

TOWONG SHIRE MUNICIPAL FIRE MANAGEMENT PLAN 2015 – 2017



Preface

The Towong Shire Municipal Fire Management Committee (MFMPC) is responsible for providing a strategic and integrated approach to fire management within the Towong Shire. This task forms part of a broader state and regional framework established under the Emergency Management Act (2013 and 1986) and is supported by the State Fire Management Planning Committee and the Hume Regional Strategic Fire Management Planning Committee (Hume RSFMPC).

A key responsibility of the Towong Shire MFMPC is the management and implementation of the Municipal Fire Management Plan (MFMP) on behalf of the Towong Shire Municipal Emergency Management Planning Committee for the Towong Shire Council. This plan, which aligns with the Hume Regional Strategic Fire Management Plan 2011-2021, describes how regional authorities, local government, fire agencies and other relevant organisations can work together to effectively anticipate, respond to and recover from bushfire events affecting the Towong Shire.

While the management of all types of fires is important, this plan has focused on bushfire in the first instance. The life of this plan is for three years and it is envisaged that future updates of this plan will include planning for other types of fire. Furthermore, it is important to note that this plan recognises, but does not duplicate, the extensive work already being undertaken in fire management across the municipality. This document is essentially a plan for improving integration of this existing work and developing improved methods for working together.

I join with the members of the Towong Shire MFMPC in commending this document to you. We see the development and implementation of this plan as an important step in the ongoing journey to securing a safer, more resilient community, healthier environment and a prosperous economy for our municipality.

David Wortmann

Chairperson

Towong Municipal Fire Management Planning Committee

Version control table

Version Number	Date of Issue	Author(s)	Brief Description of Change
Version 1.0	April 2012	S.Huguenin	Draft MFMP initiated for Comment
Version 3.0	Oct 2012	S Huguenin	Updated content to meet MEMP comments
Version 5.0	Dec 2012	S Huguenin	Inclusions of comments following Public Consultation
Version 5.1	April 2016	C Reid	Administrative update to provide currency until new guidelines are issued by the State

Authorisation

This integrated Municipal Fire Management Plan (MFMP) was adopted as the first iteration of the Towong Shire MFMP. This Plan was endorsed through a formal motion by the Towong Shire Municipal Fire Management Planning Committee (MFMP) at their meeting on _____, for which the chair of the committee will sign for and on behalf of all members of the Towong Shire MFMP.

Signed: _____ Date: ____/____/____

Print Name:
Chairperson
Towong Shire Municipal Fire Management Planning Committee

This MFMP was endorsed as a sub plan to the Towong Shire Municipal Emergency Management Plan through a formal motion by the Towong Shire Municipal Emergency Management Planning Committee (MEMPC) at their meeting on _____, for which the chair of the committee will sign for and on behalf of the members of the Towong Shire MEMPC.

Signed: _____ Date: ____/____/____

Print Name:
Chairperson
Towong Shire Municipal Emergency Management Committee

This MFMP was adopted through a formal motion by the Towong Shire Council as the MFMP for Towong Shire at their meeting on _____, for which the Chief Executive Officer /Mayor will sign for and on behalf of the Towong Shire Council.

Signed: _____ Date: ____/____/____

Print Name:
Chief Executive Officer/Mayor
Towong Shire Council

The responsibilities and accountabilities attributed to the organisations represented at the Towong Shire
MFMPC are endorsed by:

Signed: _____ Date: ____/____/____

Print Name:
District 24 Operations Manager
Country Fire Authority

Signed: _____ Date: ____/____/____

Print Name:
District Manager
Department of Environment, Lands, Water and Planning

Signed: _____ Date: ____/____/____

Print Name:
District Forester
HVP

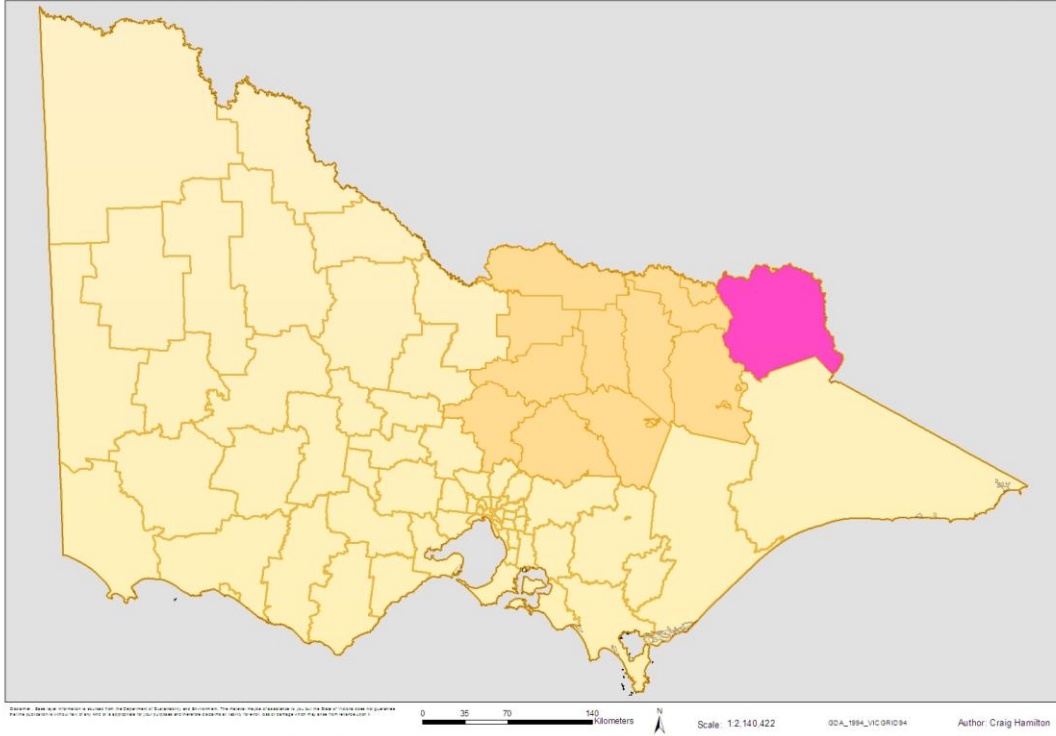


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Introduction

1.1 Context and background

Victoria has a long history of community, government and organisations working cooperatively to combat the threat of fire. However, recent challenges such as the decade of dry conditions, an increase in people living in high risk areas and the occurrence of a number of major fires, prompted the need for increased coordination and cooperation to secure fire safety across the state.

In response to these challenges, the Victorian government established an Integrated Fire Management Planning (IFMP) framework for Victoria in 2008.

IFMP provides a framework for consistent and effective fire management planning (see figure 1) across the fire management continuum, by providing a multi-agency approach, bringing together fire management planners and other stakeholders, including emergency service agencies, government departments, private organisations and the community. Working together they build relationships and share information to plan across public and private land tenures for all types of fire. IFMP is based on analysis and management of risk, uses best practices and builds on existing information.

IFMP aims to achieve a consistent and effective means for fire management planning within Victoria through a commitment to cooperation, including information sharing and the building of collective knowledge.
— The Integrated Fire Management Planning

Figure 1: Fire management planning

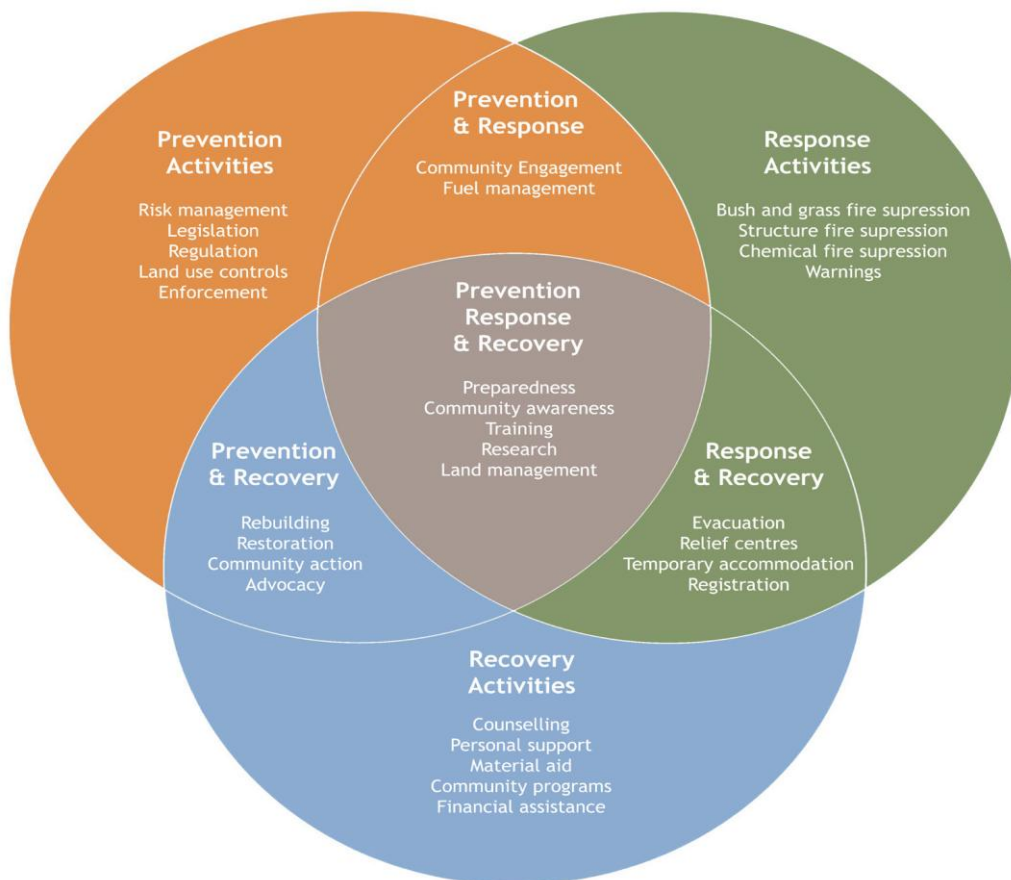
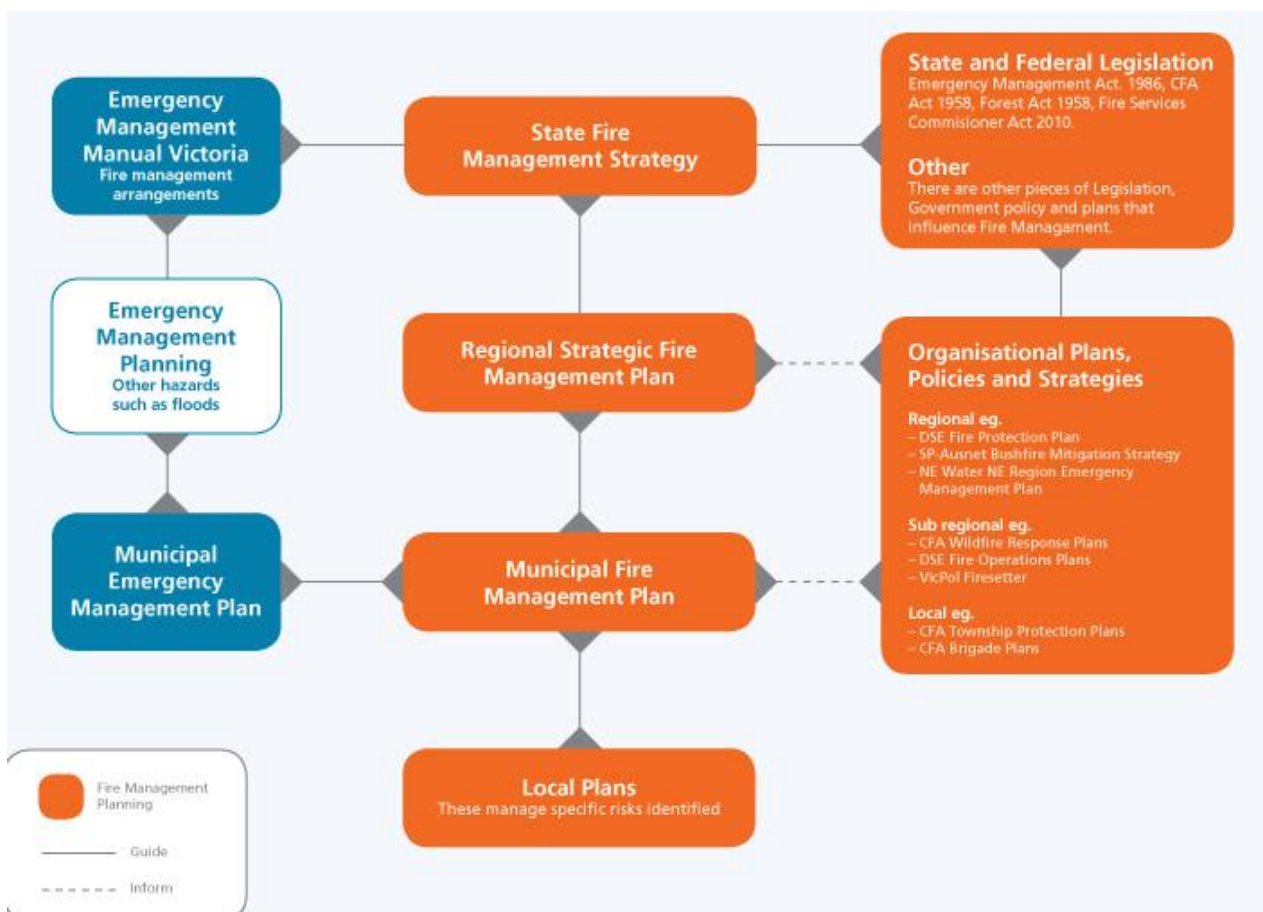


Figure 2: Victorian management plans and policies



The framework provides structures, policies and procedures to help build on the existing spirit of cooperation and networks that already exist in fire management. It establishes a tiered system of state, regional and municipal plans that provide strategic direction to fire management in Victoria, as illustrated in figure 2.

The purpose of a Municipal Fire Management Planning Committee (MFMPC) is to provide a municipal level forum for building and sustaining organisational partnerships with regards to fire management and to ensure that plans of individual agencies are linked effectively so they complement each other. This is facilitated by MFMPs having a membership consisting of representatives from key stakeholder organisations with respect to fire management within the municipality.

MFMPs also act as a sub-committee of their respective Municipal Emergency Management Planning Committee. Part 6A: Guidelines for Municipal Fire Management Planning of the Emergency Management Manual of Victoria outlines the terms of reference for these committees, identifies their minimum core membership and requires the development of a Municipal Fire Management Plan (MFMP).

Towong Shire MFMPC membership consists of:

- Towong Shire Council
- Country Fire Authority
- Department of Environment, Lands, Water and Planning
- HVP
- Parks Victoria.

The formation of an MFMPC and the development of a MFMP signify an important first step in the transition from MFMPs developed under the guidance and direction of Municipal Fire Prevention Committees, to a MFMP developed under the guidance and leadership of a MFMPC.

1.2 Period and purpose

Organisation and agencies involved in fire management already have a range of activities, plans, policies and procedures that are directly involved with, or that impact on fire management. This MFMP builds on existing work, so as to chart and coordinate the implementation of measures in use across the municipality designed to minimise the occurrence and mitigate the effects of fire. It also seeks to identify the need for adopting or developing new activities, processes and policies, and communicating this need to the relevant responsible authority.

In doing so it takes into consideration all aspects of fire management.

- **Prevention:** Regulatory and physical measures to ensure that emergencies are prevented, or their effects mitigated.
- **Preparedness:** Arrangements to ensure that in the event of an emergency occurring all those resources and services that are needed to cope with the effects can be efficiently mobilised and deployed
- **Response:** Actions taken in anticipation of, during and immediately after an emergency, to ensure its effects are minimised and that people affected are given immediate relief and support
- **Recovery:** The coordinated process of supporting emergency affected communities in the reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.

MFMPs have a three year planning cycle and this plan has a three year duration commencing from the date of council endorsement. However, it will be subject to annual review and modification as appropriate. This MFMP concentrates on bushfires; however it is expected that future versions of the plan will incorporate management of structural and chemical fires as well as the use of fire.

1.3 Preparation process

This MFMP has been developed in accordance with Part 6A of the Emergency Management Manual of Victoria and using the IFMP planning process as described in the IFMP Guide. This process follows a seven stage planning cycle as illustrated in figure 3.

Stage 1: Environmental scanning – establish a municipal base line from which fire management planning and decision making can be made and measured, including development of fire management objectives.

Stage 2: Risk assessment – identification, analysis and evaluation of the fire risks that potentially impact on the municipality.

Stage 3: Analysis – analysis of treatment options for achieving the fire management objectives.

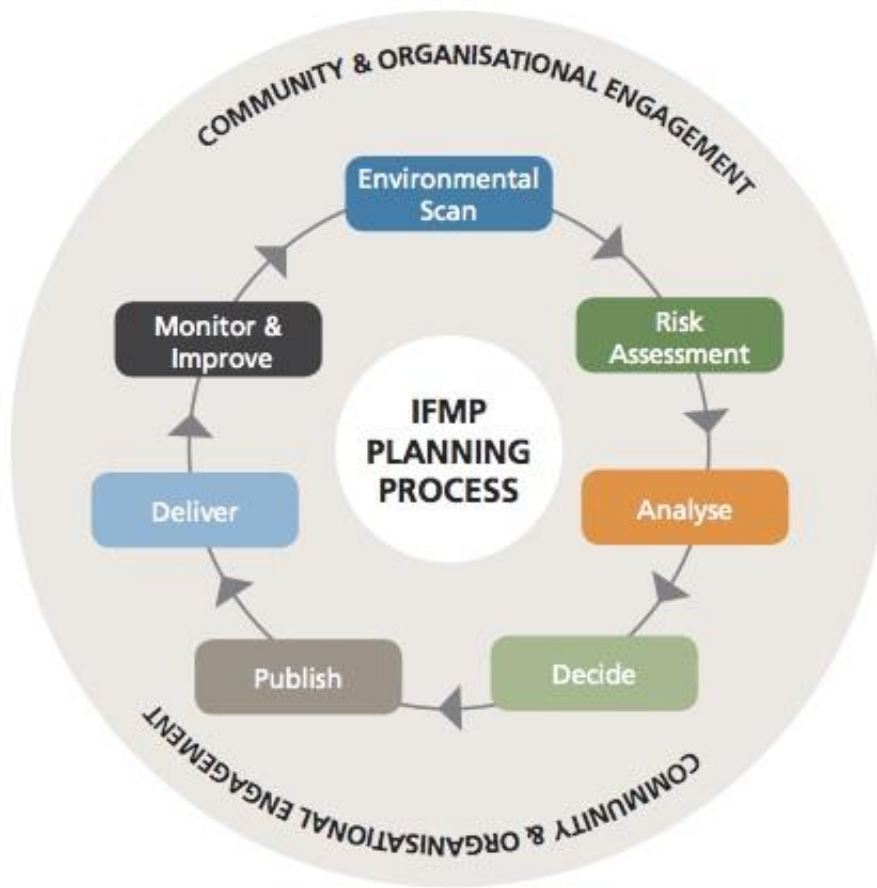
Stage 4: Decide – select the most appropriate risk treatment options to achieve the fire management objectives.

Stage 5: Publish –once the community and stakeholders have validated the draft MFMP, the relevant authorities endorse, publish and distribute it.

Stage 6: Deliver - relevant organisations implement the agreed risk treatments in the MFMP.

Stage 7: Monitor and improve – track delivery and effectiveness of risk treatments so as to continually improve the MFMP's contribution to realising the fire management objectives.

Figure 3: Integrated fire management planning process



Over a period of 12 months, members of the committee met on a regular basis to work through the steps outlined above for the purpose of developing this plan. This commenced with formally establishing the Towong Shire MFMPC as a subcommittee of the Towong Shire MEMPC and endorsing the terms of references based on those in Part 6A of the Emergency Management Manual of Victoria. Subsequent activities have included undertaking a stakeholder analysis, developing a communications strategy, identifying and assessing fire risks of concern with the municipality and assigning appropriate treatments to address them.

This planning process is risk based and aligns with the Australian Standard AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines. Figure 4 describes how this can be achieved.

Figure 4: IFMP alignment with AS/NZS ISO 31000:2009

Stage of the IFMP Planning Cycle	Relevant Aspect of the AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines
Engagement Plan	Communicate and consult
Environmental Scan	Establish the context
Risk Assessment > Analyse	Identify the risk > Analyse the risk > Evaluate the risk
Decide > Publish	Determine and document treatment options
Deliver	Treat the risk
Monitor and improve	Monitor and review

2 Engagement and communications

Stakeholder engagement and participation is an essential element of fire management planning. Stakeholders are required to participate for a range of reason, including (but not limited to):

- Legislative responsibilities in relation to fire management
- Leadership
- Provision of hazard expertise and technical advice
- Subject to hazard impact: directly and/or indirectly
- Land tenure and management arrangements
- Expressed expectation
- Influenced and/or support mitigation.

Stakeholder engagement is required during all seven stages in the IFMP planning cycle. Its aim is to allow all stakeholders to participate in the collaborative development, delivery and monitoring of the MFMP.

Engaging with stakeholders in the development and implementation of the MFMP is an essential tool for drawing on existing knowledge and experience and to build support for and involvement in this plan.

Communication and engagement tasks have been built around the model of public engagement developed by the International Association of Public Participation. This model is called the public participation spectrum and is detailed in figure 5 below. This spectrum provides a framework for planning effective stakeholder engagement about any issue or plan. It is used as the basis for communication and engagement planning during the development and subsequent implementation phases.

