Where various options are available, the Shire will invite comment from landowners to help inform the preferred solution. As well as informing residents, inviting comment could potentially enrich the Shire's understanding of the challenges in the locality and identify some cost-effective alternatives.

Where significant consensus cannot be reached on the selected option a report will be prepared for Council resolution.

3.3.4 Possible Entrapment, No Solution

This category covers public roads with only one formally gazetted entry point or where improvement works would be impractical and/or cost prohibitive and where land tenure solutions may need to be devised.

Resolution of high difficulty improvements will require strong collaboration between landowners and the Shire. In most instances, the Shire will be unable to achieve any improvement without landowners actively participating and (in some cases), accepting some tenure burden (easement/public road reservation) over freehold land.

It is not within the financial capacity of the Shire to compulsorily acquire private land for the purpose of thoroughfares, nor does compulsory acquisition always succeed.

Hence, the Shire will only be able to create new thoroughfares through a subdivision process. The LPS and LPS4 primarily contain provisions to guide new subdivision and developments. They also contain provisions which provide for existing areas. For example, Clause 6.5.17 states:

Where...subdivision would result in improved vehicular access and safety for adjacent or surrounding residents within the Bush Fire Hazard Special Control Area and where vehicular access in that area has been recognised as inadequate by appropriate experts, the Shire may recommend approval to the proposed subdivision, notwithstanding that such subdivision is not otherwise supported by the Scheme.

The normal subdivision process has the potential to facilitate dedication of road reserves, road construction and access solutions in existing problem areas. Additional subdivision potential will not be entertained for non-compliant areas where normal subdivision rights could otherwise resolve the access issues.

Where landowners in areas without subdivision potential express an interest in subdivision, the Shire will consider facilitating subdivision provided it delivers broader access improvements, amongst achieving other planning objectives within Local Planning Scheme No.4. The Western Australian Planning Commission determines subdivision application and any outcome would need to fulfill the WAPC's expectations.

The Shire will write to the affected landowners identified as 'serious concern' and encourage discussions between neighbours to agree on some interim and 'informal' access arrangements in the event of a bushfire.

3.4 Risk Analysis and Evaluation

Priorities for access improvements will be based on the considerations below. Given that the consequence of entrapment could be life threatening, the 'Consequence' rating remains at 'Catastrophic' in all instances. Whilst every life is precious, there is a need for the Shire to take a utilitarian approach and consider the 'number of residents' at risk, as this would obviously increase the priority.

Assess the Access Difficulties / Entrapment

- Number of residents potentially exposed.
- Road hierarchy.
- Bushfire risk rating, as calculated by DFESs BRMS.

3.5 Risk Treatment

Risk treatment options need to be appropriate and cost effective based on the potential benefit. Genuine gains in community safety are more important than bringing all Shire roads and thoroughfares into absolute compliance with the Guidelines. Where practicable, the Shire will endeavour to bring improvements into accordance with the Guidelines. Noting resource constraints this will occur over the longer term.

It should be acknowledged that opening roads offers broader benefits relative to ease of access. This treatment can, by virtue of more through traffic and removal of vegetation, impact on established amenity or the local community's perception of amenity in the locality. Notwithstanding this, amenity is a secondary consideration relative to preserving life and allowing for safe evacuation in the event of a bushfire.

The following criteria will be considered in the assessment of risk treatment options, prior to inclusion within the Shire's annual budget adoption process, with an emphasis on cost-effectiveness and long-term benefits:

- Compliance with Public Road Standard Guidelines
- Adherence to current Guidelines for Planning in Bushfire Prone Areas
- Potential for a staged implementation or response
- Alternative 'Acceptable Solution' responses, considering:
 - Environmental impacts
 - Social impacts
 - Ongoing management costs
- Feasibility of implementation, including tenure and cost considerations
- Interim risk mitigation actions
- Consultation outcomes (where appropriate and undertaken)

3.6 Monitoring and Review

The Strategy will be reviewed biennially to highlight any refinements, improvements or key learnings.

The Access Audit should be regarded as a dynamic document, where there is potential for new access risks to be added and a risk rating / treatment option applied.

4.0 IMPLEMENTATION

The schedule of prioritised road and access way works will be considered annually during the budget development process.

In some cases, landowners/developers must fund the upgrading of roads and access ways to realise subdivision potential and fulfil conditions of the subdivision approval. These improvements may relate to upgrades or improvements identified as a priority within BAAS. Depending on the scale of the subdivision, the contribution could be the full amount or a portion of the total works. The Shire's schedule may not align with landowners/developers' immediate expectation, resulting in a private subdivision unable to be finalised for some time.

Re-scheduling Shire works to align with developer requests is generally not supported but may be justified where the overall cost borne by the Shire (and ratepayers) is effectively subsidised by a developer contribution.

Landowners/developers who cannot proceed with subdivision due to unsatisfactory road access or no constructed public road available to proposed lots have the following options:

- 1) Postpone the subdivision until the Shire upgrades or constructs the road according to the schedule specified; or
- 2) Contribute to the full cost of constructing the road and associated infrastructure. *(Note, this may be the normal expectation where no road reserve exists in accordance with WAPC Development Control Policy 1.1); or*
- 3) Commit to providing a financial contribution to the Shire and seek approval to elevate its priority within the Shire's works schedule.

In rescheduling road improvements, the following will be considered:

- a. Implications on community safety in postponing the scheduled/committed work;
- b. The degree to which works benefit the safety of wider community;
- c. Opportunity presented in the landowner/developer partially funding the road and the potential saving to the Shire in bringing the works forward;
- d. The Shire's ability to:
 - partially fund the works within the budget;
 - dedicate resources to undertake/oversee/supervise the works;
- e. The quality and reliability of the costing process undertaken and risks associated with other matters (environmental, servicing, soil type, tenure etc).

Regardless of any decision made by any other authority, the Shire will not, and cannot, be bound to fund access improvements to facilitate private subdivision.

In summary, the implementation of the reviewed Strategy will occur as follows:

1. Council endorses the reviewed Bushfire Area Access Strategy;
2. The Built and Natural Environment directorate investigates prioritised works and maintenance;
3. The Place and Community directorate implements a process to ensure ongoing awareness of where subdivisions can positively impact existing limited access roads;
4. The Built and Natural Environment directorate (Emergency Management) monitor and update the Access Audit;
5. Following consultation, the preferred treatment option will be determined by the Shire unless valid objections* are made that cannot be substantially addressed by modifying or selecting an alternative treatment option. Where valid objections are raised that cannot be readily addressed by modifying the treatment approach, the matter will be referred to Council for determination.

*** Valid objections**

A valid objection must:

- *have a basis in the principles and considerations expressed within this strategy;*
- *relate specifically to the implications of the proposed treatment option or suggest alternatives, as retaining the status quo (ie non-compliant access) cannot be entertained;*
- *not be based on amenity considerations alone, as bushfire safety is paramount;*

Examples of invalid objections may include:

- *Suggestions which would fall outside of the intent of the Element 3 – Vehicular Access (Acceptable Solutions / Performance Principle) within Guidelines for Planning for Bushfire Prone Areas;*
- *The perceived loss of property value; and,*
- *The loss of amenity.*