



Municipal Fire Management Plan



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ISSUE DATE LISTING

Issue No.	Date considered by Council	Distribution Date	Page No.
1	21/8/2012	August 2012	Total issue
2	19/11/2013	27/11/2013	Total reissue
3	18/11/2014	28/11/2014	Total reissue. Inclusion of section on Introducing and Terminating Fire Danger Periods
4	6/12/2016	9/12/ 2016	Total reissue
5	21/8/2018	22/8/2018	Reissue. Inclusion of Neighbourhood Safer Places Plan, updating fire history, Terms of Reference and other administrative updates.

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FOREWORD

This plan has been prepared by the Municipal Fire Management Planning Committee. The Committee, made up of key organisations with responsibility for fire and emergency management, was formed in August 2011.

The plan has been developed with a range of stakeholders through the use of integrated and holistic processes that encompass the stages of emergency management: mitigation and prevention of, preparedness for, response to and recovery from emergencies. The plan feeds into regional and state-wide planning, allowing for the strategic alignment of risk mitigation efforts with our neighbours.

The plan addresses the overall risk of bushfire in the long term. Risks in relation to structural fires and hazardous materials incidents have not been included; however these will be addressed in future editions.

It is the intention that this plan will be used to encourage and facilitate improved community safety outcomes. The success of this plan will be reliant on the continued commitment to and strengthening of this collaborative multi-agency partnership.

1. INTRODUCTION

The Campaspe Municipal Fire Management Plan, (the Plan), was prepared by the Campaspe Municipal Fire Management Planning Committee (MFMPC) in line with Part 6A of the Emergency Management Manual of Victoria (EMMV) and the State Fire Management Planning **Committee's guidelines for integrated fire management planning**.

1.1. The Integrated Fire Management Planning Framework

In response to the challenges that have emerged in fire management over the last decade, the Victorian Government established an Integrated Fire Management Planning (IFMP) Framework for Victoria. The IFMP framework operates under existing fire and emergency management legislation. Through the implementation of the IFMP framework, the Campaspe MFMP is required to prepare a three year Municipal Fire Management Plan (MFMP). IFMP has adopted the following planning process that is consistent with International Standard for risk management ISO 31000.

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

FIGURE 1: IFMP ALIGNMENT WITH AS/NZS ISO 31000:2009

1.2. Authority for Plan

The Campaspe Shire Council has a legislative responsibility under section 21(4) of the *Emergency Management Act 1986* to prepare and maintain a Municipal Emergency Management Plan (MEMP), and under the *CFA Act 1958*, to develop and implement a Municipal Fire Prevention Plan. The MFMP will replace the requirement for the Municipal Fire Prevention Plan. The MFMP is a sub plan of the Integrated Municipal Emergency Management Plan (IMEMP) and is prepared by the Municipal Fire Management Planning Committee.

The MFMP, as adopted by Council, will be deemed to meet the requirements for a Municipal Fire Prevention Plan under section 55A (1) of the *CFA Act 1958*, provided it contains provisions as set out in section 55A (2) of the *CFA Act 1958*.

1.3. Plan Endorsement and Adoption

The Campaspe Shire Council is the custodian of the MFMP pursuant to current legislative arrangements. The MFMPC developed the MFMP and received endorsement of the plan from the committee and non-committee members with responsibilities and accountabilities under the plan.

The Issue Date Listing shows the dates the Plan was considered by Council, and distribution dates.

1.4. Plan Review & Updates

The Campaspe MFMP will be reviewed and amended:

- Annually in association with the IMEMP
- **If it is considered by the MFMPC that risks to assets ('Risk Contributors') have changed;**
- Following significant incidents if required;
- As directed by the State or Regional Fire Management Planning Committees;
- As required by legislation.
- As further works are completed by the MFMPC.

When a review is undertaken by the MFMPC and amendments are made to the plan, the amended plan will be sent to the Integrated Municipal Emergency Management Planning Committee (IMEMPC). Once approved by the IMEMPC, a report outlining the amendments will be presented to Council.

1.5. Plan Audit

The Municipal Fire Management Plan will be audited under section 55B of the *CFA Act 1958* every three years.

The MFMP must incorporate the provisions of section 55A (2) of the *CFA Act 1958* relating to fire risks and their treatment and will be determined to meet the requirements for a Municipal Fire Prevention Plan (MFPP) under section 55A (1) of the *CFA Act 1958*.

1.6. Planning Process

The Integrated Fire Management Planning framework enhances existing approaches to fire management planning and includes the following elements:

- Integration of plans and processes
- Consistency at State, Regional, Municipal and local levels
- Coordination of stakeholders and planning processes
- High levels of community and stakeholder engagement
- Performance management
- Monitoring and continuous improvement
- Supportive planning structure and environment
- Consistent identification and assessment of risk.

The IFMP planning cycle links the steps of contemporary planning and is consistent with international Risk Management Standards.