Figure 5: IAP2 public participation spectrum

Inform	Consult	Involve	Collaborate	Empower
Provide balanced information to stakeholders	Obtain feedback on analysis and decisions	Work directly together to ensure issues are understood	Partner in each aspect of decision making	Place final decision making in the hands primary stakeholders

2.1 Community and organisational engagement plan

In accordance with the IFMP planning guide, the Towong Shire MFMP undertook a stakeholder analysis and used this as a basis for the development of a Communication and Engagement Plan concerning the MFMP.

The stakeholder analysis consisted of a two part process; firstly identifying the key stakeholders who needed to be engaged in the MFMP's development and secondly determining the nature and level of their interest in fire management planning. This second step involved considering each stakeholder in relation to eight different fire management roles which are described in figure 6 and four different stakeholder types as outlined in figure 7.

Once a stakeholder had been categorised, the appropriate level of participation in the process and the different types of engagement activities required were determined. The results of this stakeholder analyses and the resulting Communication and Engagement Plan can be found in attachment 2.

Figure 6: Fire management roles

Role	Description
Fire coordination	Bringing together of fire management agencies and elements to ensure effective response to an incident or emergency. CFA has legislated responsibility under the CFA Act 1958 for the prevention and suppression of fires and for the protection of life and property in the country area of Victoria. In accordance with provisions in the CFA Act 1958 and the Forest Act 1958, DELWP has fire management and fire suppression responsibilities for state forests and national, state and regional parks. The Fire Services Commissioner Act 2010 establishes the Fire Services Reform Action Plan that aims to ensure that the outcomes of the 2009 Victorian Bushfires Royal Commission are met and reform the manner in which fire services operate together.
Land owner/manager responsibilities	Landholder/managers are heavily involved in fire prevention and fire suppression on land under their control. They have legislated responsibilities to extinguish a fire burning on their land and to prevent fires from starting from the use of equipment and vehicles (CFA Act 1958, Crimes Act 1958, Forest Act 1958). They are also required to comply with relevant local government laws, relevant planning or building permit conditions and conditions associated with permits to burn.
Response	Actions taken in anticipation of, during and immediately after a fire incident to minimise the impact of the fire.
Recovery	A coordinated process of supporting emergency affected communities in the reconstruction of physical infrastructure and restoration of emotional, social, economic and physical wellbeing.
Community education	Community education is learning and social development, working with individuals and groups in their communities using a range of formal and informal methods.
Community care	Community care is about identifying and catering for groups or individuals with specific needs, before during and after fire.
Asset protection	Asset protection involves protecting key community infrastructure such as power, water supplies, roads, gas pipes and protecting community assets such as parks and the environment. Asset protection can also involve the protection of private assets such as housing, plantations, crops and fences.
Regulatory	The issuing of permits for lighting fires. The development of and compliance with planning controls and permits for developments and building that take into account fire risk/management. The regulation and issuing of permits involving vegetation removal or fuel reduction activities for fire management purposes (DELWP and local councils).

Figure 7: Stakeholder type and engagement level

Stakeholder Type	Description	Participation Level
Internal	Formal responsibilities for IFMP process and outcomes	Collaborate and empower
Primary	MFMP membership, responsibility for development of the plan, communication and engagement across and within organisations rest with these organisations	Collaborate and empower
Secondary	RSFMPC membership or fire management role within municipality, may be requested to provide specific inputs, dependent upon outputs, or requested to be involved in specific tasks	Involve and consult
Tertiary	Strong interest in outcomes and may have valuable information/viewpoints to share	Inform and consult

2.2 Community engagement

During the development phase of the MFMP, the Towong Shire MFMPC's communication and engagement efforts were focused primarily upon key stakeholders. However a number of community groups were identified as tertiary stakeholders and engaging with them and the broader community was seen as a critical component to the long-term success of the MFMP.

This community engagement process is an ongoing responsibility of the Towong Shire MFMPC. It is expected to gain prominence once the plan is endorsed, and especially during review periods. Consequently, the Communication and Engagement Plan will be viewed as an evolving document, shaped according to the MFMPC's needs over time. Thus, it will guide the process of broader community engagement with additional activities and details being incorporated as required.

It is also anticipated that in addition to the activities attributed to the MFMPC, individual key stakeholders will be utilising their existing processes and undertaking their own community engagement activities in support of IFMP and the MFMP.

3 Environmental scan

Environmental scanning involves identifying key themes, issues, trends and gaps that may affect or influence fire management. It establishes the base level of knowledge and understanding required for supporting risk identification, risk assessment and risk treatment within a fire management context. Furthermore, it provides the basis for identifying fire management objectives and decision making with regard to selecting strategies to achieve these objectives.

It involves gathering and interpreting data and information relevant to fire management, so as to make predictions, assumptions and conclusions concerning fire risk for the municipality over the period of the plan. In undertaking the exercise, the Towong Shire MFMPC examined data from a variety of sources and types such as CFA VFRR reports, DELWP fuel loads and biodiversity values, OESC consequence of loss and the index of relative socio-economic disadvantage. It also drew upon local knowledge and experience.

3.1 Municipal profile

3.1.1 Location and tenure

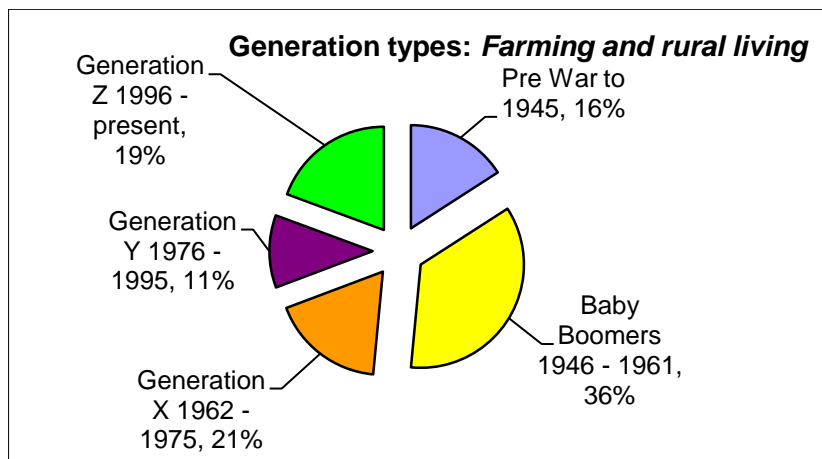
Towong Shire is located approximately 400km from Melbourne on the NSW border in the far north east of the state of Victoria. The Murray River forms its northern boundary and Shire covers around 666,172ha of which 75 per cent is public land. The majority of the public land is forested with significant proportions being in national or state parks. Parks include Burroway-Pine Mountain National Park, Alpine National Park, Mt Lawson State Park, Mt Granya State Park, Jarvis Creek Regional Park and the Wabba Wilderness Park.

3.1.2 Population and demographics

The population of the Towong Shire is approximately 6000 people. Corryong and Tallangatta are the municipality's largest towns with populations of approximately 1400 and 1200 respectively. Other townships include Bellbridge, Bethanga, Cudgewa, Dartmouth, Eskdale, Granya, Koetong, Mitta Mitta, Talgarno, Tintalra, Towong and Walwa. Rural residential lots and lifestyle properties are dispersed throughout the rural area.

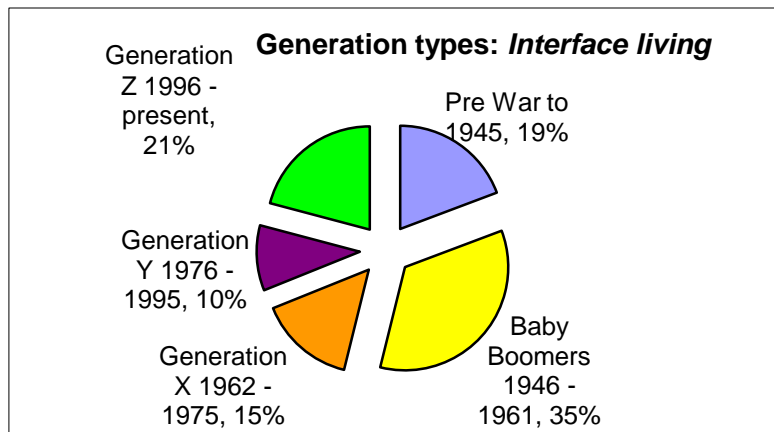
In order to help categorise risk in communities and help support service delivery planning, the CFA has developed precincts. Precincts are developed on the concept of risk environments and hazards being used to define geographic areas of like-risk. The figures below show a breakdown of the demographic profile of Towong Shire across farming and rural, interface, and township and suburban living.

Figure 8: Towong Shire generation types - farming and rural living



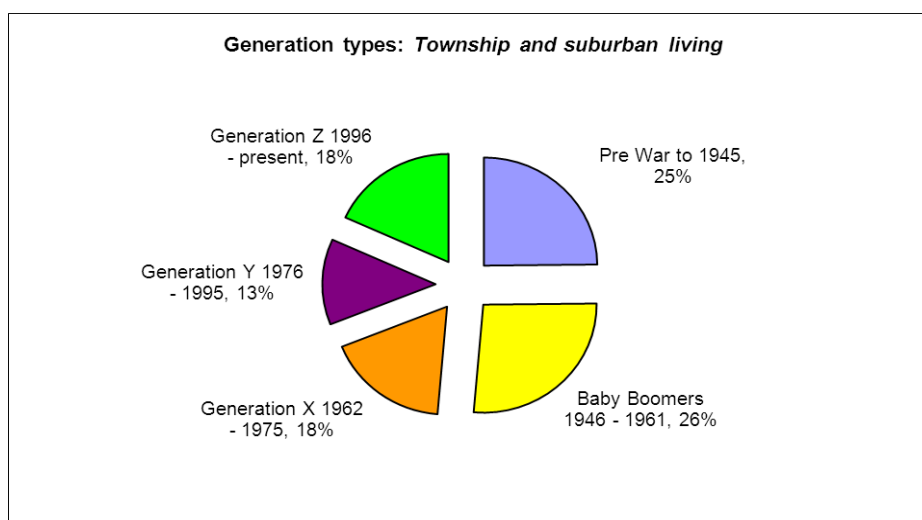
Source: VFRR-CFA

Figure 9: Towong Shire generation types – interface living



Source: VFRR-CFA

Figure 10: Towong Shire generation types – township and suburban living

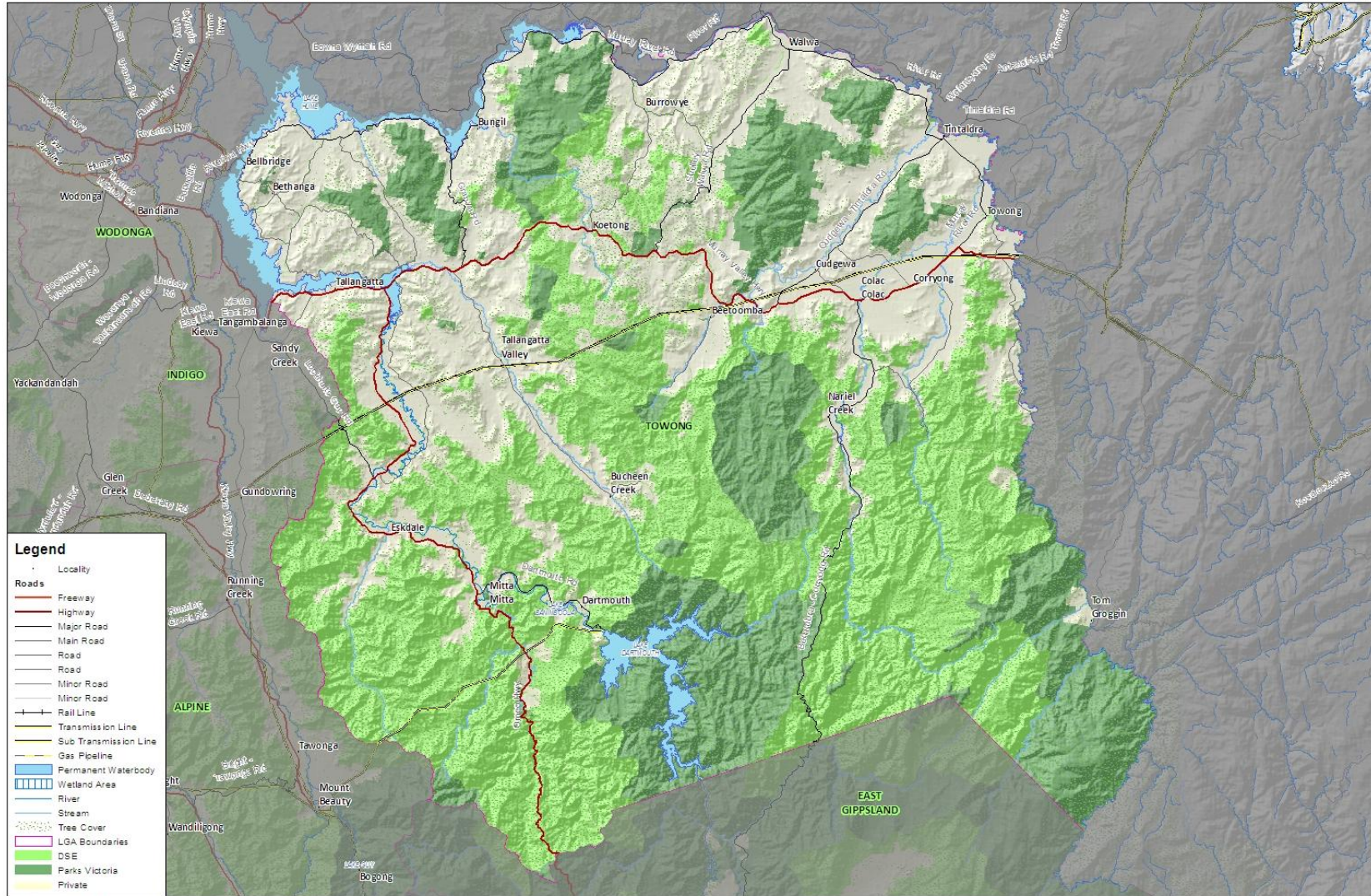


Source: VFRR-CFA

Figure 11: Locality map

Municipality Map - Towong Shire

Date: 22/07/2012



Map Produced by Wodonga GIS team, July, 2012

Copyright: The State of Victoria, Department of Sustainability and Environment 2012

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Scale: 1:380,000

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3.1.3 Natural environment

The Shire supports a variety of geologies, soil types and landscape settings subject to variable annual rainfall and this natural variability gives rise to a diverse range of vegetation types and habitats. The topography varies from the river valleys of the Upper Murray and Mitta Mitta rivers to the mountainous terrain of the Victorian Alps.

The lower foothills are of mixed eucalypt species forests leading to taller Alpine Ash country at higher elevations. Above 1300m elevation, the vegetation consists of more open sub alpine forests, alpine plains and woodlands. Thick understory is common throughout the hills and mountain areas.

As shown in the biodiversity values map (attachment 3), the municipality supports a range of state and nationally significant flora, fauna and ecological communities listed as threatened under the Victorian Flora and Fauna Guarantee Act 1988 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

3.1.4 Land use, economy and infrastructure

The economy of the region revolves around a rich agricultural sector, tourism and timber production and processing. The land use is predominantly agricultural grazing with some dairying in the valleys and Radiata Pine plantations for timber production which are generally located in hillier terrain. Mixed farming predominates outside the irrigated areas, which includes wool, prime lamb, cattle and cropping.

A significant part of the municipality is within the catchment of either the Hume or Dartmouth dams. The water in these storages forms a critical link in the water supply and irrigation network of southern Australia. They are also extensively used for recreation purposes such as boating and fishing.

The Shire is well serviced by roads including the Omeo and Murray Valley highways. However, the quality varies considerably with many being suitable for use by four wheel drive vehicles only, particularly when wet.

3.1.5 Climate

The climate is temperate over most of the Towong Shire and is characterised by dry and warm to hot summers with cold wet winters with significant snow falls above 1200m elevation. Variations in altitude exert considerable influence on temperature and rainfall in this region; weather can therefore best be understood in relation to topography.

The warmest areas are in the lower river valleys, where the average maximum temperatures for January and February are in the low 30s. Individual days here may be very hot, the highest temperatures on record generally being in the mid-40s. Temperature conditions at higher altitudes are cooler throughout the year with the differences being greatest in summer. Maximum temperatures for Alpine areas (above 1000m elevation) are around 20°C during the summer months and rarely exceed 30°C.

Average annual rainfall also varies across the municipality with elevation, ranging from 800mm per annum in the lower valley bottoms to 1500mm on the high country.

3.1.6 Fire danger

Fire Danger Index (FDI) is determined using a range of meteorological factors and is an important tool in all phases of fire management. It provides an indication of likely fire intensity and behaviour under a given set of conditions. Due to the significant difference between forest and grass fire conditions, two different FDI meters have been developed. Fire Danger Ratings (FDR) describes the ranges of FDIs.

Data from the nearest suitable weather stations (high elevation - Hunters Hill and low elevation - Wangaratta) provide an historical picture fire danger for the municipality. Figure 12 shows the average breakdown of the municipality’s fire season across the moderate to code red categories of the FDR range, whereas figure 13 describes the annual variation between each FDR category over the last seven fire seasons. Finally, figure 14 is a record of the number of total fire bans (TFBs) declared within the municipality (state-wide and regional) over the last 10 years. These statistics indicate that the Shire experiences a highly variable fire season, both geographically and annually, but it can expect to experience some “moderate” to “high” FDR level days every year, with more severe conditions occurring on a regular if not annual basis.

Figure 12: Average fire season FDR proportions for high and low elevation areas of Towong Shire