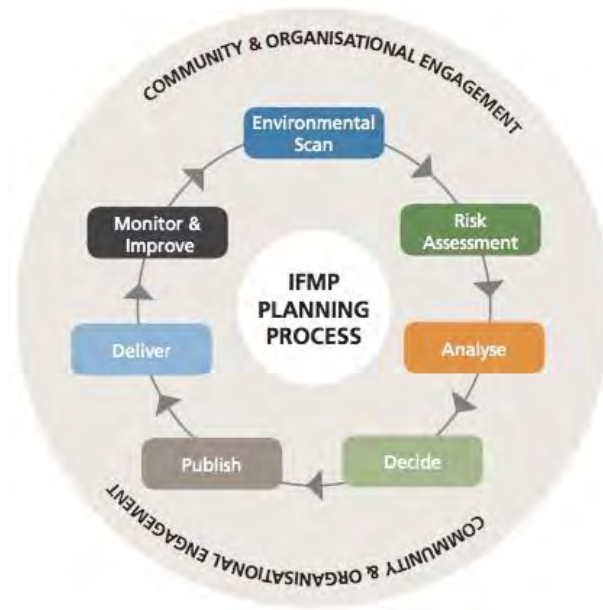


FIGURE 2: INTEGRATED FIRE MANAGEMENT PLANNING CYCLE.

SOURCE: INTEGRATED FIRE MANAGEMENT PLANNING GUIDE, 2010

1.7 Terms of Reference

Purpose

The Committee's purpose, of which the development of a municipal fire management plan is part, is to provide a municipal-level forum to build and sustain organisational partnerships, generate a common understanding and shared purpose with regard to fire management and ensure that the plans of individual agencies are linked and complement each other. This is defined in Part 6A of the Emergency Management Manual Victoria (EMMV).

Role of the Committee

The Committee is to:

- plan for fire management in a manner that coordinates fire management activities across agencies
- provide information to, and engage with, the community on matters related to fire management planning
- using the planning guide issued by the State Fire Management Planning Committee, review and maintain the Municipal Fire Management Plan for recommendation to the IMEMPC and comment by the Regional Strategic Fire Management Planning Committee, prior to consideration by Council
- monitor, review and report on the delivery of the Municipal Fire Management Plan
- advocate to the Regional Strategic Fire Management Planning Committee for municipal fire management needs
- work with the IMEMPC to align planning activities
- share knowledge and create an environment of continuous improvement.

Membership

The Campaspe Municipal Fire Management Planning Committee is appointed by the Northern Victorian Integrated Municipal Emergency Management Planning Committee (IMEMPC). The Committee has the following voting members:

- Campaspe Shire Council
- Country Fire Authority
- CFA Waranga Group delegate
- CFA Deakin Group delegate
- CFA Northern Campaspe Group delegate
- Forest Fire Management Victoria (Department of Environment, Land, Water and Planning)
- Parks Victoria
- Victoria Police
- VicRoads

If a voting member is unable to attend a meeting, they are required to send a substitute delegate from their organisation.

The Committee will provide direction and support to agencies / organisations within the IMEMPC.

The Committee may:

- a. invite new members, as required, subject to approval of the IMEMPC;
- b. co-opt other members, especially for Working Groups. Where an issue arises that requires specific advice, subject matter experts may be invited to attend.

Governance

The Campaspe Municipal Fire Management Planning Committee is established and undertakes planning as a Sub-Committee of the Northern Victorian Integrated Municipal Emergency Management Planning Committee formed under s.21(3) of the Emergency Management Act 1986.

- The MFMP will be chaired from within its membership
- The MFMP will receive support and guidance from the Regional Strategic Fire Management Planning Committee
- Composition will be determined by the IMEMPC
- The MFMP will meet on at least four occasions each year
- If conflict occurs between agencies that cannot be resolved, the Committee will raise the issue with the IMEMPC.

Quorum

A quorum will be achieved when half the number of voting members, plus one, are present at the meeting.

Reporting

The Campaspe Municipal Fire Management Planning Committee will report six monthly to the IMEMPC and the Regional Strategic Fire Management Planning Committee.

Minutes of MFMP meetings will be provided to the IMEMPC.

Support

Local Government will provide the necessary administrative support to assist the Committee to function effectively.

Planning processes will be managed and supported using technical expertise provided by relevant fire services.

Schedule of Meetings

The Committee will meet at least once every quarter unless otherwise required.

Review Period

The Committee is ongoing. The Terms of Reference document may be modified by the IMEMPC at any time, however it must be reviewed at least every three years.

2. ENGAGEMENT AND COMMUNICATIONS

2.1. IAP2 / Community Engagement Principles

Community and organisational participation played an important part in the development of the MFMP. To support this, the MFMPC adopted the International Association for Public Participation (IAP2) Framework. The IAP2 framework guided the engagement decisions by the Committee in the development of the Fire Management Plan and made clear the engagement commitment by the MFMPC.