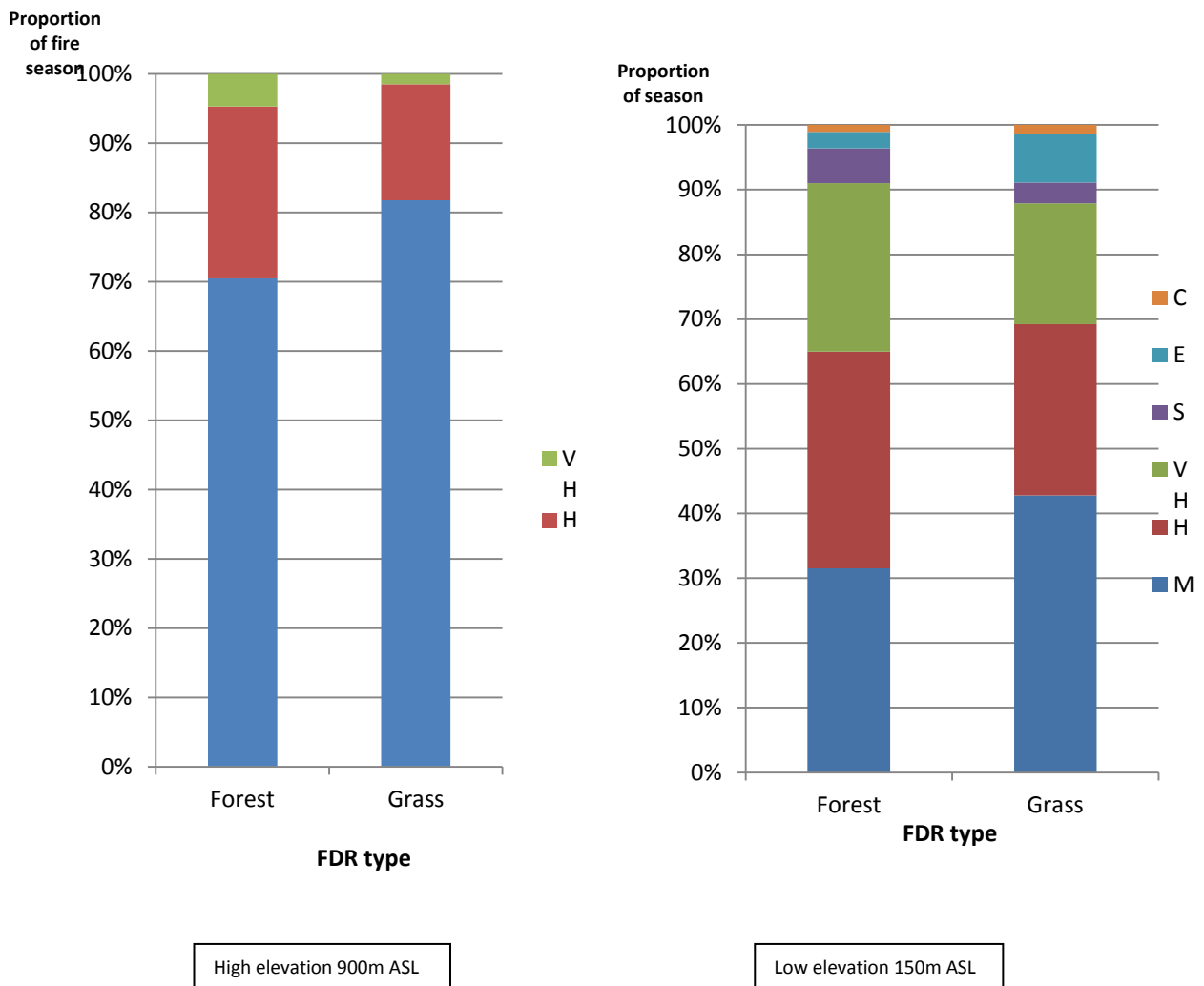


Figure 13: Annual FDR variation at high and low elevation for Towong Shire

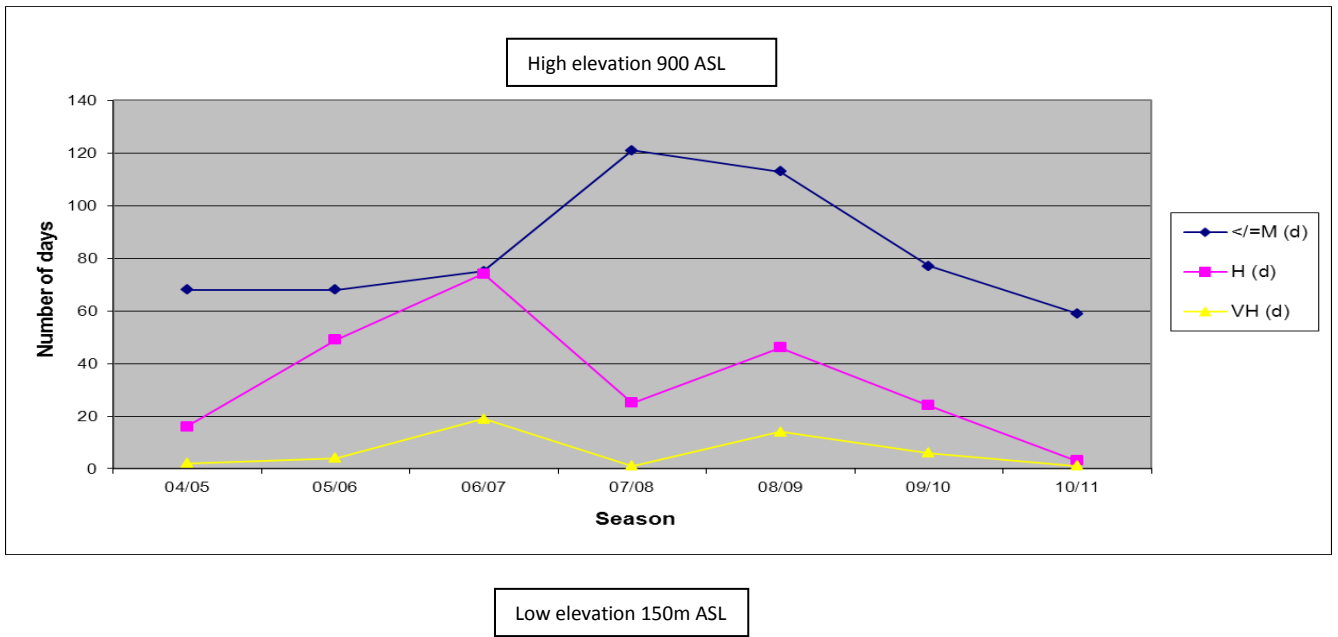
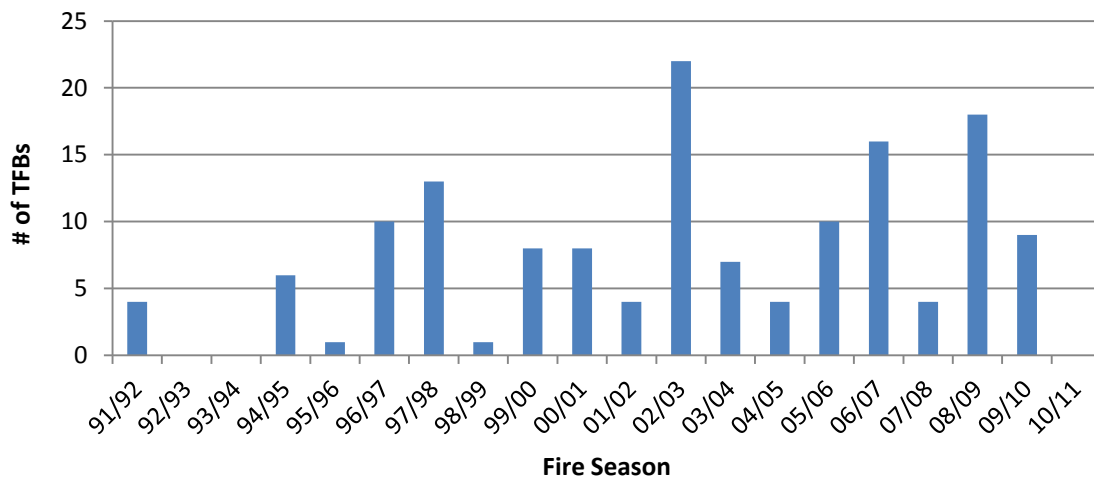


Figure 14: Historical TFB declarations for Towong Shire



3.1.7 Fire history

Bushfire outbreaks are a regular occurrence within the municipality. Towong Shire has experienced significant bushfires in 2003, 1985, 1978, 1952 and 1939. The maps in attachment 3 reflect the extent of bushfire ignitions and bushfire burn area.

3.2 Strategic implications

Bushfire can occur in any type of vegetation such as grassland, trees, crops or shrubs. This section describes the vegetation in the Towong Shire and factors that increase the likelihood of a fire starting and spreading across this area. Ensuring the municipality is a safe and healthy place to live and work involves protecting the social, environmental and economic fabric of the municipality.

3.2.1 Vegetation

The vegetation and topography of the Shire create a number of challenges for fire management.

The major river and stream systems that cross the Shire provide potential natural fuel breaks, but are also popular sites for recreation and may limit access to some areas.

The high fuel loads of the tall moist forests of the ranges create the potential for high intensity fires during prolonged dry periods. In addition, the mountainous forested terrain adds to the difficulty of detecting and accessing fires. The combination of these factors creates the potential for large scale extended bush fires to occur.

The forests of the foothills also present a risk. Although the fuel loads here may be relatively low, these forests can easily burn most summers. Furthermore, their proximity to roads, which may decrease response times, also indicates proximity to settlements and therefore raises the risk to life and property. In addition, in the terrain, whilst not as severe as the Alpine areas still presents a number of difficulties for fire fighters such as steep slopes, rocky outcrops and gullies. Combined, these areas present a number of challenges, making fire management in and about these areas an important annual task. The Shire is also characterised by long narrow valleys with single access routes that can potentially be compromised.

3.2.2 Weather and climate

Weather conditions and climate have a significant impact on fire management. Typically, the municipality experiences spring rains and mild conditions that promote growth followed by hot summers which lead to high fuel loads.

The usual fire weather pattern in Victoria during summer months is depicted by north westerly winds accompanied by high day time temperatures and low relative humidity building up over several days to a storm event with a change to south westerly winds. This can create a situation whereby fire ignition from lighting becomes a possibility, with a propensity for the fire to run quickly in one direction before changing direction, thus transforming the fire's extensive flank into the new fire front. These conditions can influence fire behaviour in the Towong Shire. Topography can also play a significant role in establishing local weather conditions that may not reflect those occurring elsewhere in the area.

3.2.3 People

The Towong Shire has people with different needs with regard to fire and fire safety. Understanding these needs is central to delivering effective community safety initiatives. This is particularly important for people unfamiliar to the area or vulnerable members of the community.

The impact of a bushfire increases if the fire occurs in areas where people live, work and visit, so settlement and visitor patterns are important when determining bushfire risk. The VFRR features of interest and human settlement map (attachment 3) helps to identify and illustrate this variation in bushfire risk. There is significant population expansion in rural residential development in several parts of the Shire for lifestyle reasons. These patterns of human settlement have increased the amount of urban rural interface that requires intensive fire management and creates variation in the degree and nature of bushfire risk between localities.

Tourism also has a considerable impact on human movement during the fire danger period, interacting with fire management at a several points. The same landscape features that may lead to increased fire danger can also be the underpinning elements of what makes the site attractive for tourism. Visitors to the municipality are often drawn to the areas of higher fire risk and visitor numbers tend to increase as the fire season advances creating a situation of increasing potential impact as the fire risk rises. Furthermore, visitors to the region are often less informed of bushfire risk and less prepared to deal with bushfire situations.

3.2.4 Economy and infrastructure

The speed at which a community recovers from a devastating event can be considered a measure of its social resilience. The recovery process is strongly influenced by people's ability to access critical services and financial income, with the maintenance or restoration of a normal operating environment around them particularly important. Ensuring the local economy and infrastructure continues to function through the provision of critical services underpins economic recovery. Therefore, treatments designed to protect and restore critical services or economic assets are a high priority.

The major transport routes which traverse the region have a number of implications for fire management. These provide potential fire ignition sources, but can also act as important fuel reduced corridors. Although they can facilitate the rapid movement of resources and people, they also can place users in a threatening situation if they are caught in a fire situation. In addition, several minor roads provide critical access/egress to isolated small communities.

4 Municipal fire management objective

The municipal fire management objective provides a framework for considering, selecting and evaluating fire management activities. This objective was developed using the information examined during the environmental scanning process, as well as being informed by the Hume Regional Fire Management Plan and relevant issues and priorities from regional stakeholders and adjoining municipalities.

4.1 Municipal objective

Towong Shire working together to effectively anticipate, respond to and recover from major bushfire – to secure a safer municipality, more resilient community, healthier environment and a prosperous economy.

4.2 Strategic direction

In developing strategic directions for the MFMP, the MFMPC was mindful of the task's planning context. As illustrated in figure 2, the MFMP forms a critical third tier in Victoria's fire management planning hierarchy and therefore must not be developed in isolation from state and regional level fire management plans. The MFMPC has adopted the following broad strategic fire management deliverables from the state Fire Management Strategy 2009. These include:

- Active participation of the community, the sector and government, working together in fire management planning to reduce the destructive impact of fire on communities and the environment
- Communities that are resilient to fire
- Greater understanding of the fire sector within the community
- Healthy natural, social and built economic environments.

4.3 Alignment of regional and municipal objectives

The Towong Shire municipal fire management objective aligns closely with the Hume RSFMP objectives and vision for fire management. The development and implementation of this plan will therefore contribute significantly to the realisation of the Hume RSFMP's vision.

Hume Regional Fire Management Vision
The Hume Region working together to effectively anticipate, respond to and recover from major bushfire – to secure a safer region, more resilient community, healthier environment and a prosperous economy.

Furthermore, the formation of the Towong Shire MFMP and the development of a MFMP using the designated IFMP planning guide have strongly supported several of the RSFMP's key objectives. Evidence of this is described in the following table.

Figure 15: Alignment of MFMP and RSFMP objectives

RSFMP element	RSFMP objective	MFMP contribution
Planning together	Develop state, regional, municipal and local fire management plans and planning with a clear purpose and a consistent assessment of risk.	The MFMP provides the third tier in the IFMP process and utilises the same risk base approach as used with state and regional plans.
Collaborative implementation	Develop and implement fire management programs and activities in a collaborative manner.	The MFMP consists of multiagency representation and has incorporated community engagement strongly into the development of the MFMP.
Building knowledge and capacity	Build and share knowledge in the fire management sector and across the community. Improve the capability of communities, the fire management sector and the government to deal with fires.	The aspirations of the MFMP converge with the regions in seeking to build both its members and the community's knowledge and understanding of fire management.
Implementation support	Support the implementation of the IFMP framework in the Hume region.	The development of this MFMP clearly demonstrates support for IFMP at a municipal level.

5 Fire management risk strategies

Integrated fire management planning involves a risk management process to establish priority setting for fire management activities and is consistent with the international standard for Risk Management ISO 31000. Risk is described within the standard as:

$$\text{Risk analysis} = \text{consequence} \times \text{likelihood}$$

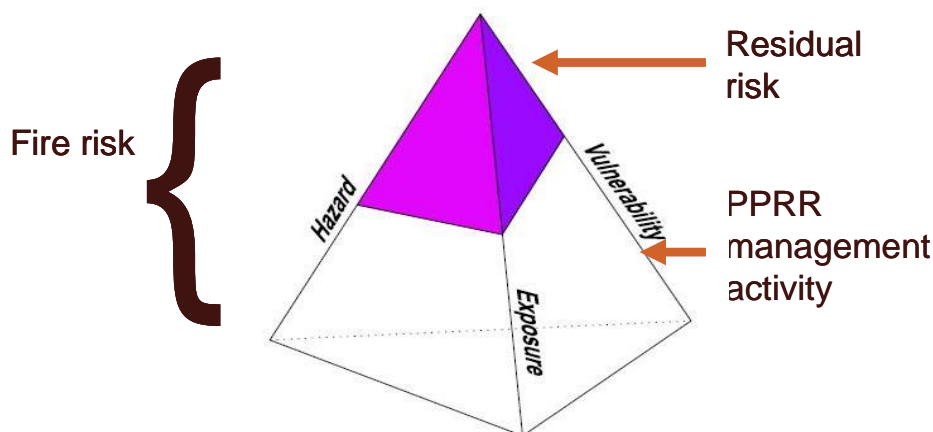
The standard emphasises the need to establish and manage the risk to the objectives set during the plan development process.

5.1 Risk identification process

These objectives and risks were identified through the environmental scanning process and use of Creighton's Risk Pyramid. Creighton's Risk Pyramid provides a framework for sorting, analysing and assessing information with respect to fire risk. It helps identify the amount of risk generated by the hazard x exposure x vulnerability relationship within the context (people, property, infrastructure, social and economic, biodiversity, the economy and heritage values) of a location or situation.

- Hazard - is a specific event characterised by a certain magnitude and likelihood of occurrence.
- Exposure - refers to the factors, such as people, buildings, networks the environment and economy that are subject to the impact of a specific hazard.
- Vulnerability - refers to the characteristics of an element exposed to a hazard - road, building, person, and economy - that contributes to the capacity of that element to resist, cope with and recover from the impact of a natural hazard.

Figure 16: Chrighton's risk pyramid



Through this means, the MFMPC was able to generate a list of bushfire concerns for the municipality. As IFMP encompasses planning across all fire hazard environments, hazards need to be considered within a range of categories, so as to better understand the likely consequences and recovery risks involved. A copy of these categories can be found in attachment 1.

5.2 Risk assessment process

Risk is assessed by describing the consequences and the likelihood of that consequence occurring, and identifying the elements at risk. An event or set of circumstances may have multiple consequences and may affect multiple objectives. Existing risk treatments and their effectiveness should be taken into account when rating the level of risk.

As a first step in the assessment process, each of the identified concerns were refined into succinct risk statements and entered into the risk register (figure 17). Risk statements are a description of the risk and simply describe the risk in terms of the source through to the impact. Each risk statement should outline:

- The hazard (the source of the risk)
- The element at risk
- The consequence of the interaction as a result of an event.

Each of these statements was then qualitatively assessed for their impact using the Fire Management Planning Committee's state bushfire consequence table (attachment 1). Each consequence was considered in terms of both damage and disruption (loss of service or function) and in some cases, the consequence of an event was not realised at the local level but was of a significant impact at regional and/or state level. In addition, the committee took into account existing treatments and their impact on the risk level. Consequence ratings were then entered into the risk register.

The likelihood of each an event being realised was assessed using the data derived from the environmental scan and the likelihood table (attachment 1). Where the committee did not believe it held the necessary technical expertise to make an assessment, advice was sought from relevant authorities outside the committee. Once agreement as to consequence and likelihood was reached, the likelihood x consequence matrix (attachment 1) was used to assign a risk level to each risk statement.

The following figure is a summary of the risk assessment process, detailing the highest priority bushfire risks in the Towong Shire. The priority risks were determined by the combined fire experts on the MFMPC which utilised the fire experience of committee members, the VFRR risk register and the former Towong Shire Fire Prevention Plan.

5.3 Risk management strategy

Having developed a register of risks for Towong Shire, the committee was then able to allocate the current treatments of responsible agencies against relevant risk areas and thus develop a Risk Management Strategy (figure 18). This strategy is a matrix of:

Priority risks x treatment x agency x timeframes

This process has created a snapshot of who is doing what, where and why, to reduce the risks posed by fire within the municipality. It should be noted that these are proposed treatments only for the next 3 years, and that actual implementation in any given year may be influenced by a variety of factors such as availability of resources and seasonal conditions.

Figure 17: Towong Shire risk register

Towong Shire Bushfire Risk Register		
ID#	Risk Description	Risk Rating
1	Risk of bushfire impacting on the major population centres on days with a Fire Danger Index above 30. (Tallangatta, Corryong, Mitta Mitta, Dartmouth, Tallangatta Valley, Eskdale, Bethanga, Granya Gap, Granya, Koetong, Towong, Cudgewa)	Moderate
2	Risk of bushfire impacting on housing/communities/settlements outside of the major centres on days with a Fire Danger Index above 30	Moderate
3	Risk bushfire impacting on life and assets of the Snowy River Camp, while it is being utilised by school aged children on extreme and code red rated days	Low
4	Risk bushfire impacting on life and assets of the Upper Murray Resort, on extreme and code red rated days	Low
5	Risk of bushfire impacting schools throughout the municipality (life and infrastructure impacts) - greatest exposure during school terms on days with Fire Danger Index above 30	Moderate
6	Risk of bushfire impacting on recreational visitors/users in the Towong Shire on days with Fire Danger Index above 30 in forests and national parks areas	Low
7	Risk of bushfire impacting on recreational visitors/users in the Towong shire on days with Fire Danger Index above 30 in the Lake Hume and Dartmouth environments	Low
8	Risk of bushfire impacting on Shelley Forest Camp on extreme and code red rated days	Low
9	Risk of bushfire damaging all timber Plantations on days with Fire Danger Index above 30	High
10	Risk of bushfire damaging all public land timber resources on days with Fire Danger Index above 30	High
11	Risk of bushfire impacting on rural economic infrastructure on days with Fire Danger Index above 30 (loss of fences, economic livelihood, social impacts, carrying capacity, stock losses, infrastructure, machinery)	Moderate
12	Risk of bushfire entering and escaping or starting at the Waste Transfer Station - Tallangatta	Low
13	Risk of bushfire entering and escaping tip at Corryong	Low
14	Risk of bushfire damage to Heritage Bridges on Rail Trail by fire (linked to risk to tourism above) at any Fire Danger Rating level	Low
15	Risk of fire (bush and structure) impacting on larger employers in the area 20+ employees (abattoir/mills/seed company/council hospital/schools) where the impact results in the facility being inoperable for a period of months	Moderate
16	Risk of "fire influenced" vegetation being impacted or changed by fire on an extreme/code red day	Low
17	Risk of "Fire sensitive" vegetation being impacted or changed by fire on an extreme or code red day	Moderate

Towong Shire Bushfire Risk Register		
ID#	Risk Description	Risk Rating
18	Risk of fire impacting state and federally listed flora and fauna sites/habitat on extreme or above FDR days	Low
19	Risk of major transmission lines & switch stations being impacted/damaged by bushfire on an extreme+ Fire Danger Rated day leading to a loss of service	Moderate
20	Risk of distribution lines & sub stations being impacted/damaged by bushfire on an extreme+ Fire Danger Rated day leading to a loss of service	Low
21	Risk of distribution lines to Corryong & Euroa being impacted/damaged by bushfire on an extreme+ Fire Danger Rated day leading to a loss of service	Moderate
22	Risk of mobile service being interrupted due to towers being impacted by bushfire	Low
23	Risk of telephone communications being interrupted due to damage to cables during a bushfire	Low
24	Risk of SMR service being interrupted due to towers being impacted by bushfire	Low
25	Risk of fire interrupting power supply to major and/or pump stations associated with effluent treatment systems	Moderate
26	Risk of fire interrupting power to, or causing damage to boosting stations for town water supply	Moderate
27	Risk of water treatment plants inability to maintain performance standards (quantity & quality) due to high water turbidity levels following a fire event	Moderate
28	Risk of waste water treatment plant being damaged by fire	Low
29	Risk of fire interrupting power supply to waste water treatment plant	Moderate
30	Risk of water treatment plant being damaged by fire	Moderate
31	Risk of water pressure failure due to excess demand on reticulation system during a bushfire	High

Figure 18: Towong Shire risk management strategy

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
Planning together											
CFA	1	Emergency Management Plan (site)	CFA input into site specific Emergency Management Plans including bushfire component.		✓				N	All	3, 4, 5, 8, 12, 13, 15
DEECD	2	Emergency Management Plan (site)	Established framework for the effective handling of emergencies in schools, childcare centres, preschools (public & private), includes development of an Emergency Management Plan and mandatory training for staff, nominated bus routes, code red closures.		✓	✓			N	All	1, 2, 5
PV	3	Emergency Management Response Plans	Ensure that proper and sufficient works for wildfire prevention and suppression activities in Victoria are conducted in an operationally safe, environmentally sensitive and cost- effective manner on PV managed land. Ensure efficient and appropriate response.		✓	✓			Y	All	All
DHHS	4	Bushfire Plan	Individual bushfire plans for DHHS run facilities (as necessary).				✓		N	All	1, 2
NEW	5	Risk management procedures	Operating procedures varied to reduce risk during high fire danger periods/events and strategic spread resources including generators to spread risk and ensure continuity of supply.		✓				N	All	11, 15
NEW	6	Emergency Response Plan	Respond appropriately to the impacts of fire on water supply and waste management.			✓	✓		N	All	11, 15
DPCD	7	Bushfire hazard identification framework	Identifies the different level of bushfire hazard at a state wide scale and the different responses that planning and building systems will implement.	✓					N	All	All
DPCD	8	Bushfire overlay	Development of a new overlay to replace Wildfire Management Overlays, includes opportunity to modify to local conditions through schedules.	✓					N	All	All
DPCD	9	Bushfire prone maps	Interactive online map service that identifies areas likely to be subject to fires and consequent construction standards requirements.	✓					N	All	All
DELWP	10	Fire management planning	DELWP Fire Management Zones. Strategic landscape scale zoning of public land across the state to achieve fuel management outcomes.		✓				N	All	All

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
DELWP	11	Fire Operations Plan	Planning of proposed fire prevention activities to be carried out on public land (includes all land managed by DELWP and PV) with the objective of reducing impacts of bushfire on life, community, critical infrastructure, industry and the environment. Includes planned burns, slashing and track works, grazing, and additions to the permanent network of strategic fuel breaks.		✓				Y	All	All
LGA	12	Bushfire Management Overlay	Planning referral for new subdivisions, structures, applies conditions for access, water supply, standards, works and vegetation management.	✓	✓				Y	All	All
CFA	13	Statutory & legislative activities	Bushfire Prone Areas & Bushfire Management Overlay, declaration of TFBs, declared danger periods, regulation of burning permits.	✓	✓				N	All	All
NEW	14	Alternative drinking water supply plan	Provision of alternative drinking water supplies to specific towns in the event of loss of normal supply.		✓	✓			N	All	11, 15
PV/DELWP	15	Rehabilitation Plan	Implement a works program to repair or replace fire affected infrastructure and minimise impacts upon natural values.			✓	✓		N	All	All
Working together											
LGA/DELWP/PV/CFA	16	Fire access roads, tracks & water points	Construction/maintenance of a strategic network of waterpoints, roads, tracks and bridges to specified standards in support of fire management activities. Includes Coordination of Fire Access Roads Subsidy Scheme (FARS) by CFA.	✓					Y	All	All
CFA	17	Vegetation management	Advice to landholders & linkages to CFA Brigades to manage vegetation & lower bushfire risk.	✓	✓				Y	All	All
LGA/Vic Roads	18	Roadside vegetation management	Removal of fuel and vegetation management along roadsides. Includes strategic breaks and routine roadside maintenance.	✓	✓				Y	All	All
CFA	19	Brigade Burn Program	Removal of vegetation through burning to protect life & property, includes Township Protection Burning, Planned Burn Program & Fuel Reduction Burns by CFA Brigades.	✓	✓				Y	All	All
DELWP	20	Planned burning	Implementation of planned burning and other works as identified in FOP on public land.		✓				Y	All	All
DELWP	21	Crown land fuel management	Managing fuel loads on crown land. Includes slashing, mulching and burning.		✓				Y	All	All
Telstra	22	Bushfire mitigation	Removal of identified fire risks to lines & facilities, e.g. tree lopping.		✓				N	All	19, 20, 21
LGA	23	Fuel hazard management	Reducing fuel loads to protect assets, fuel hazard mitigation within townships, roadsides.	✓	✓				Y	All	All

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
LGA	24	Power line clearance	Vegetation management around powerlines.	✓	✓				N	All	All
AusNet Services	25	Routine maintenance of facilities	Ongoing mowing/slashing/spraying of sites to reduce fuel loads to ensure protection of assets, minimise ignition potential and ensure adequate access and egress. Includes routine maintenance of structures (e.g. gutter cleaning).	✓	✓				N	All	All
AusNet Services	26	Routine maintenance of transmission & power lines	Vegetation management around powerlines and along easement, regular inspections, maintenance of access tracks.	✓	✓				N	All	All
DEECD	27	Routine maintenance of facilities	Ongoing mowing/slashing/spraying of sites to reduce fuel loads to ensure protection of assets, minimise ignition potential, includes routine maintenance of structures (e.g. gutter cleaning).		✓				N	All	5
Telstra	28	Routine maintenance of facilities	Ongoing mowing/slashing/spraying of sites to reduce fuel loads to ensure protection of assets, minimise ignition potential and ensure adequate access and egress. Includes routine maintenance of structures (e.g. gutter cleaning).		✓				N	All	22, 23, 24
NEW	29	Routine ground maintenance of facilities	Ongoing mowing/slashing/spraying of sites to reduce fuel loads to ensure protection of assets, minimise ignition potential and ensure adequate access and egress. Includes routine maintenance of structures (e.g. gutter cleaning).		✓				N	All	All
AusNet Services	30	Supply continuity	Maintain a response capability (scaled to level of risk) so as to minimise length of power disruptions from incidents e.g. fire/storms.			✓			N	All	All
CFA	31	Resourcing	Strategic network of qualified & equipped staff, volunteers & appliances for mounting timely response to fires on private land.			✓			N	All	All
DELWP	32	Emergency management support	Provide support to other organisations for emergency management, including expertise and specialist resources.			✓			N	All	All
SES	33	Specialist support	Provide specialist support to other agencies (Vic Pol, CFA, DHHS, DELWP) involved in response to an emergency, e.g. doorknocks, transport, staging area mgt.			✓			N	All	All
Vic Pol	34	Specialist support	Provide specialist support to other agencies involved in response to a bushfire e.g. vehicle escorts.	✓	✓	✓			Y	All	All
LGA	35	Technical advice	Provision of specialist technical advice, information & skills to other agencies involved in emergency response.			✓			N	All	All

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
CFA	36	Standard operating procedures	Dictate level of readiness according to the conditions so as to ensure appropriate resourcing & preparedness for optimum response.		✓				N	All	All
DELWP	37	ICCS	Maintenance of a strategic network of Incident Control Centre facilities to support response in emergency management incidents. Includes agreed level 3 ICCs to predetermined standards.		✓				N	All	All
Vic Pol	38	MERC	Coordinate municipal emergency response effort in the event of a major bushfire.			✓			N	All	All
DHHS	39	Regional resourcing & activation guidelines	Identifies DHHS resource requirements for different emergencies and describes triggers for activation of different levels.		✓				N	All	1, 2
DELWP	40	Communications	Maintenance of a communications network.		✓				N	All	All
DELWP	41	Detection	Maintenance of a detection network. Includes fire lookout towers and detection flights.		✓				N	All	All
DELWP	42	Air support facilities	Maintenance of a strategic network of air support facilities. Includes airbases & helipads.		✓				Y	All	All
DELWP	43	Bushfire readiness	Provision of specified levels of skills and resources to respond to emergencies. Includes people (PFFs), equipment, heavy plant, aircraft, facilities and consumables.		✓				N	All	All
AusNet Services	44	Technical advice	Provision of specialist technical advice, information & assistance to other agencies involved in emergency response e.g. temporary power cessation, line inspection in conjunction with field operations.			✓			N	All	All
DELWP	45	Bushfire response	Respond to bushfires on public land to protect life and minimise impacts on property, communities and the environment. Includes timely provision of public information.			✓			N	All	All
Telstra	46	Response program	Maintain service continuity and minimise disruptions by responding to faults or damage to facilities, includes deployment of mobile communication units and use of generators during power outages.			✓	✓		N	All	22, 23, 24
LGA	47	Resourcing	Provision of specialist equipment (graders, water carriers) and facilities (MECC centre) to other agencies involved in emergency response.			✓			N	All	All
Vic Pol	48	Operation Firesetter	Increased resources in high risk areas on Severe+ FDI days, increased patrols, increased visibility and covert surveillance so as to reduce the risk of arson and increase capacity in the event of a bushfire occurring.			✓			N	All	All
LGA	49	Fire plug and hydrant installation and maintenance	Works carried out to ensure that the system will operate correctly when required to do so.		✓				Y	All	All

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
LGA	50	Relocation assistance	Provision of emergency short term accommodation, relief centres, leave early destinations, nearer safety places.			✓			N	All	1-8, 11
CFA	51	Agricultural management	Fire management & safety issues for landowners/managers to assist in the preparation of property fire management plans. Includes publication "On the land", "Farm Fire Safety" module (delivered via DPI & TAFE Whole Farm Planning courses on request).		✓				N	All	1, 2, 11, 15
DPI	52	Relief & recovery services to primary producers	Assess damage to and loss of agricultural crops, livestock and infrastructure of commercial primary producers and rural land managers (including aquaculture), identify & refer personal and technical needs to appropriate businesses (within DPI) or agencies.				✓		N	All	1, 2, 11, 15
DPI	53	Animal welfare needs	Liaise with animal welfare support agencies and organisations to deliver animal welfare services including assessing injured and affected animals (livestock & companion animals) in emergencies with an emphasis on the needs of commercial primary producers and rural land manager.			✓			N	All	1, 2, 11, 15
DELWP	54	Native animal welfare	Management of native animal welfare associated with an emergency incident.				✓		N	All	18
LGA	55	Livestock management	Disposal of dead livestock & companion animals, support with animal welfare needs.			✓			N	All	1, 2, 11, 15
DHHS	56	Emergency grants	Grant to families whose home is impacted by fire, allocated by municipality.				✓		N	All	1, 2, 11, 15
DHHS	57	Information kits	"After the fires: Practical Advice" & "Recovery from emergencies"; information kits containing brochures & fact sheets for people affected by fire/emergency.				✓		N	All	1, 2, 11, 15
DHHS	58	Emergency Relief Handbook	Information & direction for emergency relief arrangements in Vic.				✓		N	All	All
DHHS	59	Fire risk management system	GIS program identifying location & details of community facilities managed by DHHS and allied agencies.		✓				N	All	1, 2
DHHS	60	Vulnerable persons toolkit	Identifies location, contact details & describes needs of vulnerable persons within a municipality.		✓				N	All	1, 2
LGA	61	Vulnerable groups	Identification of vulnerable community groups and persons.		✓				N	All	1, 2
Vic Pol	62	Investigations	Investigate suspicious fires to ascertain cause and identify perpetrators.			✓			N	All	All
DELWP/PV	63	Enforcement	Programs which support legislative compliance. Includes patrols to enforce campfire regulations, forest closures, fire cause investigations and prosecutions.	✓					N	All	All
Vic Roads	64	Traffic diversion	Establishment of an appropriate traffic flow, through traffic management in the community and appropriate access and egress for property and business owners. Includes Traffic Management Strategies Assistance to other agencies.		✓				N	All	1-7, 11, 15

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
Vic Pol	65	Evacuations	Coordinate evacuation measures undertaken in response to a bushfire threat.				✓		N	All	All
PV	66	Patrol/inspection	Inspections of assets to ensure compliance with regulations and safety requirements and to assess for fire hazards. Includes Campfire Patrols and Parks Victoria Ranger Patrol Program.	✓	✓				Y	All	All
PV/DELWP	67	Park/Forest closures	Closure of parks, Forests and facilities at times of very high fire danger.		✓				N	All	All
HVP	68	Strategic Fire Plan	Development and maintenance of strategic fire breaks and fire access tracks, operational restrictions on plantation activities based on forecasted FDI, a range of fire fighting resources on varying levels of preparedness based on forecasted FDI (includes fire fighting appliances, trained and experienced personnel, heavy machinery, and aerial support), strategic water points/ fire tanks placed throughout estate to ensure water availability for suppression activities.	✓	✓	✓			Y	All	8, 9
Building capability											
CFA	69	Community Information Guide	Planned response (for both emergency services & the community) to a bushfire within a close proximity to a township, which has the potential to impact on the local community.		✓				Y	All	See CFA annual Bushfire Project Plan
CFA	70	Community fire guard	A community development program designed to help reduce the loss of lives & homes in bushfires. It assists neighbouring residents to develop bushfire survival strategies that suit their level of risk, lifestyle, environment & values.		✓				Y	All	See CFA annual Bushfire Project Plan
CFA	71	Bushfire planning workshops	Interactive workshop for residents living in High to Extreme bushfire risk areas. Participants are guided through the Fire Ready Kit by a trained facilitator to identify their own bushfire risks and the considerations they'll need to make when putting together their bushfire survival plan.		✓	✓			Y	All	See CFA annual Bushfire Project Plan
CFA	72	Home bushfire advice service	Individual 1:1 fire awareness & education for residents with the highest level of bushfire risk. Advice on property management, planning, personal capacity & potential fire hazards.		✓	✓			Y	All	1, 2
CFA	73	Fire Ready Victoria	Assists in perception & understanding bushfire risk, to modify behaviours to make individuals act more safely. Includes bushfire awareness sessions for communities, community groups, businesses & service providers.		✓				Y	All	All
CFA	74	Awareness	Fire awareness programs targeted at communities via shows/events/displays.		✓				N	All	All
DELWP/PV	75	Education	Programs which maintain public awareness of the bushfire threat, promote the importance of self protection & encourage the responsible use of fire by the community. Includes multi media messaging, in field patrols and publications.	✓					N	All	All
CFA	76	Vulnerable communities fire	Community education & information for vulnerable groups about fire.	✓	✓				N	All	See CFA annual Bushfire Project

Responsible agency(s)	Treatment		Treatment description	Spectrum					Application		Risk addressed
	ID #	Name		Prevention	Preparedness	Response	Recovery	Use	Targeted	Year 1, 2, 3	ID #
		awareness									Plan
LGA	77	Public awareness	Fire information through notices boards, signage etc. to raise awareness of risk, responsibilities and services available.	✓	✓				N	All	All
AusNet Services	78	Public awareness	Fire information through notice boards, brochures, signage etc. to raise awareness of fire risk.		✓				N	All	All
CFA	79	Schools program	Fire Safe Kids, Mobile Education Bushfire Unit.		✓				N	All	See CFA annual Bushfire Project Plan

5.4 Specific treatments

In addition to the above risk assessment and Risk Management Strategy, the MFMPC came up with a list of specific treatments. This list of treatments (Figure 20) highlights the specific activities either currently undertaken or proposed to be undertaken to mitigate fire risk further and give more detail than listed in the Risk Management Strategy. The treatment id number refers to the Risk Management Strategy above and the risk id number to the risk assessment. The specific activity treatment is listed as is the type and status of the activity. Activity custodians refer to all agencies involved in the treatment regime. In terms of a timeline, the year column refers to the three year life cycle of the plan and which year the treatment is applicable.

Figure 19: Towong Shire specific treatments

Activity #	Risk #	Specific treatment activity	Activity type	Treatment status	P.P.R.R or use	Activity custodian	Year 1	Year 2	Year 3
1	24	Contact SMR system owners to understand the impact of the loss of a single tower in this area	Research	New	Preparedness	MFMPC	Yes		
2	22	Contact mobile tower system owners to understand the impact of the loss of a single tower in this area	Research	New	Preparedness	MFMPC	Yes		
3	3	Confirm the existence an EM Plan for the Snowy River Camp	Research	New	Preparedness	MFMPC			
4	1, 2	Maintain current TPP	Action	Current	Preparedness	CFA	Yes		
5	1, 2, 15	Threat Map produced developed to inform the development of treatments appropriate for communities, based on vegetation proximity on pre-determined fire behaviour. To be considered for endorsement by the MFMPC	Research	New	Preparedness	LGA/CFA	Yes		
6	1, 2, 5-11, 15	Investigate the status of the Roadside Management Plan, what is the guidance for fuel management on roadsides	Research	New	Preparedness	MFMPC	Yes		

Activity #	Risk #	Specific treatment activity	Activity type	Treatment status	P.P.R.R or use	Activity custodian	Year 1	Year 2	Year 3
7	1, 2, 5-11, 15	Develop a project to investigate Roadside Management issues - linkages in DELWP Strategic Fire access roads current Fire Prevention Plan Strategic Access Egress roads, CFA Critical Access Roads.	Research	New	Preparedness	MFMP/DELWP/CFA/LGA/VicRoads	Yes	Yes	
8	6	Investigate the education program used for Forest Area recreation to inform visitors of fire risk. By request to the RSFMP	Research	New	Preparedness	MFMP Chair	Yes		
9	25	Advocate that European and indigenous heritage values are included on the asset databases used by fire responders	Action	New	Preparedness	MFMP	Yes		
10	15	LGA and CFA to work together identifying a list of major employers and their status of EM plans	Action	New	Preparedness	LGA/CFA	Yes		
11	19, 20	Identify the distribution/transmission lines in Towong (map) - talk to AusNet Services about impact on community - committee then reevaluate the power Risk Ratings	Research	New	Preparedness	MFMP	Yes		
12	22-24	Identify the Telecommunications infrastructure in Towong (map) - talk to providers about impact on community from loss - committee then reevaluate the Risk Ratings	Research	New	Preparedness	MFMP	Yes		

5.5 Fire management responsibility

Fire management responsibility within the municipality may be described in three categories.

5.5.1 Response agencies

Country Fire Authority (CFA) is charged under the CFA Act with the responsibility for fire safety planning and fire suppression in all areas of Victoria excepting the area covered by the Metropolitan Fire Brigade and fire protected areas. The CFA is a community based fire and emergency service whose mission is to protect lives and property. CFA responds directly to a range of emergency incidents, as well as conducting broader activities with the community such as education, awareness raising, industry brigades and fire investigation.

Link to CFA website: cfa.vic.gov.au/

Department of Environment, Lands, Water and Planning (DELWP) is responsible for fire suppression and management on public land including integrated programs with Parks Victoria, including planned burning for ecological and risk management objectives. Their objective is to protect communities and critical infrastructure from fire and to promote healthy and resilient ecosystems.

Link to DELWP FOPs planning: delwp.vic.gov.au/fire-and-other-emergencies/fire-plans-and-guidelines

5.5.2 Regulatory and service providers

Towong Shire Council is responsible for the management of all Council owned property, as well as ensuring that private land holders appropriately manage their land. Council officers inspect properties within the municipality to assess the potential risk of a bushfire and where necessary may issue a fire prevention notice. They also undertake annual fire prevention works on roadsides and reserves leading up to and during the fire season.

Link to Towong Shire Council: towong.vic.gov.au/

Department of Health and Human Services (DHHS) is the appointed agency to coordinate recovery planning and operations at the state and regional levels. At a municipal level, the responsibility for recovery is with the LGA with recovery arrangements and plans outlined in the Municipal Emergency Management Plan (MEMP).

Link to DHHS website: dhhs.vic.gov.au

5.5.3 Community

Land managers, the community and individuals all have a legal responsibility to maintain their properties and to conduct their activities in a responsible manner with respect to fire management. The effectiveness of the Risk Management Strategy relies heavily upon the community understanding and accepting their responsibilities and acting accordingly.

While specific treatments cannot be attributed to private individuals and organisations within the Risk Management Strategy, the MFMPC does have an expectation that members of the community will, where appropriate.

- Prepare and plan for fires, both bushfire and structural
- Prepare their properties for fire events
- Ensure adequate access and water for fire fighting appliances
- Maintain an awareness of fire danger levels and listen for alerts and warnings.

Advice, training and support to groups, businesses and individuals concerning all of these expectations can be obtained from the CFA (see link below).

Link to CFA Fire Safety: cfa.vic.gov.au/firesafety

5.6 Balancing fire risk against other values

In the course of developing the risk register, it became apparent to the MFMPC that some of the concerns being raised lay less with the impact of the actual fire and more with that of the treatments being applied. A number of the fire risk treatments adopted in the Risk Management Plan pose a potential threat to some of the same values the MFMPC is seeking to safeguard. It is important that these threats are noted and that a balance is struck between protecting the community from fire and maintaining the economic, social, and environmental wellbeing of the municipality.

A number of processes and treatments are already in place to ensure that all values are taken into consideration and protected during the planning and implementation of fire risk treatments. Where conflict does occur, the MFMP offers a dispute resolution process for member organisations by establishing a pathway for issues to be escalated and resolved at either a regional or state level by the responsible authorities.

5.7 Cross-boundary management and links to other programs/processes

In developing this plan, the Towong Shire MFMPC has endeavoured to ensure that concerns which cross municipal, regional or state boundaries are treated in a seamless manner with regard to risk assessment and treatments. This has been achieved through:

- Consistent use of processes and tools across the region
- Deliberate alignment of municipal and regional objectives
- Frequent cross membership of MFMPCs by agencies
- Making draft and final MFMPs available to other MFMPCs
- Upper Murray cross-border liaison committee.

6 Improvement and plan reporting and review process

Monitoring and improvement form the final stage in the IFMP process during the development of the initial MFMP. However, from this point on, monitoring and improvement should be viewed as ongoing activities as they entail continuous action, undertaken throughout the plan's three year life.

It is important to track the performance of the plan and the degree to which it contributes to achieving the desired outcomes once implementation of the Fire Management Plan has commenced. Monitoring, evaluation and reporting occur throughout the life of the plan, the aim being to identify those treatments working effectively and those that may need to be modified. This process also seeks to provide a transparent and accurate means of assessing the MFMP's progress in achieving its objective. The table below summarises the proposed implementation, reporting and review activities, as well who is responsible for undertaking them.