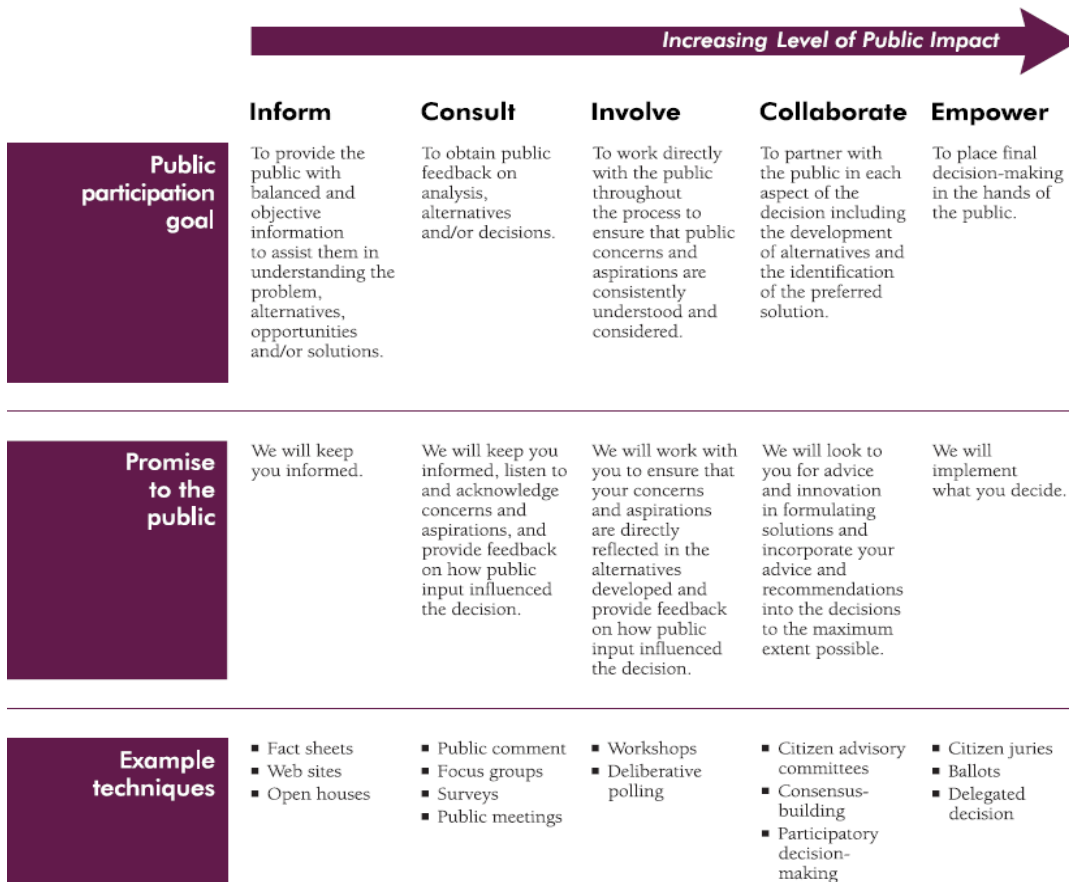


FIGURE 3: INTERNATIONAL ASSOCIATION FOR PUBLIC PARTICIPATION

2.2. IFMP Engagement Process

The Planning Committee undertook stakeholder consultation and community engagement activities during the development of the plan in 2011 and 2012.

3. ENVIRONMENTAL SCAN

3.1. Summary

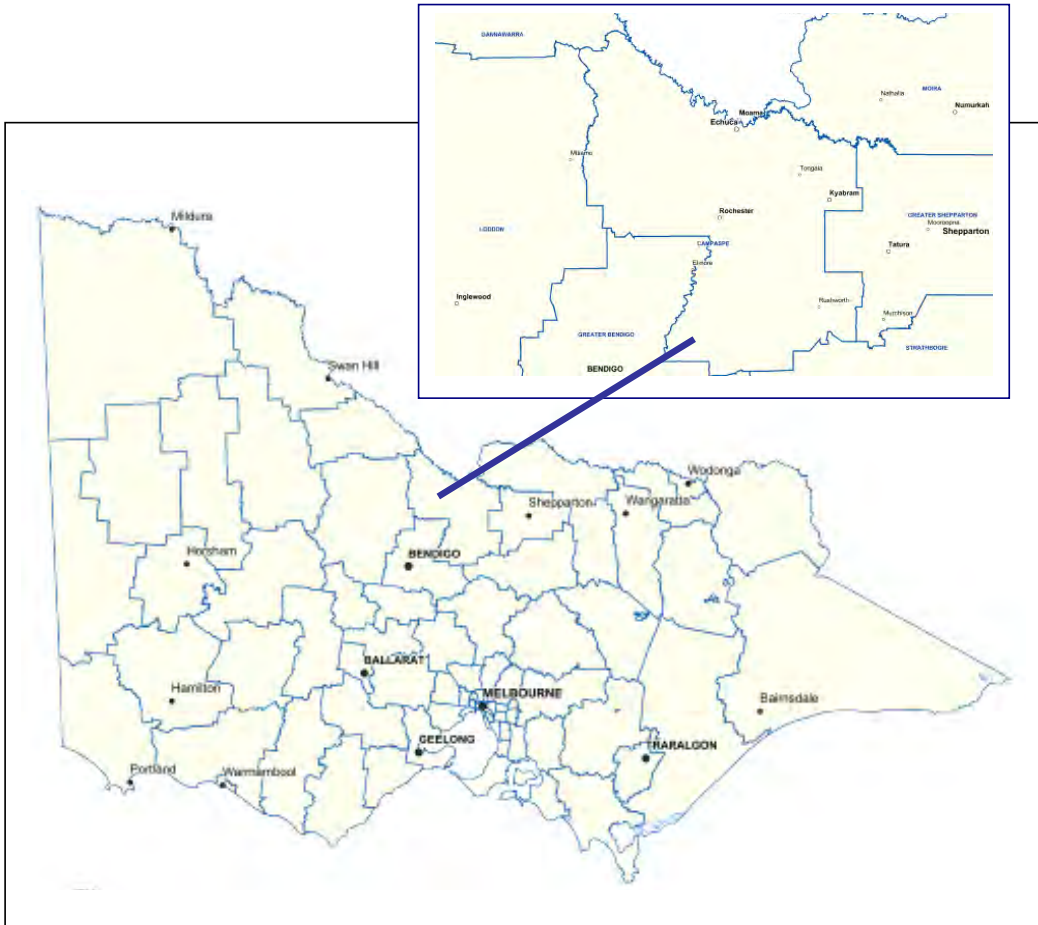


FIGURE 4 – SHIRE OF CAMPASPE MAP

The Shire of Campaspe is located in the north of the state with its borders comprising the City of Greater Bendigo, Loddon Shire, Gannawarra Shire, Moira Shire, Greater Shepparton City Council, Strathbogie Shire Council and the Murray River.