Figure 20: Towong MFMP reporting and evaluation program

Frequency	Task/action	Responsible party
Ongoing	Implement actions, as per agreed Action Plan.	Custodians
	Further explore identified opportunities for new or enhanced treatments with relevant stakeholders, and agree course of action.	MFMPC
Biannually (every 6 months)	Report to MFMPC on the progress of treatment/action implementation, including an evaluation of treatment appropriateness, impact, effectiveness, efficiency, and legacy in a manner acceptable to the MFMPC.	All Treatment Owners & Action Custodian
	Update Risk Register & Work Plan to reflect treatment status, as reported by treatment owner.	MFMPC
Annually (every 12 months)	Conduct strategic review of risks and associated treatment program, asking: <ul style="list-style-type: none"> • Are the identified risks still valid? • Do their pre-treatment and residual risk ratings still hold true? • Are there new risks that need to be added to the register and managed? • Do the treatments currently in place adequately address the identified risks? • Are there any new or enhanced treatments required? 	MFMPC
	Review and update plan content and mapping to ensure validity.	MFMPC
	Provide overarching progress report to Municipal Emergency Management Planning Committee, focusing on the collective effectiveness of treatments in the management of risks and progress towards the achievement of objectives.	MFMPC
Triennially (every 3 years)	Conduct end-to-end review of plan, with particular focus on the environmental scan and objectives.	MFMPC

Source: Swan Hill MFMP

7 Attachments

Attachment 1: Risk assessment tables

Risk categories table

Risk group	Risk category	Risk element
SOCIAL	People & Social Setting	<i>Life & injury:</i> Public Safety <i>Social services:</i> Functional continuity <i>Health & wellbeing:</i> Social networks <i>Displacement of people:</i> Employment/income
	Infrastructure	<i>Residential:</i> House, flat, caravan, apartments <i>Public accommodation:</i> Boarding house, hotel, hostel, correctional facilities <i>Public assembly:</i> Education, hall, theatre, stadium, cafe, restaurant <i>Health care:</i> Special accommodation homes, nursing homes and hospitals
	Cultural, Heritage	<i>Heritage sites and buildings</i> <i>Indigenous sites</i> <i>Iconic sites and features:</i> e.g. Puffing Billy
ECONOMIC	Infrastructure	<i>Commercial:</i> Shopping complex, office <i>Industrial:</i> Factory (heavy, light, special), warehouse, Silo, chemical, petrol <i>Critical/Essential Infrastructure:</i> Pipelines, Power, public transport systems, Water Catchments, Power Water & Sewerage, Gas, Communications <i>Transport:</i> Road, rail, bridge, tunnel, port, marine, airport
	Production	<i>Agriculture and Farming:</i> Plantation, crop, pasture, poultry, feedlot, sawmill <i>Business/Industrial Capacity:</i> <i>Tourism:</i>
ENVIRONMENT	Biodiversity	<i>Assets that provide biological based ecosystem functions and/or services considered of value.</i>
	Water	<i>Assets that provide of atmospheric/climatic ecosystem functions and/or services considered of value</i>
	Air	<i>Assets that provide water-based ecosystems functions and/or services considered of value.</i>
PLANNING	Governance & Regulation	<i>Corporate Governance Issues, including organisation structures; Boundary issues, Inter-Agency Agreements; Environmental scans; Population projections; urban development projections/planning; Volume projections; Long term/short term solutions; Infrastructure requirements to meet projected community needs</i>
	Planning & Communication	<i>Internal, external, multi-municipal, communications strategies</i>
	Stakeholder Management	<i>Community Expectations; Government expectations; Business and Industry Issues, including risks associated with developing and implementing programs to minimise the impact of fire on business and industry;</i>
	Operational	<i>Encompasses the planning, daily operational activities, resources (including people) and support required within the 'area of interest', that results in the successful development and delivery of products/ services.</i>
	Financial	<i>Ability to allocate limited financial resources to maximum effect; Ability to fund adequate resources to meet community needs; Skills & technical expertise; Management skills; Equipment maintenance, upgrades, and replacement funding; Geographical remoteness location needs; Government's ability to fund requirements to meet population growth needs</i>

State bushfire consequence table

STATE DESCRIPTOR BUSHFIRE	People - Bushfire	Infrastructure - Bushfire	Public Admin - Bushfire	Environment - Bushfire	Economy - Bushfire	Social Setting
Catastrophic	50+ lives lost. Hundreds injured 1000+ houses destroyed. 2000+ people displaced. 30,000 + livestock lost.	Loss of critical infrastructure and/or services for 24-48 hours to the Melbourne metropolitan area. Loss of services to a major regional city/several suburbs for more than a week.	Significant statewide outrage. Royal Commission or other similar inquiry leading to changes in policy and practice.	Permanent total loss of one or more ecosystems or critical habitat elements. Loss of nationally significant cultural assets.	\$1B or 30% of State revenue	Severe disruption to community wellbeing over the whole area or a large part of it for a period of many years
Major	10 -50 fatalities as a direct result of the bushfire event. 300 - 1000 houses destroyed. 500 -2000 people displaced. 10,000 - 30,000 livestock lost. Significant loss of breeding stock.	Loss of critical infrastructure and/or services for up to 8-24 hours to the Melbourne metropolitan area. Loss of services to a major regional city/several suburbs for 4 days and up to a week.	Significant regional and local outrage, with some occurring at state level. Parliamentary or other inquiry leading to change in practice.	Permanent partial loss of one or more ecosystems or critical habitat elements. Extinction of a species or significantly increase the likelihood of extinction to almost certain that intervention such as captive breeding programs are required. Loss of state significant cultural assets.	Damage costs including legal actions and/or industry impacts (tourism, forestry, wine and grape etc) to the value of more than \$300M.	Severe disruption to community wellbeing over a wide area or for more than 24 months.
Serious	2 - 10 fatalities as a direct result of the bushfire event. Large number of people affected by smoke. 30 - 300 houses lost. 200- 500 people displaced 4000 - 10000 livestock lost.	Loss of critical infrastructure and/or services for up to 2-8 hours to the Melbourne metropolitan area. Loss of services to a major regional city/several suburbs for 2-4 days.	Some outrage at local and regional level.	Long term disturbance to one or more ecosystems or critical habitat elements. National response and/or support for animal welfare. Loss of a regionally significant cultural asset such as Phillip Island penguins, Healesville Sanctuary, Puffing Billy.	Damage costs including legal actions and/or industry impacts (tourism, business etc) to the value of more than \$100M.	Major disruption to community wellbeing over a moderate to large area* or for a period of months.
Significant	Single fatality and/or multiple serious injuries requiring hospitalisation as a direct result of the bushfire event. Up to 30 houses lost. 50 - 200 people displaced. 2000 - 4000 livestock lost.	Loss of critical infrastructure and/or services for up to 1 hour to the Melbourne metropolitan area. Loss of services to a major regional city for 1 day. Loss of services to local community for a week.	Local outrage and concern.	Temporary disturbance to one or more ecosystems or critical habitat elements. Local response and/or support for animal welfare.	Damage costs including legal actions and/or industry impacts (tourism, business etc) to the value of more than \$30M.	Localised disruption to community wellbeing over a small area or for a period of weeks.
Important	Serious injury and disability, up to 50 people displaced, up to 2000 livestock lost	Loss of services to regional town for a day. Loss of services to local community of up to a week	Local concern	Temporary disturbance to local habitat . Local response and/or support for animal welfare.	Damage costs including legal actions and/or industry impacts (tourism, business etc) to the value of less than \$30M.	Localised disruption to community wellbeing over a small area or for a period of up to one week.

Likelihood table

Level	Descriptor	Description In any one year, the likelihood of the event occurring is:
A	Almost Certain (Annually)	Close to 100% - Annually
B	Likely	33% (i.e., once in every three years)
C	Possible	10% (i.e., once every 10 years)
D	Unlikely	3% (once every 30 years)
E	Rare	1% (once every 100 years)

Risk assessment matrix

Consequence Level					
Likelihood Level	Important	Significant	Serious	Major	Catastrophic
Almost Certain	Moderate	Moderate	High	Extreme	Extreme
Likely	Low	Moderate	High	High	Extreme
Possible	Low	Low	Moderate	High	High
Unlikely	Low	Low	Moderate	Moderate	High
Rare	Low	Low	Low	Moderate	Moderate

Attachment 2: Stakeholder analysis and Community Engagement Plan

Stakeholder type and engagement level		
Stakeholder type	Description	Participation level*
Internal	Formal responsibilities for IFMP process and outcomes	Collaborate and empower
Primary	MFMP membership, responsibility for development of the plan, communication and engagement across and within organisations rest with these organisations	Collaborate and empower
Secondary	RSFMPC membership or fire management role within municipality, may be requested to provide specific inputs, dependent upon outputs, or requested to be involved in specific tasks,	Involve and consult
Tertiary	Strong interest in outcomes	Inform and consult

*IAP2 Public Participation Spectrum: *empower* → *collaborate* → *involve* → *consult* → *inform*

Fire management roles	
Role	Description
Fire coordination	Bringing together of fire management agencies and elements to ensure effective response to an incident or emergency. CFA has legislated responsibility under the CFA act 1958 for the prevention and suppression of fires and for the protection of life and property in the Country Area of Victoria. In accordance with provisions in the CFA Act and the Forest Act 1958, DELWP has fire management and fire suppression responsibilities for state forests and national, state and regional parks.
Land owner/manager responsibilities	Landholder/managers are heavily involved in fire prevention and fire suppression on land under their control. They have legislated responsibilities to extinguish a fire burning on their land and to prevent fires from starting from the use of equipment and vehicles (CFA Act 1958, Crimes Act 1958). They are also required to comply with relevant State government laws, local government laws, relevant planning and building permit conditions and conditions associated with permits to burn.
Response	Actions taken in anticipation of, during and immediately after a fire incident to minimise the impact of the fire.
Recovery	A coordinated process of supporting emergency affected communities in the reconstruction of physical infrastructure and restoration of emotional, social, economic and physical wellbeing.
Community education	Community education is learning and social development, working with individuals and groups in their communities using a range of formal and informal methods
Community care	Community care is about identifying and catering for groups or individuals with specific needs, before during and after fire.
Asset protection	Asset protection involves protecting key community infrastructure such as power, water supplies, roads, gas pipes and protecting community assets such as parks and the environment. Asset protection can also involve the protection of private assets such as housing, plantations, crops and fences.
Regulatory	The issuing of permits for lighting fires. The development of and compliance with planning controls and permits for developments and building that take into account fire risk/management. The regulation and issuing of permits involving vegetation removal or fuel reduction activities for fire management purposes.

Towong MFMPC stakeholder analysis

Stakeholder	Type				Fire management role within Hume Region									
	Internal	Primary	Secondary	Tertiary	Fire Coord	Land Mgr	Response	Recovery	Comm Info	Comm Care	Asset Protect	Regulate	RSFMPC Member	Other
Hume RSFMPC	✓						✓	✓	✓				✓	Regional IFMP oversight & strategic fire planning
MEMPC	✓						✓	✓	✓					Municipal integrated & strategic emergency planning
MFMPC	✓						✓	✓	✓					Municipal integrated & strategic fire planning
Towong Shire Council		✓				✓	✓	✓	✓	✓	✓	✓		
HVP		✓				✓	✓	✓		✓				Forest fire expertise
Vic Pol		✓					✓						✓	
Parks Victoria		✓				✓	✓	✓	✓	✓	✓		✓	Forest fire expertise
CFA		✓			✓		✓	✓	✓	✓	✓	✓	✓	Fire safety expertise
DELWP		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	Forest fire expertise
DHHS			✓				✓	✓		✓			✓	
DPCD			✓					✓				✓	✓	Oversight of rural adjustment & development programs, development of planning controls
DPI				✓				✓					✓	Animal health, agricultural loss & recovery responsibilities
SES			✓				✓						✓	

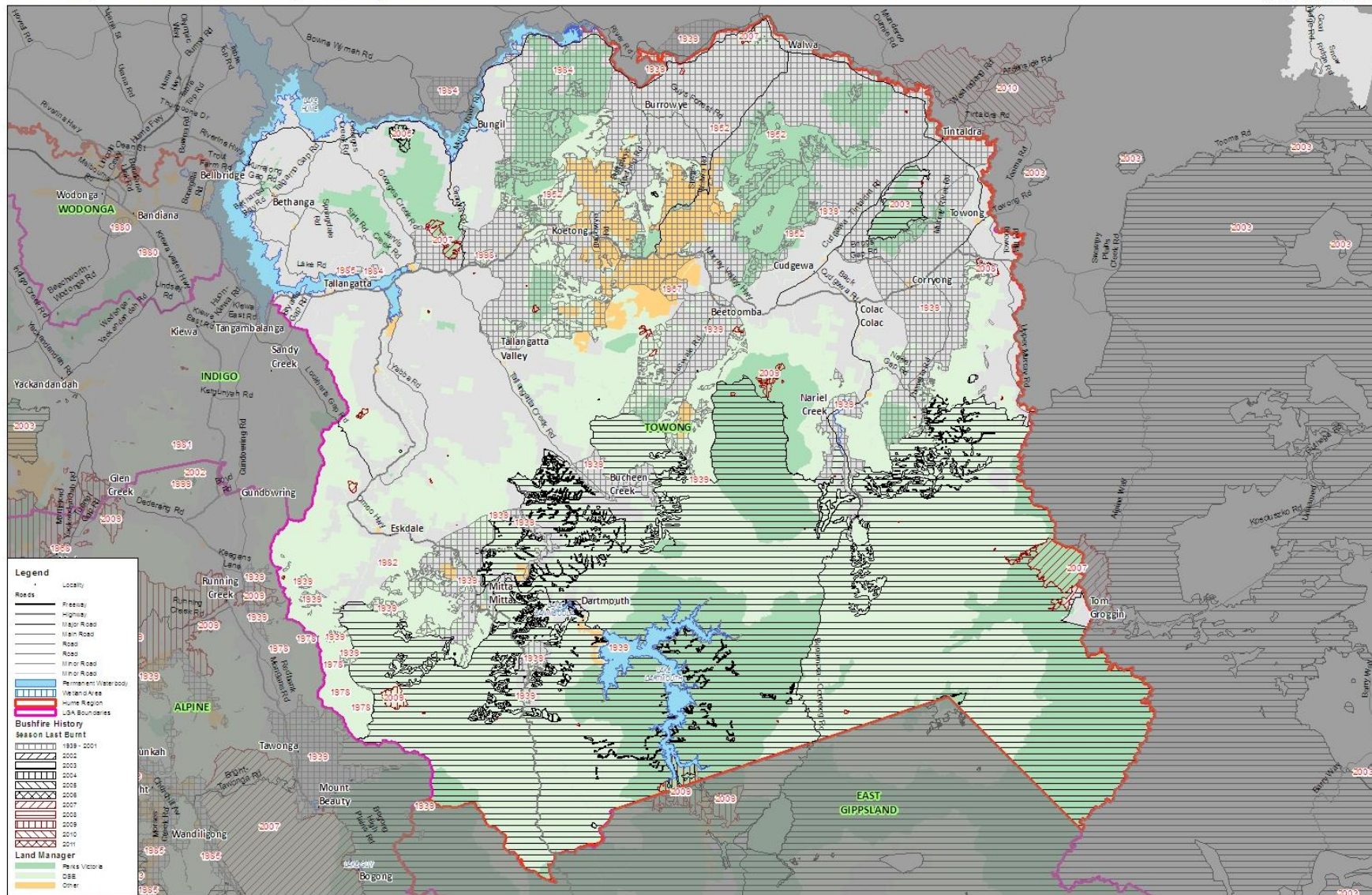
Vic Roads			✓			✓	✓				✓	✓	✓	
AusNet Services			✓							✓			✓	
Towong MFMPC stakeholder analysis														
Stakeholder	Type				Fire management role within Hume Region									
	Internal	Primary	Secondary	Tertiary	Fire Coord	Land Mgr	Response	Recovery	Comm Info	Comm Care	Asset Protect	Regulate	RSFMPC Member	Other
NE water			✓							✓	✓		✓	
GMW			✓			✓					✓			
Telstra			✓							✓	✓		✓	
Neighbouring MFMPC's			✓				✓	✓	✓					
Optus				✓						✓	✓			
NECMA				✓		✓		✓			✓	✓		
DEECD				✓						✓				
Ambulance Vic				✓						✓				
Media				✓			✓		✓					
Local community/industry groups				✓										
General public				✓		✓	✓	✓			✓			Responsibility for private property, social networks & personal well being.
Upper Murray Border Liaison Committee				✓	✓		✓							

Towong MFMPC Communication and Engagement Plan											
Stakeholder	Engagement level	Engagement activity									
		Meeting minutes, reports & agendas	1:1 consultation	IFMP & Towong web site	Email updates	Media articles	Special meetings	Draft consultation	3 year review	Individual org networks	Notify updates
Internal stakeholders											
Hume RSFMPC	Collaborate & empower	✓		✓	✓	✓	✓	✓	✓		✓
MEMPC											
MFMPC											
Primary – Answerable for activity/decision											
Towong Shire Council	Collaborate & empower										
CFA											
DELWP		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VicPol											
Parks Victoria											
HVP											
Secondary – Contributory responsibility											
DHHS	Involve & consult										
DPCD											
SES											
Vic Roads		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AusNet Services											
GMW											
North East Water											
Telstra											
Tertiary – Interested											
NECMA	Inform & consult										
DPI											
DEECD											
Ambulance Vic		✓		✓		✓		✓	✓		
Media											
Optus											
Community/industry grps											
General public											

Attachment 3: Environmental scan maps and data

Bushfire (burnt area 1939 - 2011) - Towong Shire

Date: 20/07/2012



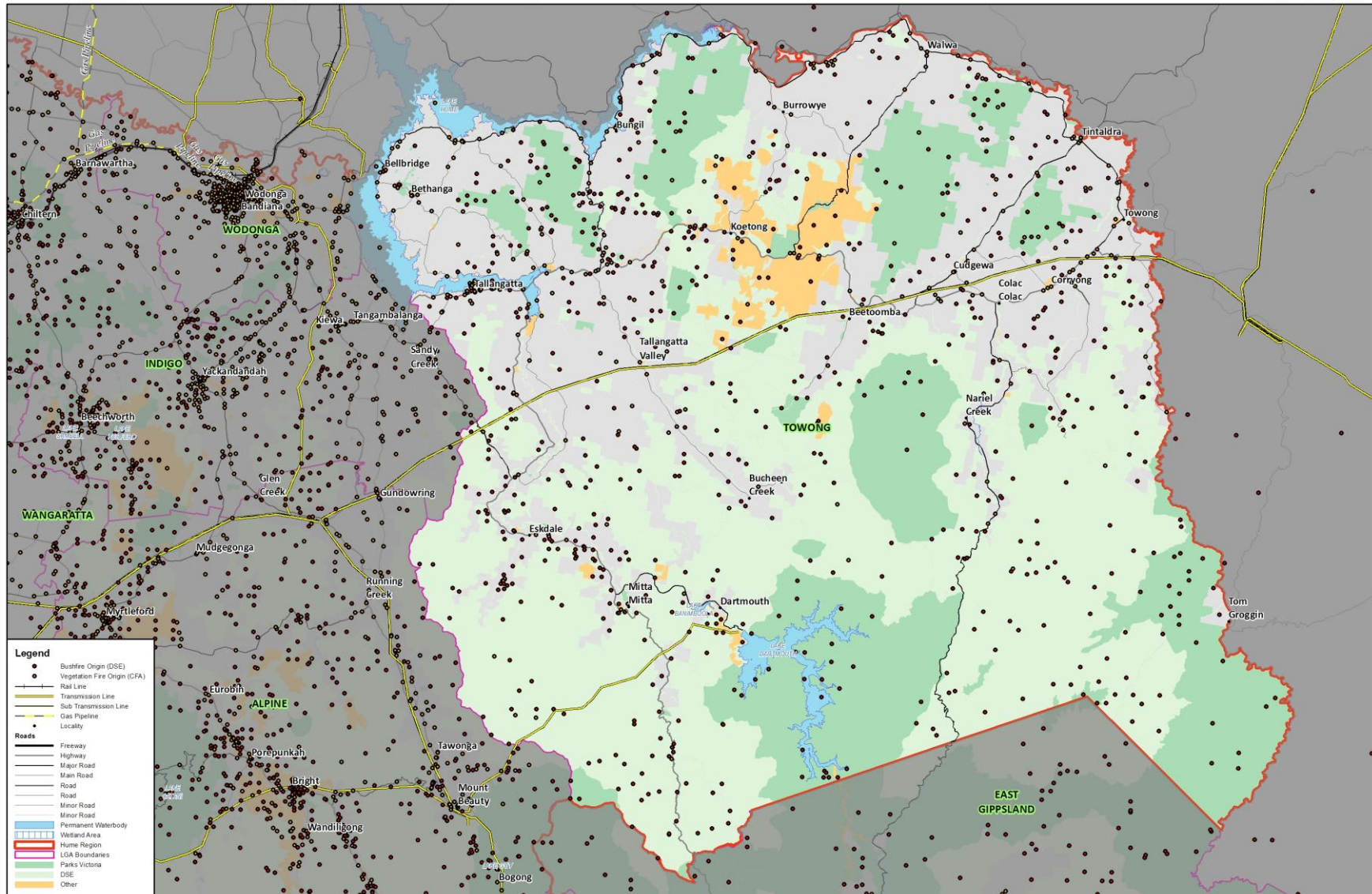
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Scale: 1:380,000

GDA 1994 VICGRID94





Legend

- Bushfire Origin (DSE)
- Vegetation Fire Origin (CFA)
- Rail Line
- Transmission Line
- Sub Transmission Line
- Gas Pipeline
- Locality

Roads

- Freeway
- Highway
- Major Road
- Main Road
- Road
- Minor Road
- Minor Road

- Permanent Waterbody
- Wetland Area
- Home Region
- LGA Boundaries
- Parks Victoria
- DSE
- Other

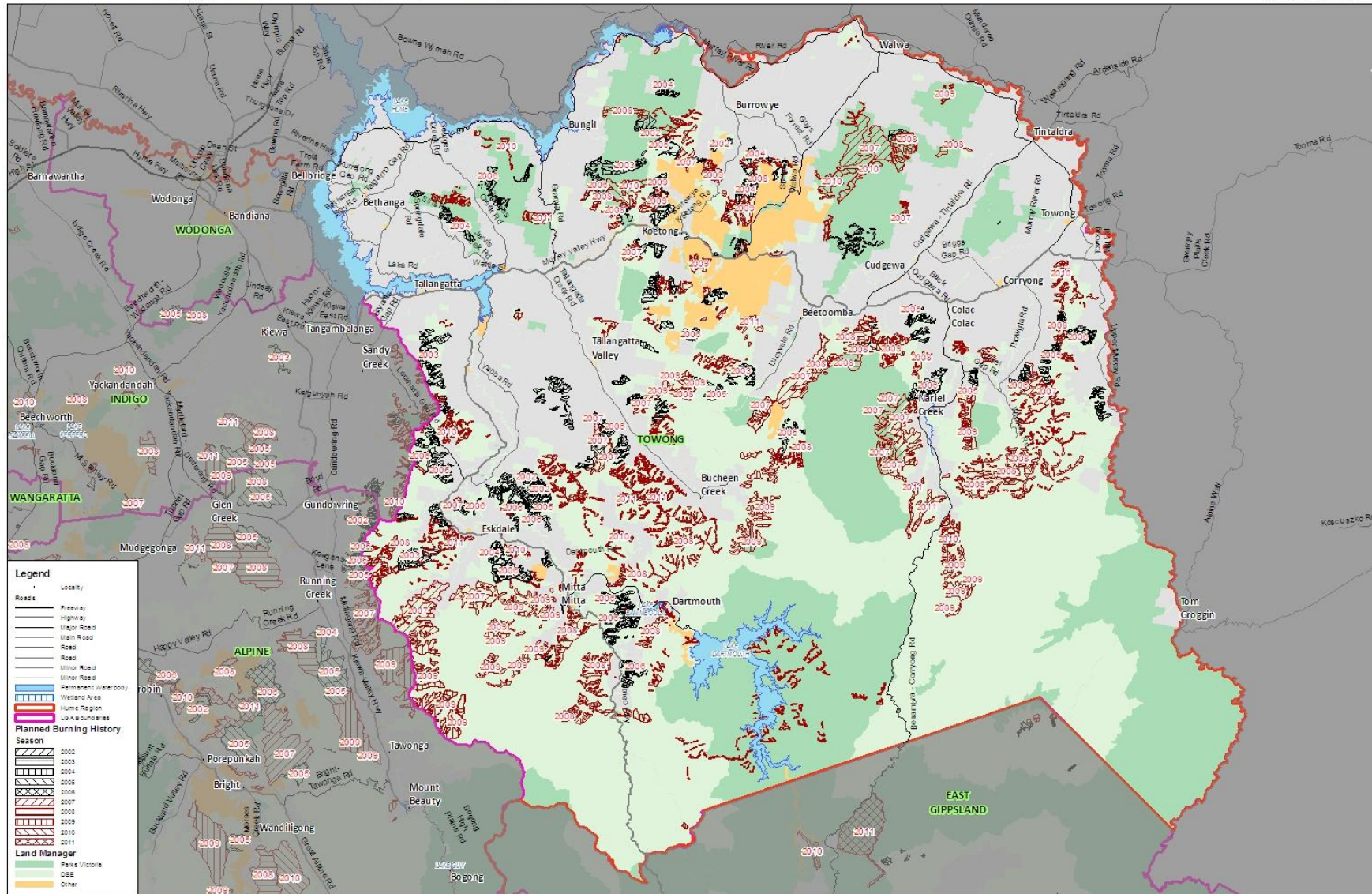
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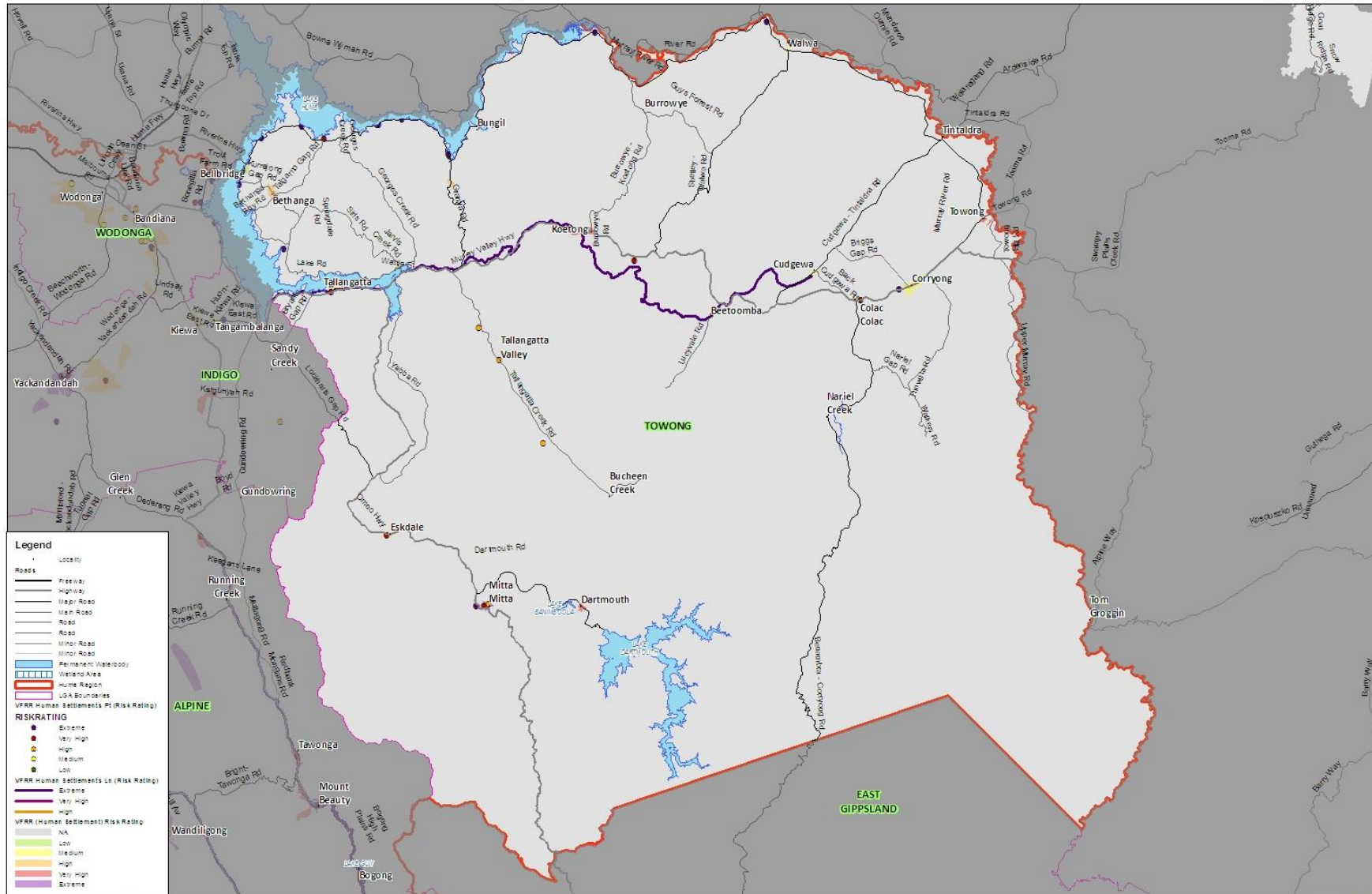
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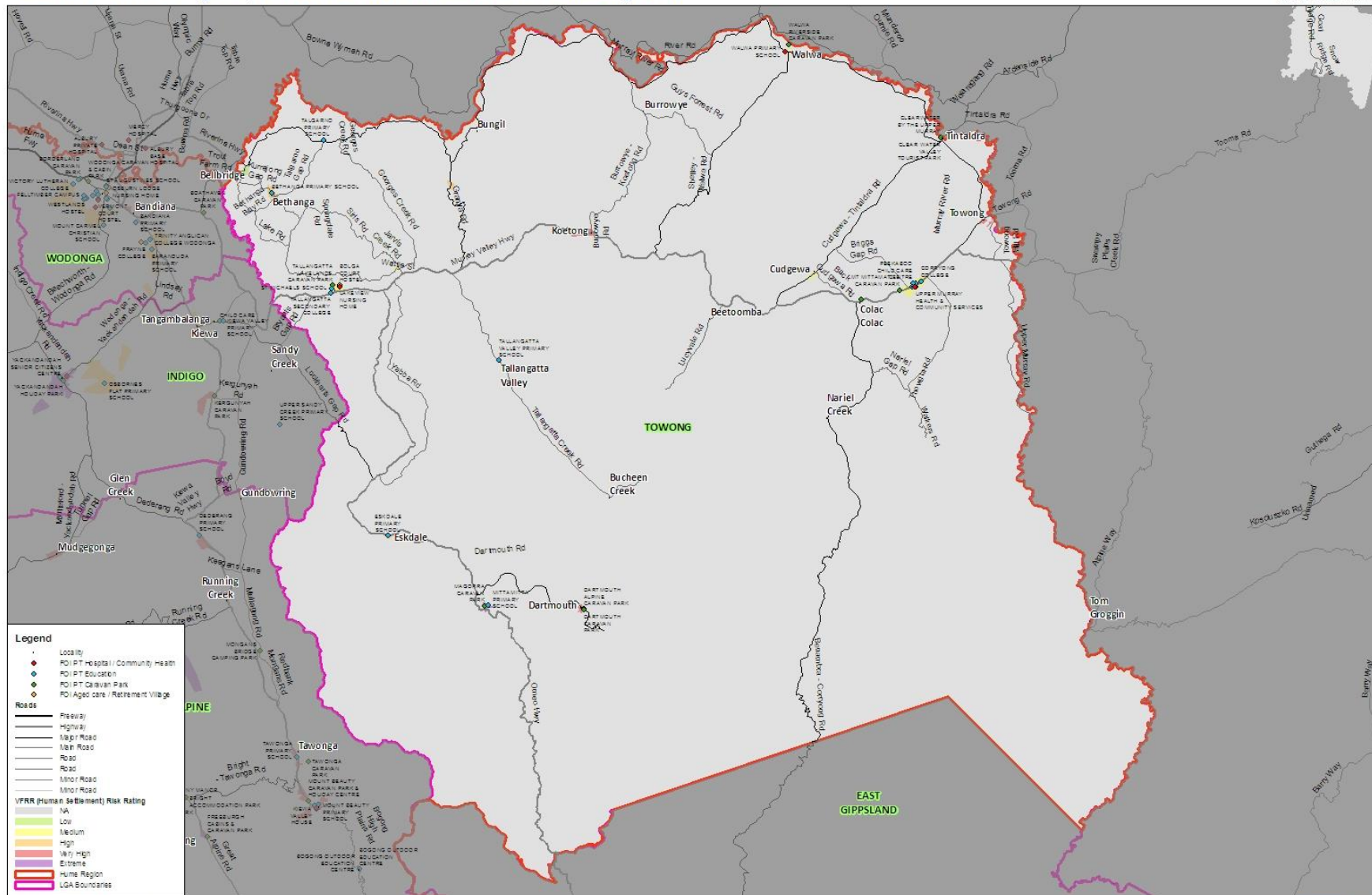
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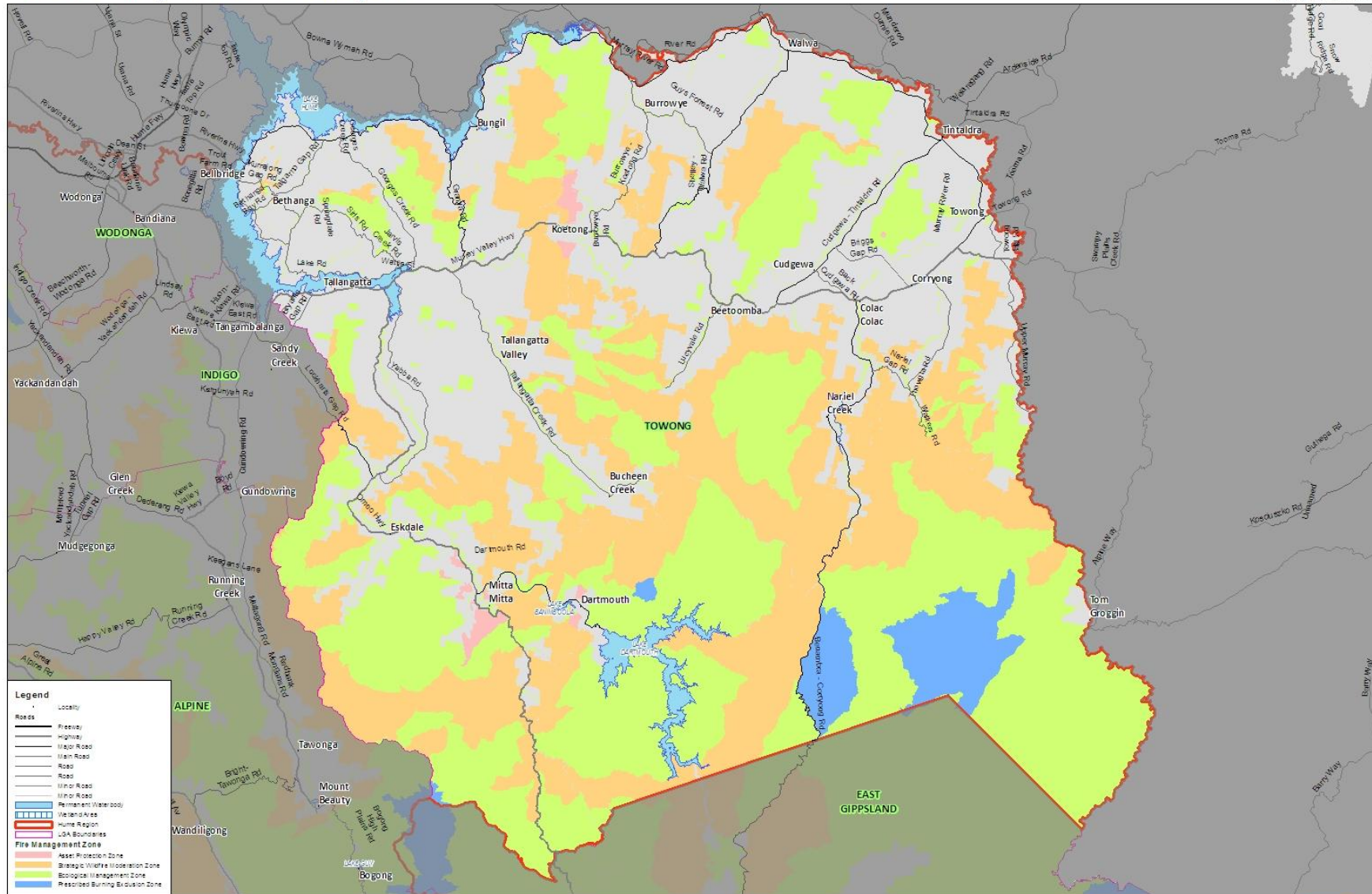
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Scale: 1:380,000

GDA 1994 VICGRID94





Legend

- Locality
- Roads
 - Freeway
 - Highway
 - Major Road
 - Inter-Road
 - Road
 - Minor Road
 - Minor Road
 - Minor Road
- Remnant/Waterbody
- Wetland Area
- Hume Region
- Fire Management Zone
 - Strategic Wildfire Mitigation Zone
 - Biological Management Zone
 - Prescribed Burning Exclusion Zone

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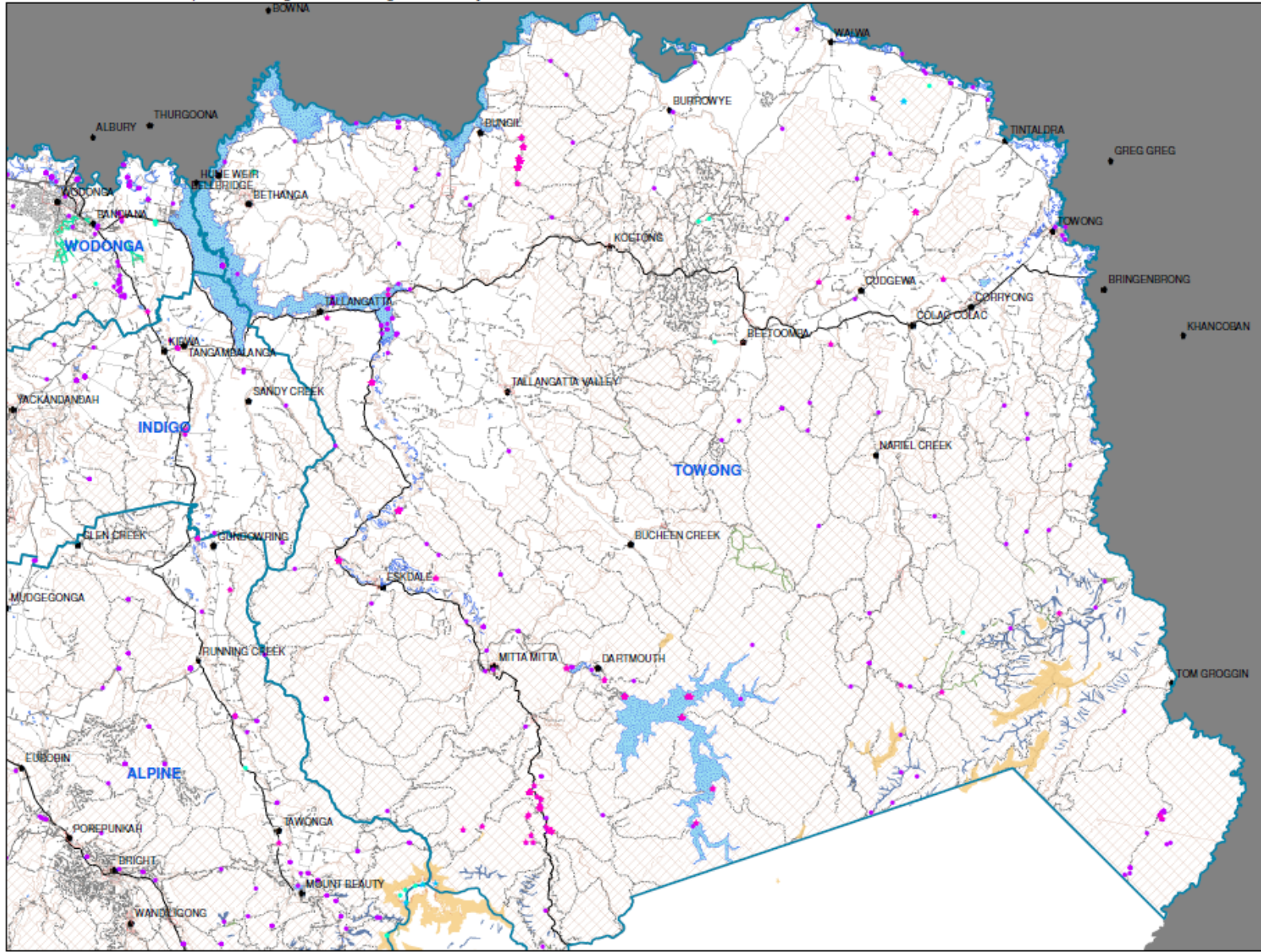


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GDA 1994 VICGRID94



IFMP Municipal Fire Management Planning - Biodiversity Values



- Legend**
- EPBC Act listed Fauna
 - FFG Act listed Fauna
 - EPBC Act listed Flora
 - FFG Act listed Flora
 - Local Gov Areas
- Fire Sensitive vegetation EVC NAME**
- Montane Riparian Thicket
 - Montane Riparian Woodland
 - Montane Wet Forest
 - Sub-alpine Shrubland
 - Sub-alpine Woodland
 - Wet Forest
 - Wetlands
 - Township Polygon
- Locality
- Freeway
- Highway
- Main
- Local
- 2WD
- 4WD
- ▨ Public Land

Please note the displayed data comes from DSE GIS Corporate Data Library, gaps will appear where there has been no past survey work, however this means due diligence should be undertaken by the proponent or land manager.

These layers have not been analysed and are shown to flag locations where the presence of any detrimental values need to be factored into any discussions regarding possible fire management treatments.

Data Source : DSE GIS CSOL 2011
 (Refer to documentation for further information)
 GDA_1994_VICGRID94

North Arrow
 Date: 12/06/2012

Scale: 1:350,000



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Attachment 4: Hazard trees – identification and notification procedures

The Electricity Safety Act 1998 (Vic) states that a municipal council must specify, within its Municipal Fire Prevention Plan:

- Procedures and criteria for the identification of trees that are likely to fall onto, or come into contact with, an electric line (hazard trees)
- Procedures for the notification of responsible persons of trees that are hazard trees in relation to electric lines for which they are responsible.

Under the Electricity Safety Act, the person responsible for maintaining vegetation and clearance space around power lines is referred to as the 'responsible person'.

The procedures outlined in this section of the MFPP seek to address the requirement detailed above.

Each responsible person should have his/her own internal procedure regarding the steps that will be taken when it receives notification of a potentially hazardous tree.

What is a hazard tree?

According to the Electricity Safety Act, a hazard tree is a tree which 'is likely to fall onto, or come into contact with, an electric line'.

The Electricity Safety (Electric Line Clearance) Regulations 2010 further state that a responsible person may cut or remove such a tree 'provided that the tree has been assessed by a suitably qualified arborist; and that assessment confirms the likelihood of contact with an electric line having regard to foreseeable local conditions.'

Due to legal requirements which require a clearance space be maintained around an electric line, hazard trees are usually located outside the regulated clearance space. Despite being outside the clearance space, the tree may still have the potential to contact the line due to its size or because of a structural fault or weakness which renders part, or all, of the tree likely to contact or fall onto the line.

Who is responsible for a hazard tree?

Under the Act, the person responsible for maintaining vegetation and clearance space around power lines is referred to as the 'responsible person'. This includes responsibility for keeping the whole or any part of a tree clear of the line.