3.2. The Municipality

The Shire of Campaspe is located in northern Victoria, approximately 180 kilometres north of Melbourne, encompassing a land area of over 4,500 square kilometres. The Murray River forms the northern boundary of the municipality, while the Goulburn River forms the eastern boundary and the Mount Hope Creek and Kow Swamp form the western boundary. The Campaspe River dissects the Shire, passing through Rochester and joining the Murray River at Echuca.

Echuca is the largest urban area in the Shire and is located adjacent to the Murray River. The bridge which crosses the Murray River into New South Wales at Echuca provides a major connection between the two states. The majority of the community lives in the townships of Echuca, Kyabram, Gunbower, Lockington, Rochester, Rushworth, Stanhope and Tongala.

The Shire of Campaspe is predominantly a rural area. Land use across the Shire is dominated by agriculture, mostly irrigated agriculture, and the landscape is visually defined by the network of irrigation and drainage channels. The local economy is based on agricultural production (dairy, beef cattle, sheep, cereals and grains, vegetables and viticulture), processing of agricultural products (milk, tomatoes, grapes), as well as the provision of services and tourism.

The vast majority (88%) of the land within the Shire is privately owned and managed by property owners and occupiers with 12% reserved as Crown Land (i.e. State Parks, Reserves and National Parks).

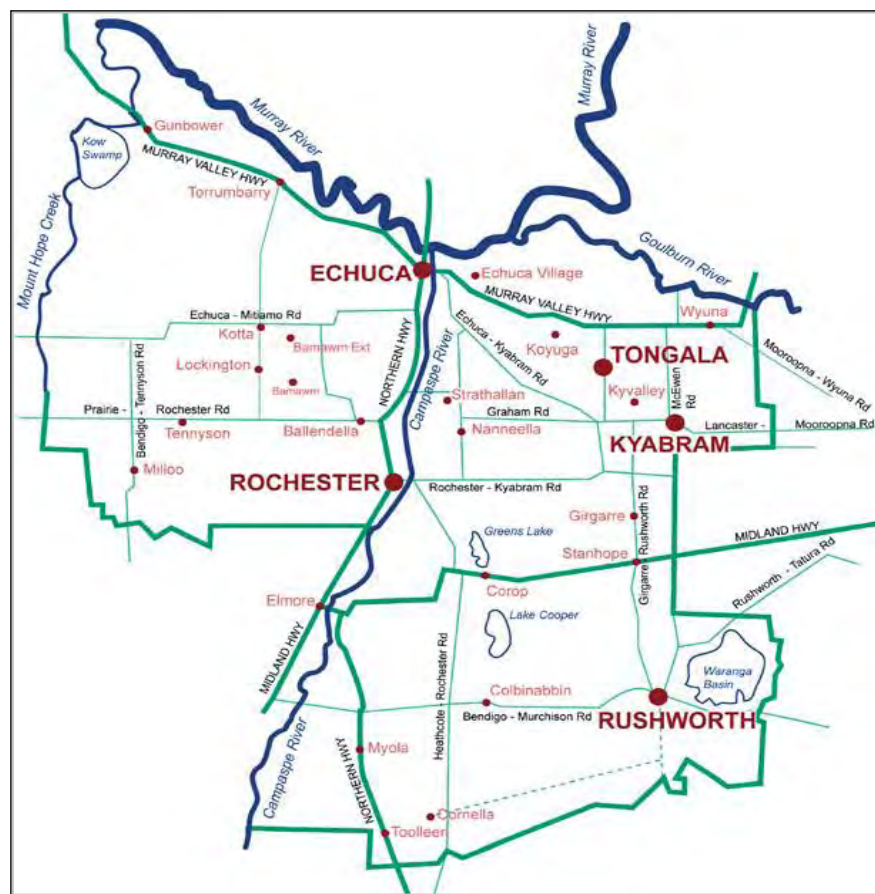


FIGURE 5: AREA OF THE SHIRE OF CAMPASPE

3.3. Demographics

The 2016 Census shows Campaspe Shire has a population of 37,061. **Functionally, Echuca (the Shire's major urban centre with approximately 14,144 persons) interacts with its New South Wales' counterpart, Moama. The current population of Echuca - Moama is approximately 20,500 persons. The bulk of the Shire's population is centred around the northern and eastern points of the Shire, especially within the Echuca - Kyabram - Rochester triangle.** The southern and western areas of the Shire are more sparsely populated. The other primary population centres of the Shire include Kyabram and district (7,604 persons), Rochester and district (3,077), Tongala and district (3564), Rushworth and district (2438), Stanhope and district (2,496), Lockington, Gunbower and district (3,990), (Statistics taken from Community .id). There are approximately 15,000 residents living in non-urban areas.

There are some high vulnerability levels within the shire but these are mainly restricted to age groups, it has been recognised that the under 14 age bracket and over 65 age bracket are more susceptible to poor decision making about what to do in the event of a fire, which in turn makes them more vulnerable.

3.4. Geographic Characteristics

The Shire is characterised by a flat landscape that slopes to the north. There is a variation in landscape and vegetation types, from river valleys, plains grasslands to river red gum floodplains.

The Municipality is well serviced by roads with Council roads having lengths sealed roads 1,147 km, gravel 2440 km, earth 551 km giving a total of 4,148 km. The municipality is also traversed by the Midland Highway, Northern Highway and Murray Valley Highway. Passenger rail lines extend to Echuca from Bendigo. There is a freight line from Echuca running east to Toolamba in the Greater Shepparton City Council. These provide a high risk of being a potential fire ignition source, whilst at the same time forming a potential control line and an important fuel reduced corridor.

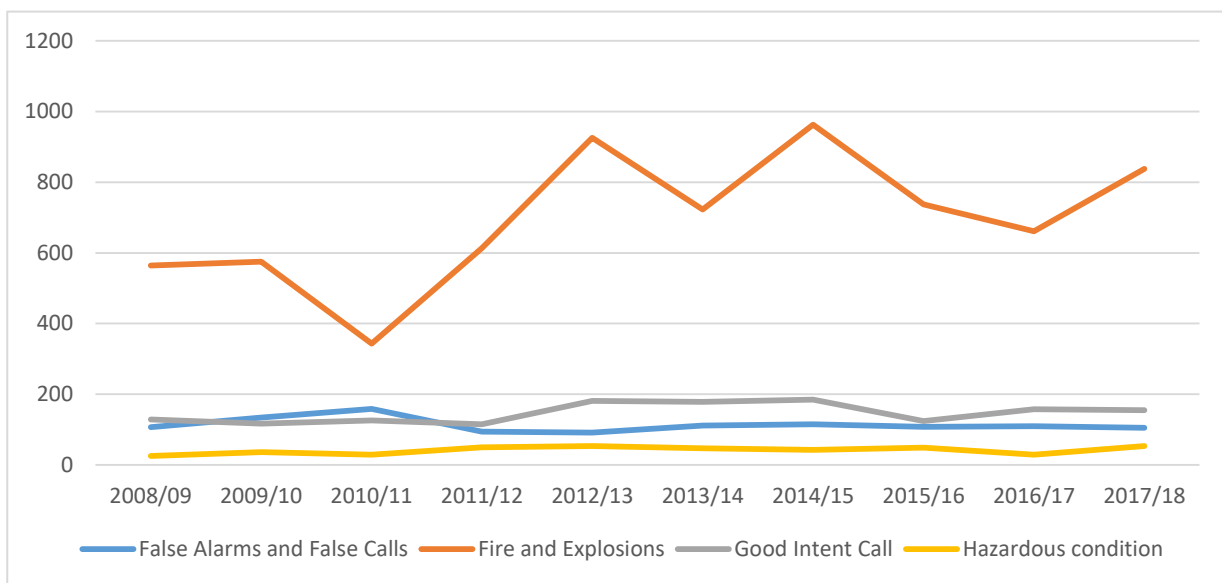
The land use within the Shire is dominated by agriculture, predominantly irrigated agriculture with large tracts of dryland farming. The network of irrigation channels defines the landscape, with a focus on the activities of dairying and cropping. Feedlots, beef cattle, sheep, vegetable growing and viticulture are also important agricultural industries within the Shire. As a result of these agricultural influences the landscape across the Shire has been significantly modified. 90% of land has been cleared at some time for agricultural purposes. On-farm production, manufacturing and construction are the other **primary contributors to Campaspe's economy.** The unique landscape and history of the Shire also supports a healthy tourism industry.

3.5. Fire History

The following information is sourced from CFA FIRS data.

It shows fire and incidents reported to CFA in recent years.

	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18
False Alarms and False Calls	107	134	158	94	91	111	115	108	109	105
Fire and Explosions	564	575	343	613	926	723	963	737	661	838
Good Intent Call	128	117	126	115	181	178	185	124	157	155
Hazardous condition	25	36	29	50	53	47	42	49	29	53