Under the Act, responsibility is allocated between distribution businesses and other owners of electricity infrastructure, land owners and occupiers, public land managers such as municipal councils and VicRoads.

Municipal councils are responsible for trees on public land within their municipalities, for which they are the land manager, where these are also within a declared area for the purposes of the Electricity Safety Act. Primary responsibility for vegetation clearance and management within the municipality, for areas which are not within a declared area, will usually fall to the relevant electricity distribution company.

Responsible persons within Towong Shire Council

There are a number of organisations that have responsibility for line clearance in Towong Shire including:

- AusNet Services
- VicRoads.

Other relevant information

Responsible persons, other than private persons, must have an electric line clearance management plan in place for areas for which they have responsibility (refer Electricity Safety [Electric Line Clearance] Regulations 2010).

Procedures and criteria for identifying hazard trees

In the course of everyday duties, potentially hazardous trees may come to the attention of staff or volunteer members of the entities with representation on the Municipal Fire Prevention Committee, staff of the distribution business or other persons, including members of the public.

There are a range of factors which may indicate that a tree is a hazard tree; that is, a tree which is likely to fall onto, or come into contact with, an electric line. Some of these factors will be obvious when looking at the tree but many may only be apparent when the tree is assessed by a person with specific expertise and training, such as an arborist.

The following criteria may be used to assist in identifying a hazard tree.

- The size of the tree suggests that it is likely to come into contact with the electric line, for example because it appears to be encroaching or growing into the line clearance space.
- There is an excessive lean on the tree, or branches hanging off the tree, and the tree is in proximity to an electric (power) line.
- The size or appearance of the tree suggests it could come into contact with the line including under foreseeable local conditions.

If a potentially hazardous tree is identified, the notification procedure outlined below should be followed. Where a responsible person becomes aware of a potentially hazardous tree for which they have responsibility, they must follow their own applicable internal procedure and the notification procedure described below does not apply.

Procedures and criteria for notifying hazard trees

To ensure that information regarding potentially hazardous trees is captured in an efficient manner and, as appropriate, referred to the responsible person for action, the following procedure for the notification of hazardous trees should be followed.

- The person with responsibility for the highest percentage of lines within the municipality (the primary responsible person) is the person to whom potentially hazardous trees should be reported.
- The primary responsible person (or their representative) is referred to in these procedures as the primary responsible person representative (PRPR).
- Where any person becomes aware of, or receives a report of, a potentially hazardous tree within the municipality, this should be referred to the PRPR. Where the committee becomes aware of, or receives a report of, a potentially hazardous tree within the municipality, this must be referred to the PRPR.
- Reports of potentially hazardous trees must be provided to the PRPR for action as soon as practicable.

Reports must include, at a minimum:

- The name and contact details and any relevant qualifications where known of the person making the report
- As much detail as possible about the location of the tree (including, where known, GPS coordinates, details of numerical/name plate on nearest pole, name of nearest road or crossroads, closest landmark, whether tree is on private land or road reserve etc.)
- A description of the tree (including, if known, the genus and species of tree)

A potentially hazardous tree must be referred to the relevant responsible person for action as soon as possible, and by 2 business days, in circumstances where:

- The potentially hazardous tree is located within a high bushfire risk area (as per s.80 of the Electricity Safety Act) and the potentially hazardous tree is reported during the fire danger period declared under the Country Fire Authority Act 1958 (Vic) or
- The report indicates that there is an imminent danger that the tree will contact or fall onto lines as a result of minor environmental changes.

Each responsible person (other than the primary responsible person) must provide the PRPR with contact details of the person (position title) to whom reports should be provided. It is the responsibility of each responsible person to ensure that the PRPR is provided with up-to-date contact details.

Register

It is recommended that the PRPR maintain a register in which all notifications are recorded together with the date of receipt of the notification and the date the notification was reported to the responsible person.

It is recommended that responsible persons also maintain a register of notifications received of hazardous trees for which they are the responsible person.

PRPR consultation

The committee notes that the primary responsible person was consulted in relation to the development of these procedures.

Attachment 5: Community Information Guides and Neighbourhood Safer Places

There are four Neighbourhood Safer Places -places of last resort within the Towong Shire. These are at:

1. Dartmouth
2. Tallangatta
3. Corryong
4. Eskdale
5. More information on NSPs found on the CFA website at: saferplaces.cfa.vic.gov.au/cfa/search/default.htm

Community information Guides (CIG) have been produced for:

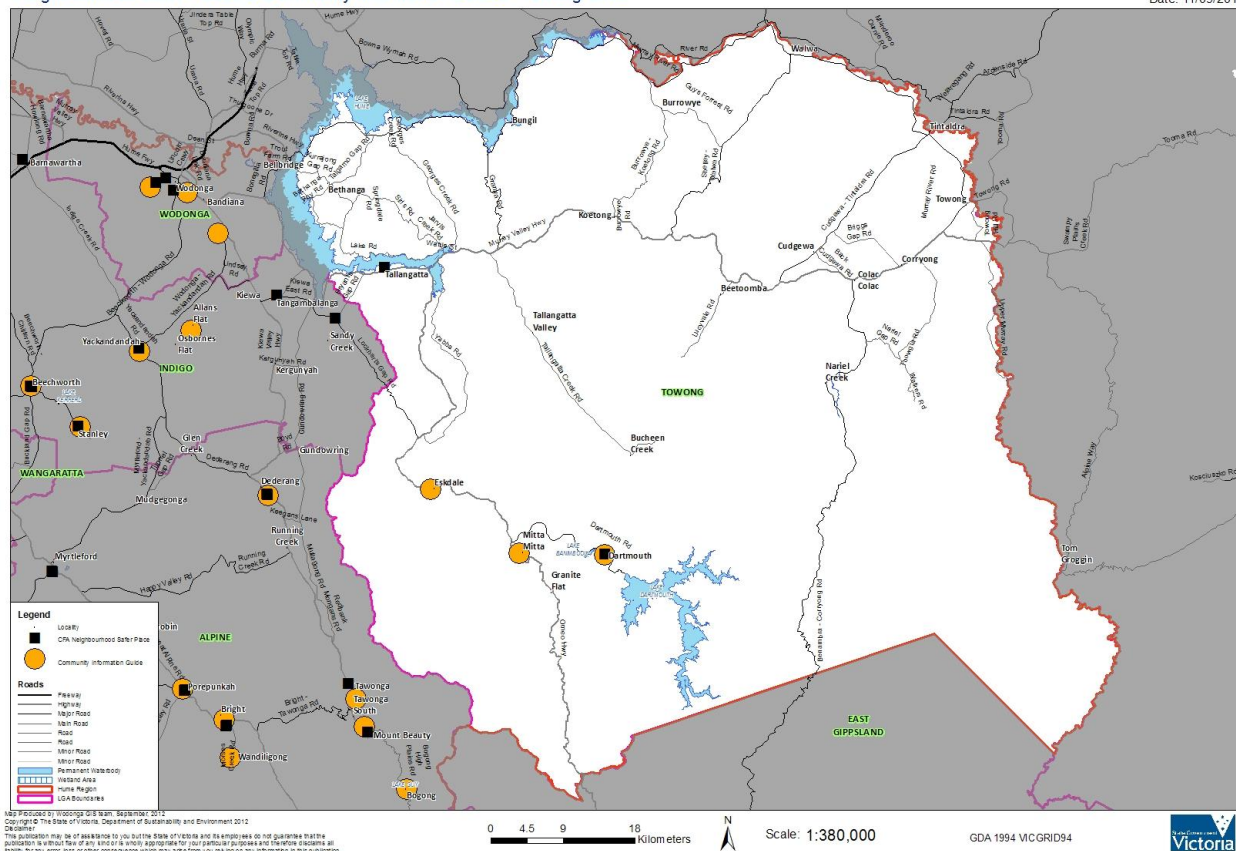
1. Dartmouth
2. Eskdale
3. Mitta Mitta.

More information and copies of these CIGs can be found on the CFA website at: cfaonline.cfa.vic.gov.au/mycfa/Show?pagelid=publicTownshipProtectionPlans

This list of CIG's and TPP's was accurate at the time of printing, however they may have been modified since that time and the most up to date information can be found on the CFA website at the links above. A map of the current NSP & CIG locations is attached below.

Neighbourhood Safer Places & Community Information Guides - Towong Shire

Date: 11/09/2012



Attachment 6: Glossary and acronyms

Term	Description
ABS	Australian Bureau of Statistics
Acceptable Risk	The level of potential losses that a society or community considers acceptable, given existing social, economic, political, cultural, technical and environmental conditions.
APT	Australian Pipeline Trust
ARMB	Alpine Resort Management Board
AIIMS	Australasian Inter-service Incident Management System A nationally adopted structure to formalise a coordinated approach to emergency incident management.
Assets and values	Recognised features of the built, natural and cultural environments. Built assets may include buildings, roads and bridges; Structures managed by utility and service providers; or recognised features of private land, such as houses, property, stock and crops plus associated equipment. Natural assets may include forest produce, forest regeneration, conservation values including vegetation types, fauna, air and water catchments. Cultural values may include recreational, indigenous, historical, and archaeological and landscape values. (Code of Practice for Emergency Management on Public Land)
AWS	Automatic Weather Station The Bureau's standard AWSs use sensors to monitor temperature, humidity, wind speed and direction, pressure and rainfall. Various advanced sensors are available for specialised applications. These sensors can monitor cloud height (ceilometer), visibility, present weather, thunderstorms, soil temperature (at a range of depths) and terrestrial temperature. (Developed from the BOM).
BASO	Brigade Administration Support Officer
BMO	Bushfire Management Overlay
BOM	Bureau of Meteorology
Burning Program	A program of prescribed burns scheduled these for a designated area over a nominated time, normally looking ahead over one fire season (for the coming spring to the following autumn), but can also look ahead five years or more.
Burn Plan	The plan which is approved for the conduct of prescribed burning. It contains a map identifying the area to be burnt and incorporates the specifications and conditions under which the operation is to be conducted.
Bushfire	Unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires both with and without a suppression objective.
Bushfire Danger Period	A period of the year either established by legislation or declared by the relevant agency, when restrictions are placed on the use of fire due to dry vegetation and the existence of conditions conducive to the spread of fire.
Bushfire Management	All those activities directed to prevention, detection, damage mitigation, and suppression of bushfires. Includes bushfire legislation, policy, administration, law enforcement, community education, training of fire fighters, planning, communications systems, equipment, research, and the multitude of field operations undertaken by land managers and emergency services personnel relating to bushfire control.

Term	Description
Campaign fire	A fire normally of a size and/or complexity that requires substantial fire fighting resources, and possibly several days or weeks to suppress.
CERM	Community Emergency Risk Management
CFA	Country Fire Authority
CIG	Community Information Guide (Formerly known as TPP)
COL	Consequence of Loss - OESC A dataset is owned and maintained by the OESC. The dataset contains records of infrastructure and assets under the categories: Economic Infrastructure, Economic Production, Environmental Biodiversity, Social Cultural, Social Human Life and Social Infrastructure. The dataset contains detailed attributes about the assets type, value and location.
Consequence	Outcome or impact of an event
Control authority	The agency, service, organization or authority with legislative responsibility for control of the incident. (Also referred to as the responsible authority or agency.)
Coordination	The bringing together of agencies and elements to ensure effective response to an incident or emergency. It is primarily concerned with the systematic acquisition and application of resources in accordance with the requirements imposed by the emergency or emergencies. Coordination relates primarily to resources and operates: <ul style="list-style-type: none"> • vertically, within an agency, as a function of the authority to command; • horizontally, across agencies, as a function of the authority to control.
Essential infrastructure	Those services, physical facilities, supply chains, information technologies and communication networks that, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the social or economic wellbeing of the community E.g. Water supply facilities.
Curing	Drying and browning of herbaceous vegetation due to mortality or senescence.
DEECD	Department of Education and Early Childhood Development
DHHS	Department of Health and Human Services
DOT	Department of Transport
DPCD	Department of Planning and Community Development
DPI	Department of Primary Industries
DELWP	Department of Environment, Lands, Water and Planning
EHO	Environmental Health Officer – Council
Elements at risk	The population, buildings and civil engineering works, economic activities, public services and infrastructure etc., exposed to sources of risk.
EMA	Emergency Management Act
EMMV	Emergency Management Manual Victoria
EPBC	Environmental Protection Biodiversity Conservation
Essential service	A service (including the supply of goods) that if rendered unavailable for an

Term	Description
	extended period would significantly impact on the social or economic wellbeing of the community E.g. Electricity supply. (Adapted from Essential Services Commission Act 2001)
FDI	Fire Danger Index A relative number denoting the potential rates of spread, or suppression difficulty for specific combinations of temperature, relative humidity, drought effects and wind speed.
FDR	Fire Danger Rating A relative class denoting the potential rates of spread, or suppression difficulty for specific combinations of temperature, relative humidity, drought effects and wind speed, indicating the relative evaluation of fire danger.
FFG Act 1988	Flora and Fauna Guarantee Act 1988 – Victorian State Legislation
Fire management	All activities associated with the management of fire prone land, including the use of fire to meet land management goals and objectives.
FOI	Freedom of Information
Fuel Break System	A series of modified strips or blocks tied together to form continuous strategically located fuel breaks around land units.
Fuel management	Modification of fuels by prescribed burning, or other means.
Fuel modification	Manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling and burning).
Fire season	The period during which bushfires are likely to occur, spread and do sufficient damage to warrant organised fire control.
FRB	Fuel Reduction Burn
Fuel	Any material such as grass, leaf litter and live vegetation which can be ignited and sustains a fire. Fuel is usually measured in tonnes per hectare. Related Terms: Available fuel, Coarse fuel, Dead fuel, Elevated dead fuel, Fine fuel Ladder fuels, Surface fuels, and Total fine fuel.
Fuel hazard	A fuel complex, defined by volume, type condition, arrangement, and location, that determines the degree of ease of ignition and of resistance to control.
Fuel management	Modification of fuels by prescribed burning or other means. (AFAC)
GBCMA	Goulburn Broken Catchment Management Authority
GMW	Goulburn Murray Water
GVW	Goulburn Valley Water
Hazard	A source of potential harm or situation with a potential to cause loss. A potentially damaging physical event that may cause loss of life or injury, property damage, social and economic disruption or environmental degradation.

Term	Description
Hazard Layer – DELWP	Hazard layer developed and maintained by DELWP, Office of Land and Fire. It is a state-wide coverage of <30 m ² > cell resolution with approx 27 attributes detailing surface and elevated fuel loads, hazard ratings and vegetation descriptions.
HRSFMPC	Hume Region Strategic Fire Management Planning Committee
HRSFMP	Hume Region Strategic Fire Management Plan
IAP	Incident Action Plan
IFMP	Integrated Fire Management Planning
IRSED	Index of Relative Social & Economic Disadvantage 8 ABS scoring method for determining and comparing levels of social and economic disadvantage in given areas at a given point in time, with information displayed according to IRSED values from lowest (most disadvantaged) to highest (least disadvantaged).
ISO	International Standards Organisation
ISO 31000:2009	An international risk management standard that provides principles and general guidelines on how to manage risk
ICC	Incident Control Centre The location where the Incident Controller and various members of the Incident Management Team provide overall direction of response activities.
LGA	Local Government Authority Represents relevant Municipal Council (or ARMB) for area of concern.
Likelihood	Probability or frequency of an event can be either qualitative or quantitative.
Loss	Any negative consequence or adverse effect, financial or otherwise.
MBS	Municipal Building Surveyor - Council
MDA	Map Display Area
MEMP	Municipal Emergency Management Planning
MEMPC	Municipal Emergency Management Planning Committee
MERC	Municipal Emergency Response Coordinator – Victoria Police
MERO	Municipal Emergency Resource Officer – Council
MFB	Metropolitan Fire Brigade
MFMP	Municipal Fire Management Planning
MFMPC	Municipal Fire Management Planning Committee
MFPC	Municipal Fire Prevention Committee (<i>superseded by MFMPC</i>)
MFPP	Municipal Fire Prevention Plan (<i>superseded by MFMP</i>)
MFPO	Municipal Fire Prevention Officer
Mitigation	Measures taken in advance of a disaster, aimed at decreasing or eliminating its impact on society and environment.
Municipal area	The geographic footprint of the relevant LGA/ARMB
NECMA	North East Catchment Management Authority

Term	Description
NEW	North East Water
NSP	Neighbourhood Safer Place – Place of Last Resort
OESC	Office of Emergency Service Commission
PPRR	Prevention, Preparedness, Response, Recovery
Practicable	<p>What is realistic to achieve in the context of:</p> <ul style="list-style-type: none"> • The severity of the hazard. • The state of knowledge about the hazard or risk and any ways of removing or mitigating it. • The availability and suitability of ways to remove or mitigate that hazard or risk. • The cost of removing or mitigating that hazard or risk. <p>(Dangerous Goods (Storage and Handling) Regulations 2000)</p>
Preparedness	Arrangements to ensure that in the event of an emergency occurring all those resources and services that area needed to cope with the effects can be efficiently mobilised and deployed.
Prescribed burning	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.
Prevention	Regulatory and physical measures to ensure that emergencies are prevented, or their effects mitigated.
Probability	A measure of the chance of an event occurring, often expressed as a number.
Recovery	The coordinated process of supporting emergency affected communities in the reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.
Residual risk	Risk remaining after implementation of a risk treatment.
Resilience	The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organising itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures. (UN/ISDR, Geneva 2004)
Response	Actions taken in anticipation of, during and immediately after an emergency, to ensure its effects are minimised and that people affected are given immediate relief and support.
Risk	The exposure to the possibility of such things as economic or financial loss or gain, physical damage, injury or delay, as a consequence of pursuing a particular course of action. The concept of risk has two elements, i.e. the likelihood of something happening and the consequences if it happens.
Risk analysis	A systematic use of available information to determine how often specific events may occur and the magnitude of their likely consequence.
Risk assessment	The overall process of risk identification, analysis and evaluation.
Risk criteria	Terms of reference by which the significance of risk is assessed.
Risk evaluation	Process of comparing the level of risk against criteria.

Term	Description
Risk identification	The process of determining what, where, when, why and how something could happen.
Risk management	The culture, process and structure that are directed towards potential opportunities whilst managing adverse effects.
Risk management Process	The systematic application of management of policies, procedures and practices to the tasks of communicating, establishing the context, identifying, analysing, evaluating, treating, monitoring and reviewing risk.
Risk reduction	Actions taken to lessen the likelihood, negative consequences, or both, associated with a risk.
Risk register	A listing of risk statements describing sources of risk and elements at risk, with assigned consequences, likelihoods and levels of risk.
Risk treatment	Process of selection and implementation of measures to modify risk.
RSFMPC	Regional Strategic Fire Management Planning Committee
SES	State Emergency Services
SFMPC	State Fire Management Planning Committee
SMR	StateNet Mobile Radio
SOP	Standard Operating Procedures
Source of risk	Source of potential harm
Stakeholders	Those people and organisations who may affect, be affected by or perceive themselves to be affected by a decision, activity or risk.
Susceptibility	The potential to be affected by loss
TAPO	Technical Administrative Project Officer
TFB	Total Fire Ban (A day of Total Fire Ban)
Tolerable risk	A risk within a range that society can live with so as to secure certain net benefits. It is the range of risk regarded as non-negligible and needing to be kept under review and reduced further if possible.
TOR	Terms of Reference
Treatment	An existing process, policy, device, practice or other action that acts to minimise negative risk or enhance positive opportunities. The word control may also be applied to a process designed to provide reasonable assurance regarding the achievement of objectives.
Treatment assessment	Systematic review of processes to ensure that controls are still effective and appropriate.
Urban rural interface	The line, area, or zone where structures and other human development adjoin or overlap with undeveloped bushland.
VFRR	Victoria Fire Risk Register CFA process that identifies assets at risk from bushfire, assesses the level of risk and highlights the risk mitigation treatments currently in place along with the responsible agencies for implementing these treatments. The output is a geographic layer and associated attributes that identifies the asset type; name; location and risk factors and priorities of these assets based on a

Term	Description
	wildfire occurring in its vicinity on a day of 100 FDI.
VICPOL	Victoria Police
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. (UN/ISDR, Geneva 2004)
Vulnerable people	Those living in high bushfire risk areas and who are unable to make an independent decision, including due to cognitive impairment; physically dependant and totally reliant on in home personal care and support; and people who live alone and are geographically isolated with no co-resident carer or family. (DHHS)
WTP	Water Treatment Plant

AFAC bushfire glossary can be found at the following website: knowledgeweb.afac.com.au/data

Attachment 7: Municipal Fire Prevention Strategy

The following excerpts from the Towong Shire Municipal Fire Prevention Strategy are to be reviewed by the MFMPCC with a view to integrating them into the next version of the MFMP. In the interim, the MFMPCC endorses their continued application.

The list of roads is to be transferred to the Fire Management Plan as an interim list of roads for the purpose of continuity of treatment, pending the development of a road treatment priority based upon identified risk.

Fuel reduced corridors and priority access roads

1 General

Refer to appendix A for the delineation of Shire/VicRoads managed roads.

It is acknowledged that fire brigades may identify and undertake treatments on local roads as fuel reduced corridors within their own brigade boundaries, which may not necessarily be identified in the municipality's strategy. These fire prevention works are not always undertaken annually, however all such works shall require approval by the MFPC and be undertaken in a coordinated manner to minimise the threat to life and property from uncontrolled wildfire. These works form an integral part of the Fire Prevention Strategy of the municipality and are supported by this document.

Fire brigades shall submit annually prior to the fire season details of proposed fuel reduction works proposed to be undertaken on roads and/or reserves.

It is recognised that there are fire prevention benefits derived from road maintenance works on roads that are not identified within this strategy. The continuation of these works is encouraged to be undertaken with due consideration for responsible roads side vegetation management.

All works are to be undertaken in accordance with the following details.

2 Fuel reduced corridors

Fuel reduced corridors must be sufficiently fuel reduced to provide a safe corridor for the travelling public, provide a means of establishing a control line, reduce the time of travel to low-risk areas and to slow the spread of fire on the road reserve.

Fuel reduced corridors should have the fine fuel reduced for a distance of 1m to 3m behind the guideposts on either side of the road where practical. All overhanging obstructions less than 5m above the road pavement must be removed to allow the safe passage of fire fighting appliances. They should be inspected annually by the controlling road authority and maintained prior to the fire danger period.

One or all of the following methods can be used to meet the requirements.

- Mowing or slashing a strip 1m to 3m wide on one or both sides of the road reserve, either adjacent to the shoulders of the pavement, or next to or inside the adjoining property, at the appropriate time to prevent regrowth and accumulation of dry slashed material.
- The ploughing of an earth strip of not less than 2m wide on both sides of the road reserve adjacent to the fence line where there has been a past history of ploughing.
- Fuel reduction low intensity burning by fire brigades on a coordinated basis.
- The spraying of appropriate herbicide where other treatments are not practical to create a strip a 1m to 3m wide with little or no vegetation present on both sides of the road reserve adjacent to the shoulders of the pavement. Burning may then follow as required. Spraying of native grasses should be avoided.

- Thinning out vegetation within the reserve or easement to facilitate fuel management work.
- The removal of fallen heavy fuel where it is an obstruction to undertaking the work listed above.

Appendix E contains a diagram for typical works on fuel reduced corridors.

Fuel reduced corridors have been identified as:

- Lake Road/Bethanga Bay Road (Bellbridge to Bethanga)
- Kurrajong Gap Road
- Bryants Gap Road
- Cudgewa Tintaldra Road
- Murray Valley Highway (West Municipal Boundary to Darbyshire, Shelley to Murray River)
- Omeo Highway (Murray Valley Highway to 2km south of the Murray Valley Highway)
- Fernvale to Bullhead Creek, 2km south of Yabba Road to Tallandoon)
- Tallangatta Valley Road (Murray Valley Highway to Buckeen Creek with the exception of 1.5km at Wyeboo)
- Lucyvale Road (Murray Valley Highway to Lucyvale).

3 Fire access roads and tracks

The municipality, in conjunction with the brigades, shall ensure that the designated fire access roads and tracks are kept in a trafficable condition suitable for access by fire brigade tankers.

The required works include:

- (a) Removal of windfall timber
- (b) Maintain horizontal and vertical clearances
- (c) Maintenance of the road/track surface.

Fire access roads have been identified as:

- Ambrose Fire Tail
- Eighty Acres Track
- Flagstaff Fire Trail
- Low Grade Track
- Leys Fire Trail
- McCormacks Gap Track
- Mt Alfred Track
- Mt Charlie Track
- Pine Mountain Track
- Pooleys Track
- Schintlers Track
- Talgarno Fire Trail
- Werमतong Track
- Mitchells Track (Bethanga) (added as a correction to the plan 2012).

4 Priority access roads

Priority access roads must be cleared of all low overhanging obstructions less than 5m above the road pavement and dangerous trees/limbs need to be removed. A 3m minimum width fine fuel reduced area on both sides of the road must abut a clear travelled path that has a 6m minimum width.

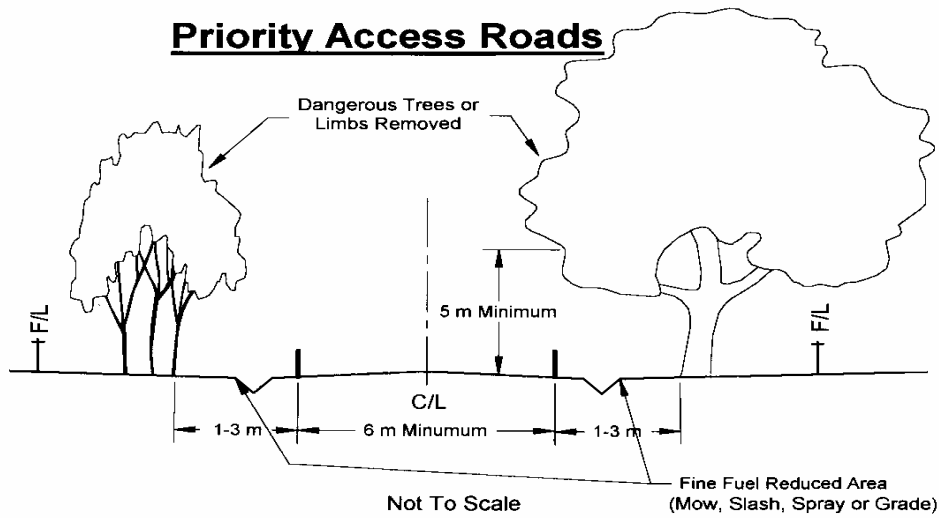
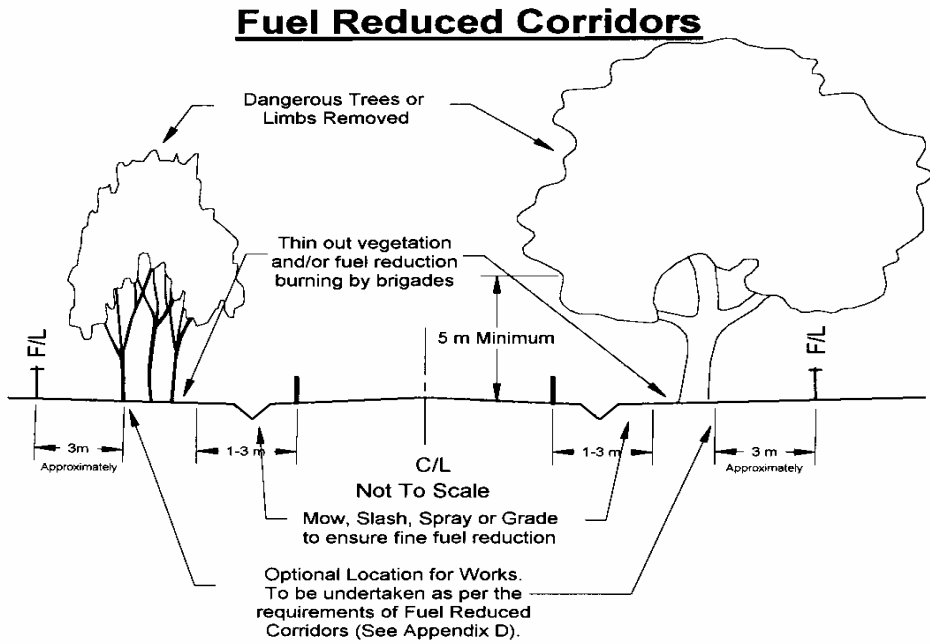
These roads must be inspected annually by the controlling road authority and maintained prior to the fire danger period.

Priority access roads have been identified as:

- Back Thowgla Road
- Benambra Corryong Road (Colac Colac to Nariel)
- Bluff Falls Road (as far as the National Park)
- Cudgewa North Road (as far as the National Park)
- Dartmouth Road
- Guy's Forest Road (Murray River Road to Burrowye)
- Lockharts Gap Road
- Murray Valley Highway (Darbyshire to Shelley)
- Omeo Highway (2km south of the Murray Valley Highway to Fernvale, Bullhead Creek to 2km south of Yabba Road, Tallandoon to Mitta Mitta)
- Sandy Creek Road (as far as the National Park)
- Shelley Walwa Road (Murray River Road to Plantations)
- Tallangatta Creek Road (1.5km at Wyeboo)
- Murray River Road
- Talgarno Gap Road
- Thowgla Road (Thowgla to Nariel Gap Road)
- Upper Murray Road (full length of seal)
- Yabba Road.
- Georges Creek Road

Diagrams of typical works on roads

NOTE: The following diagrams show the optimum desirable situation. It must be noted that this may not be achievable or practical in all situations. **It should also be noted that to lessen the risk of erosion, spraying should not be used in drainage lines.**



Fire hazard removal/fuel reduction and hazard isolation

1 Fire hazard inspections

Ongoing liaison shall be maintained between the MFPO and the local fire brigades to ensure that fire hazards are minimised throughout the year. When a hazard is determined by the MFPO appropriate measures will be instigated to have the hazard removed.

Fire hazards/risks associated with commercial and industrial properties are controlled by legislation, such as the Building Act and the Planning and Environment Act. Where hazards are identified at these locations this specialist legislation should be used, in addition to the powers provided under the CFA Act.

The property owners or occupiers shall complete fire hazard removal, reduction and isolation, including the clearing of blocks pursuant to Section 41 of the CFA Act, prior to the introduction of the declared fire danger period. This must include blocks that have been cleared and have regrown.

Public notices shall be placed in the local papers in October advising the public of its responsibilities for the removal of fire hazards from private land and the consequences of non compliance.

Depending on seasonal conditions, it is expected that the MFPO will commence formal inspections of the townships in the late spring, generally early November, to determine which blocks require clearance. The inspections shall be undertaken prior to the declaration of the fire danger period. Owners, who have not undertaken the works prior to the inspection, will then be issued with a fire prevention notice. Following the expiration of the allowed time for the work to be undertaken (generally two weeks), and not more than four weeks later, further inspection of the townships will be undertaken. Property owners who have failed to have the work performed will have the work undertaken by others at their expense, at the direction of the MFPO, and may have infringement notices issued to them.

2 Urban residential allotments

It is recommended that urban residential allotments should have all the grass, weeds and undergrowth cut to a height of less than 75mm including all grass up to and against fences, buildings and trees. However, it is recognised that special circumstances may require a variance to this standard. The vegetation should be removed, together with any dead wood or other flammable refuse from the allotments. Where the grass is less than 400mm in height prior to cutting, it may only be necessary to remove any cut grass from the area within 3m of the property boundary.

3 Larger allotments

Larger allotments, exceeding 0.5ha and less than 5ha, should have the fuel reduced by cutting and removing, burning, grazing or ploughing for a distance of 20m around dwellings and other assets. A minimum of 3m to 6m maximum, width break (or fuel reduced zone) should be constructed around the boundary, as deemed suitable by MFPO spraying, if undertaken at the appropriate time can be used to make these breaks.

4 Other rural locations

In forest areas, it is recommended that:

- A fuel reduced zone is maintained for a distance of 20m minimum around dwellings and buildings
- Trees should be thinned, limbs removed and fine fuel reduced for a further 20m beyond the initial inner 20m zone. This outer zone should ensure that the vegetation is not continuous, either horizontally or vertically.

The above may be varied as deemed necessary by the MFPO.

In grassland areas, fuel reduction should be undertaken by cutting and removing, burning, grazing or ploughing for a distance of 20m around buildings and assets and other installations requiring protection. Three metres to 6m minimum width break around the perimeter of the property should also be undertaken where practical.

Undeveloped municipal reserves and public lands should have a fire break or fuel reduction strip 3m to 6m wide, constructed around the perimeter of the reserve where practical/appropriate. Access for fire fighting vehicles should be provided.

Public authorities have a responsibility to ensure that the lands vested in their control are maintained in a manner safe to the general public and local community. Where necessary, these measures are to be coordinated with the local MFPO.

Permits to burn and burning within townships

Burning in townships

Local Law No. 2 – Community Amenity provides controls on the use of incinerators and burning in the open air.

Permits to Burn

Permits to Burn shall be issued in accordance with the following guidelines. Seasonal conditions may lead to the need to vary the requirements as listed:

- The date from which individual and brigade Permits to Burn can be issued shall be determined by the MFPO after consultation with group officers
- The maximum duration of a permit shall normally be one week.

The procedure for individuals obtaining permits to burn is as follows.

- Permits to Burn shall only be issued for the burning of stubble, grass or other dry vegetation (not for general burning of rubbish).
- If, as stated above, it is safe for burn offs to be undertaken, the applicant must apply for a permit from the Municipal Fire Prevention Officer. The application can be made by fax or in person, but must be before midday of the day prior to the day of the proposed burn off.
- DELWP approval is required if the burn area is within the “marginal 1.5km” of public land.
- The permit shall include the property crown description, CFA District 24 map number, grid reference, the road on which the property is located and the property number if applicable. The local CFA brigade tanker cannot be included in the required fire control equipment as it may be called away. The generally accepted minimum width of the required perimeter breaks being 3m.
- The MFPO will issue the permit, and a copy to be given/sent to the applicant. The applicant must:
 - Supply a copy to the relevant brigade nominated officer
 - Notify the brigade of their intended time to burn
 - Notify Vic Fire prior to light up
 - Notify the contiguous landholders of the proposed burn off.

The copies of the permit can be faxed if those facilities exist.

Prior to the commencement of each fire season, brigades are to notify the MFPO as to who is the brigade nominated person to be given the copy of the Permit to Burn.

A Permit to Burn, issued by Council, is required at all times of the year for any burning undertaken on the land controlled by private landowners. Any landholder with land within the fire protected area, who undertakes burning off, must obtain a permit from the DELWP. Similar notification requirements apply.

Industrial (transitional component targeted for 2nd stage of IFMP development)

Context

There are a number of industries within the municipality that are generally located close to their supply of raw materials. The major industries at risk are sawmills, timber preservation plants, peppermint oil extraction plants, abattoirs, and panel beaters in Corryong, Walwa and Tallangatta. There are other lower risk industries located in Corryong and Tallangatta. There are a number of risks associated with these industries that include fire, hazardous material spills (both storage and transport), and environmental damage from pollution and/or spillage.

There are a number of depots and other industries that are located within the Industrial zones of the townships of Corryong and Tallangatta where smaller amounts of dangerous goods are stored. This has led to an abundance of chemicals and dangerous goods being stored and used throughout the municipality. Storage volumes are generally very low and their use is not obvious to anyone other than the proprietors. Generally the controls on industries are quite stringent and hence the likelihood of any major incident is low and is restricted to unforeseen events, accidents and bad practice. However, in the case of any of these events occurring, there would be a potentially significant impact on the community both economic and potentially to life.

Risks, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level.	Identify and maintain a data base of at risk Industrial premises. Details to be placed in Appendix G. Encourage the industries to develop and maintain an adequate Fire Prevention and Evacuation Plans.	Municipality & CFA		Ongoing
Property loss and resultant economic loss both public and private.	Significant	Reduce incidence and severity	Information & education is provided where required.	Owner / Occupier	CFA	Ongoing
Environmental damage.	Significant	Reduce incidence and severity	Encourage local fire brigades to become familiar with the risks associated with the industries in their area.	CFA & Municipality		Ongoing

Commercial

Context

The commercial centres within the municipality are located within the towns of Bellbridge, Corryong, Tallangatta and Walwa with isolated establishments located within the other villages and hamlets. There are a number of risks associated with the occurrence of fire related to these commercial centres that include a higher concentration of flammable materials and the proximity to other similar premises, particularly in the older townships. The loss of these premises as a result of fire may result in major economic loss and the loss of employment.

Due to the nature and operation of the commercial premises, shortfalls in the provision of adequate housekeeping practices and general fire safety can raise the level of risk to the general public and owners/employees of these types of premises.

Risks, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level	Fire Prevention Planning. Develop a database of at risk Commercial premises. Details to be added in Appendix G.	Municipality & CFA		Ongoing
Loss of property from the effects of uncontrolled fire.	Significant	Reduce incidence and severity	Risk management, including the inspection of a minimum of 4 properties per year on a random basis as necessary. Request written replies from identified Commercial premises stating planning and action in place to achieve stated objectives. Follow up with inspections and application of enforcement under the BCA as necessary.	Municipality & CFA	Fire Brigades	Ongoing
Economic loss both public and private.	Significant	Reduce incidence and severity	Education. Provide information as required.	CFA & Municipality	CFA & Fire Brigades	Ongoing

Health care

Context

There are health care centres located Corryong, Tallangatta and Walwa. By nature, they contain a population that in general are dependent on outside assistance for mobility, day to day living, control and direction. Consequently, this group that encompasses special accommodation, nursing homes, hostels and hospitals are very vulnerable to a wide range of events.

There is a risk inherent in all these facilities of multiple injuries and loss of life should a significant incident occur. Generally, fire controls are high (e.g. fire protection equipment and structural safety), however any incident involving these premises, taking participant numbers into consideration, can lead to major consequences.

Risks, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level	Identify and maintain a database of at risk premises. Details to be placed in Appendix G.	Health Services Municipality	Dep't of Health & Community Services, CFA	Ongoing
Loss of property from the effects of uncontrolled fire.	Significant	Reduce incidence and severity	Risk management, including the inspection of a minimum of 1 property per year on a random basis and encourage compliance with the BCA where necessary.	Municipal/ Private Building Surveyors & CFA	Fire Brigades	Ongoing
Economic loss both public and private.	Significant	Reduce incidence and severity	Building Surveyor to provide an annual report to the MFPO summarising inspections and resultant action.	Municipal Building Surveyor	MFPO	Ongoing

Public accommodation and tourist facilities

Context

The nature and range of these types of facilities varies greatly across the municipality. The type, size and age of the premises have a very significant impact on the potential for the loss of both life and/or property. As a general rule, these types of premises can contain a high number of people who will be sleeping on the premises and are unfamiliar with their surroundings. They could be exposed to varying standards of serviceability including a lack of safety procedures. In some cases, the occupants have very little control over their surroundings and invariably have little interest in the risks associated with the accommodation. Although the likelihood of a large fire in these premises or facilities is rare, the consequence in the event of fire is major (loss life).

Risk environments, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level	Fire Prevention Planning. Develop a database of all at risk premises. Details to be added in Appendix G.	Municipality & CFA	Owners	Ongoing
Loss of property from the effects of uncontrolled fire.	Significant	Reduce incidence and severity	Risk management, including the inspection of a minimum of 2 properties per year on a random basis and application of enforcement under the BCA where necessary.	Municipality & CFA	Owners	Ongoing
Economic loss both public and private.	Significant	Reduce incidence and severity	Building Surveyor to provide an annual report to the MFPO summarising inspections and resultant action.	Municipality	Owners	Ongoing
Lack of communication and access to/with bush campers.	Significant	Raise the awareness and create a safer recreation environment	Raise public awareness through education (e.g. placement of fixed signs). Provide general information literature for general distribution.	CFA	Local Brigades Owner/ Occupier	November Annually- Ongoing.

Public assembly

Context

Similar to public accommodation and tourist facilities, the likelihood of a large fire in a public assembly area is low to moderate, however the risk to life in the event of an uncontrolled fire is very high. Past experience has shown that fires in dance halls or similar locations can have catastrophic consequences. As a general rule, these types of premises can contain a high number of people who will be gathering together on the premises and are unfamiliar with their surroundings. They could be exposed to varying standards of serviceability including a lack of safety procedures. In some cases, the occupants might have very little control over their surroundings and invariably have little interest in the risks associated with the premises.

There are a number of these premises within the municipality including public halls, sporting complexes, churches, schools, preschools and childcare centres. Each facility or premises has its own particular risk that will require individual evaluation.

Risks, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level	Risk management, including the inspection of a minimum of 5 properties per year on a random basis and application of enforcement under the BCA where necessary.	Municipality & CFA	Committees of Management	Ongoing
Loss of property from the effects of uncontrolled fire.	Significant	Reduce incidence and severity	Education. Provide an information letter as requested to owner / occupiers.	Municipality & CFA	Committees of Management	Ongoing
Economic loss both public and private.	Significant	Reduce incidence and severity	Fire Prevention Planning. Develop a database of at risk premises. Details to be added to Appendix G.	Municipality & CFA		Ongoing

Special risks

Context

Fire brigades are encouraged to identify these risks within their own locality and work with the municipality and CFA to minimise the risks. The early suppression of fires in the near proximity of high voltage power transmission lines may not be possible due to the potential electrical discharge through the smoke. The existence of Lake Hume at the north west edge of the Shire provides a specific risk, due to the combination of steep slopes and traffic associated with tourist/recreational use of Lake Hume in specific locations (e.g. Bellbridge). The risk of fire spreading from roadsides shall be managed on a case by case basis, and reference is made to the Roadside Management Plan for additional guidance.

Specific risks have been identified as:

- High voltage power transmission lines
- Areas of tourist/recreational lakeside use adjacent to steep, heavily vegetated slopes
- A process to ensure any hazardous trees in proximity to powerlines that are reported, are passed on to the responsible officer for that authority.

Risks, strategies, programs and actions

Risk		Objective	Treatment/program/action	Responsibility	Others involved	Timeframe
Details	Rating					
Loss of life from the effects of uncontrolled fire.	Significant	Maintain current nil level	Ensure that brigades have appropriate standing operating procedures and training in place.	CFA	GMW AusNet Services	November Annually Ongoing
Loss of property from the effects of uncontrolled fire.	Significant	Reduce incidence and severity	Ensure that brigades have appropriate standing operating procedures and training in place.	CFA	GMW AusNet Services	
Loss of property from the effects of uncontrolled fire.	Significant	Minimise the outbreak of fires caused by trees hitting power lines	Power suppliers undertake line clearance according to hazard clearance requirements. Municipality to implement a process to ensure reports of hazardous trees are passed to the relevant authority.	SP AusNet Municipality		