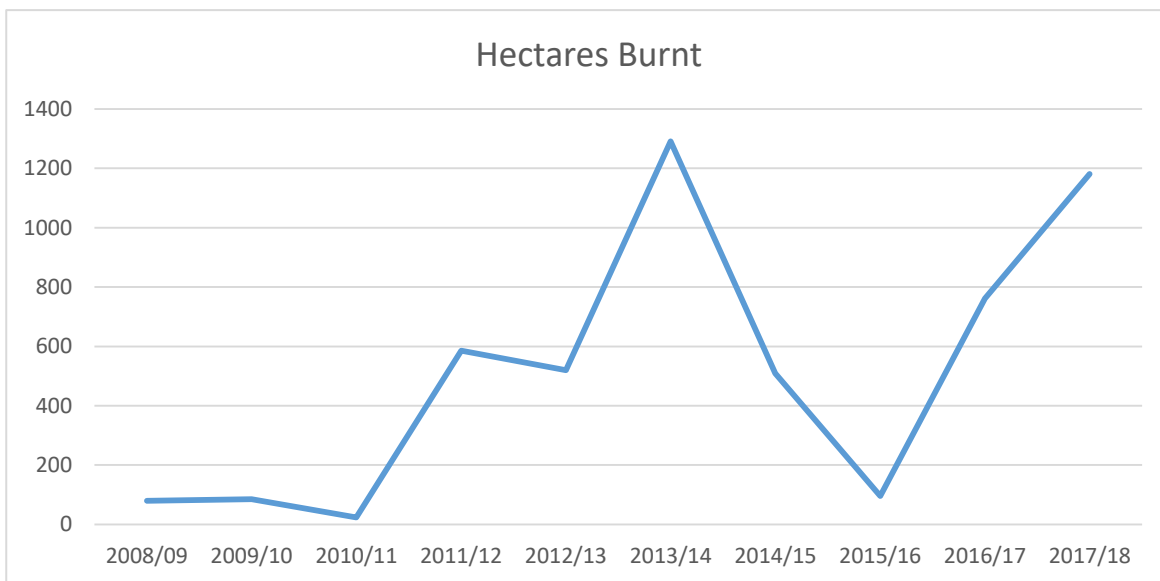
GRAPH 1 – CFA INCIDENTS BY YEAR

Explanatory notes for the CFA FIRS Data

- False alarms and False Calls – these calls include calls to alarms at premises with automatic fire alarm systems along with intentional false alarm calls via 000.
- Fire and Explosions – calls to fires including those involving rubbish bins, illegal bonfires and campfires, vehicles and structures including sheds, outbuildings, residences and commercial properties.
- Good Intent Call – calls to smoke sightings, smell of smoke or gas, other incidents where there was no brigade action required.
- Hazardous condition – calls to fuel or oil spills or leaks including those occurring as a result of motor vehicle incidents along with other incidents including gas leaks and incidents involving power lines.

It is important that there are no assumptions made about the number of fires in any given year and the damage caused. Therefore the following table represents the total area burnt (grass and bush) for fires exceeding 1 hectare in size.

	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18
Hectares Burnt	79	85	23	585	520	1291	509	96	761	1181



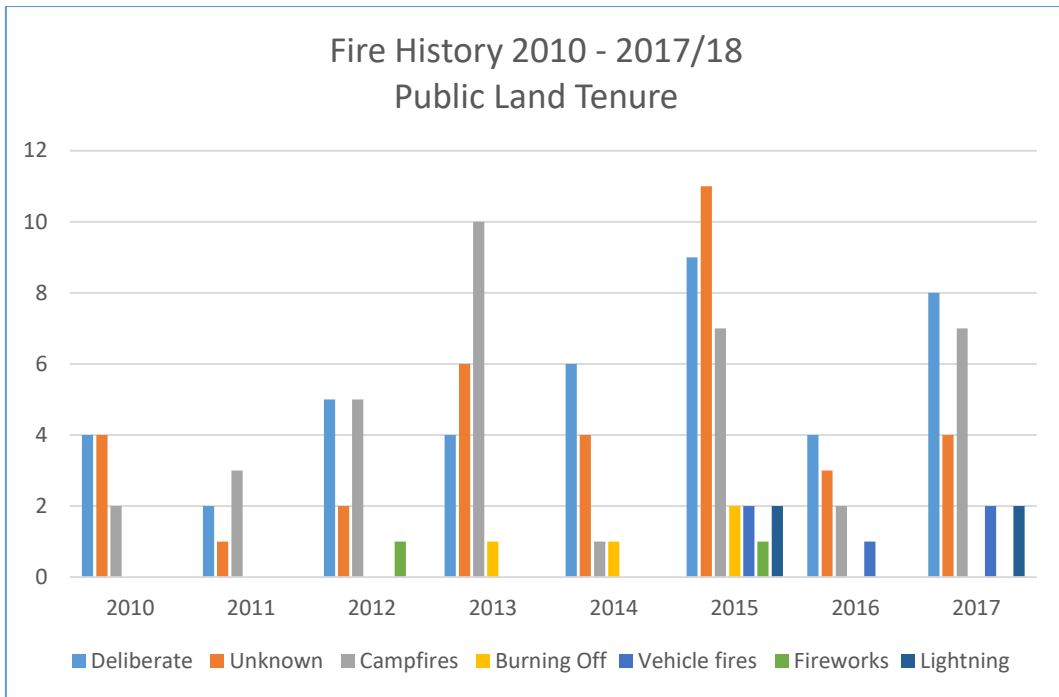
GRAPH 2 – HECTARES BURNT BY YEAR

Four of the largest bushfires in the Municipality over the last 10 years occurred predominantly in grassland.

These were:

- 13/01/2012 195ha in Chiswell Road Corop
- 14/01/2012 198ha along the Northern Highway at Toolleen
- 23/02/2012 130ha along the railway line south of Echuca
- 26/12/2013 1165ha east of the Northern Highway Toolleen.

DELWP ignition data shows a much smaller number of ignitions per year, however it needs to be incorporated in any decisions regarding instances of fire within the Shire of Campaspe as these fires are on crown land where reporting of fires is generally delayed.



GRAPH 3 – DELWP IGNITION HISTORY BY YEAR

DELWP fire history within the Shire of Campaspe indicates that the majority of fires recorded are unattended camp fires. Other causes are lightning and deliberate ignitions. Both of the fire causes are in the low percentage range.

The largest event was 10 hectares.

The smallest event was 0.01 hectares.

Event average is 1.312 hectares.

3.6. Bushfire Landscapes

3.6.1. Bushfire Risk

The Shire of Campaspe has four key bushfire landscapes. Each landscape has unique characteristics which when combined with weather conditions of the day will determine how fire behaves.

MUNICIPAL FIRE MANAGEMENT PLAN

Landscape	Fuel Hazard Level	Topography	Primary Driver	Spotting / Ember Potential
Grass, Crop and Stubble	Low to Moderate	Flat to Undulating	Wind	Low
Box and Ironbark Forest and Woodland	High to Extreme	Undulating	Fuel / Topography	Moderate / High
Riverine Forest	High to Extreme	Flat	Fuel	Low
Urban	Low to High	Flat to Undulating	Wind / Fuel	Low

TABLE 4: SHIRE OF CAMPASPE BUSHFIRE LANDSCAPE
SOURCE: LODDON MALLEE REGIONAL STRATEGIC FIRE MANAGEMENT PLAN 2011 – 2021

In developing the Loddon Mallee Regional Strategic Fire Management Plan, an assessment was undertaken to identify the ranking of each municipality against certain likelihood, vulnerability, and consequence criteria. The matrix below highlights the rankings for the Shire of Campaspe, in relation to other municipalities in the Loddon Mallee Region.

Category	Ranking (out of 10 municipalities)	Description
Likelihood of grass fire	Sixth (6 th)	Based on the history of ignition, number of days of Grass Fire Danger Rating greater than Very High, and the percentage of fuel hazard that is High, Very High or Extreme in the municipality
Likelihood of forest fire	Seventh (7 th)	Based on the history of ignition, number of days of Forest Fire Danger Rating greater than Very High, and the percentage of fuel hazard that is High, Very High or Extreme in the municipality
Human vulnerability	Sixth (6 th)	Based on the barriers to capability building and levels of social connectedness across the prevention, preparedness, response and recovery spectrum
Human settlement exposure	Fourth (4 th)	The extent and number of human settlements and places that house vulnerable community members rated Extreme or Very High that have been identified by the Victorian Fire Risk Register assessment process
Business and asset exposure	First (1 st)	The extent of business and infrastructure assets rated Extreme or Very High that have been identified by the Victorian Fire Risk Register assessment process
Biodiversity risk	First (1 st)	The extent of endangered and vulnerable Ecological Vegetation Classes in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project
Aboriginal heritage risk	First (1 st)	The extent of fire sensitive aboriginal sites in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project
Non-aboriginal heritage risk	Sixth (6 th)	The extent of listed on the Victorian Heritage Register in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project

TABLE 5: SHIRE OF CAMPASPE BUSHFIRE LIKELIHOOD, VULNERABILITY & CONSEQUENCE RANKINGS
SOURCE: LODDON MALLEE REGIONAL STRATEGIC FIRE MANAGEMENT PLAN 2011 - 2021

The Loddon Mallee Regional Strategic **Fire Management Plan states** “The history of broad-scale agricultural use has changed the landscape significantly in the Campaspe Shire. Grassland vegetation is dominant with 92.3% of fuel hazard of the municipality rated as low or moderate level. Ignitions though are some of the highest in the region. These combined with the 127 day bushfire season means that the likelihood of grass and forest fires which persist beyond extended first attack falls into the average range.

Community connectedness and barriers to capability building are both average for the Region.

The abundance of caravan parks and settlements along the Murray River raises the number of Special Protection Sites (31) to carry the human settlement risk above the regional average. The Victorian Fire Risk Register (VFRR) assessment for the municipality identified 23 sites of extreme rating and 15 sites as very high. A concentration of population within irrigated landscapes means that portion of the municipality has a low number of human settlement exposures.

The VFRR has identified a higher level of economic risk exposure to fire for the municipality. This takes into account Murray River aligned tourism projects, and the major electricity infrastructure that traverses the municipality. Landscape change through agriculture has affected biodiversity values. Campaspe has the equal highest level of endangered and vulnerable EVC remnants of native vegetation in the region.”

The way in which we respond to and prepare for fire can also have an effect on many significant environmental assets within the Campaspe Shire. The Loddon Mallee Region contains many sites of ecological significance. These significant sites may be home to individual species of flora and fauna or may be entire vegetation communities. Many of these species or vegetation communities may be listed under various acts of state and federal legislation or are protected by local planning provisions.

The Loddon Mallee Regional Strategic **Fire Management Plan states:** “Those on roadsides are particularly vulnerable to roadside fire management activities. Much of the vulnerable vegetation is made up of native grassland ecosystem. Fire sensitive aboriginal artefacts, mostly associated with riverine and lake systems, are the highest in the region. These sites are particularly vulnerable to fire management activities in particular fuel reduction or ecological burning. Non-aboriginal cultural heritage registrations are average for the region.”

It is imperative that planning and implementation of fire prevention works (including grading, slashing, vegetation removal and fuel reduction burning) takes into account the potential impacts on native flora and fauna.

3.6.2. Structural Risks

Work is currently being undertaken by the Metropolitan Fire Brigade to develop tools that will assist with identifying structural risks. These will be forwarded to Local Government authorities when complete.

3.6.3. Hazardous Material Risk

There are many hazardous material storages in the municipality mostly assigned with factories which are appropriately stored and managed by the companies. A long term risk that may need addressing in future versions of this plan is the cartage of these hazardous materials into the Shire.

3.7. Fire hazard areas

To support bushfire planning the Regional Strategic Fire Management Planning Committee prepared scenario maps to show bushfire intensity for the municipality. Scenarios assist committees and community members to plan for and around events. Maps based on probable fire behaviour and the associated fire intensity were prepared for days of severe, extreme or Code Red fire danger days. The maps measure the predicted head fire intensity (this is measured in kilowatts / linear metre, the same as the bar heater that may be found in a family home).

These scenarios are modelled to provide benchmarks around which strategies and actions can be built. The mapping segmented the landscape to reflect the important fire management thresholds that were identified during the Victorian Bushfires Royal Commission.

Based on description to the Victorian Bushfires Royal Commission 2009

- 0 - 1000 kW/m – controlled burns are feasible
- 1001 - 4000 kW/m – direct attack at the fires front is possible
- 4001 - 10,000 kW/m – may be feasible to actively work on flanks of fire front but not head
- 10,001 – 30000 kW/m – direct attack not feasible, but asset protection may be possible depending upon circumstance
- 30,000+ kW/m – fire fighting not feasible and asset protection generally not feasible.

The following scenarios are typical of what may be experienced in the Loddon Mallee in any mid summer period when a fire is fully established and has been running for several hours. Extreme wind events have not been included.

Scenario	Severe	Extreme	Code Red
Fire Danger Index range	50-74	75-99	100+
Temperature C°	38	42	45
Relative Humidity Rh%	9	7	4
Wind Speed in Kph	40	45	50
Forest Fire Danger Index (FFDI)	63	87	120

TABLE 6: FOREST

Scenario	Severe	Extreme	Code Red
Fire Danger Index range	50-99	100-149	150+
Temperature C°	37	42	44
Relative Humidity Rh%	13	9	7
Wind Speed in Kph	40	45	50
Grass Fire Danger Index (GFDI)	75	125	180

TABLE 7: GRASSLAND

The intensity mapping draws on the DELWP fuel load and topographic layers and calculates head fire intensity based on CSIRO Grassland and Macarthur Forest meters for three sets of weather described in Tables 6 and 7. The intensity maps have been prepared to reflect a fully established fire of several hours and the intensity in kw/m that it will generate in the 30m x 30m grid point. Topography and wind speed and direction are always in the positive form to generate maximum intensity.

The MF MPC used the fire intensity maps as one of the key tools in the identification of risk, both as basis for the risk analysis and determining appropriate treatments. The maps allowed the committee to understand the maximum potential fire intensity if a fire was to occur under optimal conditions. The MF MPC then made appropriate decisions based on these maps, their local knowledge of the landscape and their understanding of fire behaviour.

For fire intensity maps, and assumptions used for the mapping, please see Appendix C.

3.8. Assumptions about the future

Assumptions concerning future trends of the municipality include areas of land use, tourism, housing and population growth, along with increased infrastructure. These will all impact on cultural and environmental sustainability. Agricultural changes from irrigation to dry land farming have created significant modifications to the landscape, causing a change in risk management. Land availability and housing development will continue to be in demand with an increasing population trend.

Further, infrastructure including rail and road transport capability, utilities, industry, educational and commercial facilities **will be established to meet the municipality's need. Greater tourism numbers will impact the vulnerable ecosystems and** create an increase in demand for holiday accommodation within the municipality. Areas of significant cultural importance to Indigenous and non Indigenous communities will also be considerably compromised.

It is acknowledged that extreme weather patterns which include prolonged drought and heavy rainfall events will impact the municipality and must be considered in the plan.

In order to manage the identified future trends, emergency services will be in high demand, impacting on the safety of the municipality.

3.9. Implications for fire management in the Municipality

While considering assumptions about the future of the municipality the implications must also be discussed. The social implications of population growth, transient communities and an ageing demographic will impact upon the recruitment, length of service and ability to be an active fire fighter or for a member of the community to respond appropriately. Response time to incidents may also be compromised due to a possible decline in volunteerism in the smaller rural townships.

Targeted educational programs will be required to assist the elderly, the isolated, culturally and linguistically diverse and transient communities to prepare for the risk of fire.

Infrastructure development may create a change in risk throughout the municipality. As the larger townships grow and land use and management alters, fire fighting techniques may need to be developed in conjunction with the changed risk.

Environmental implications may include the decline of natural habitat and the sustainability of flora and fauna values within the Shire of Campaspe.

The implications for the **municipality's future are significant and require a holistic approach by all stakeholders to ensure a comprehensive and sustainable fire management plan.**

4. MUNICIPAL FIRE MANAGEMENT OBJECTIVES

Vision:

Our vision is to manage the risk of fire to promote safer communities, healthier environments and to minimise risk to life and property.

4.1. Alignment to regional objectives

The MFMP provides input into, and is developed with reference and alignment to the Loddon Mallee Regional Strategic Fire Management Plan. The MFMP is principally a plan that coordinates and aligns the fire management activities in a manner that is consistent with the Regional Plan. Of particular relevance to this plan:

- To create alignment with regional objectives and a common approach to risks and treatments across the Loddon Mallee Region.
- To provide appropriate information and strategies for input into both the development and any future review of the Regional Plan.
- That the Regional Plan and the Municipal Plan identify life preservation as the highest risk
- That the Regional Plan and the Municipal Plan discuss the need for integration of the agencies to provide better outcomes for fire management.

4.2. Objectives and outcomes proposed

The objectives that are proposed to be achieved by the Campaspe MFMP are:

Safer Communities

- To enhance the integration and communication of emergency management agencies, organisations and the community to increase understanding and awareness of fire.
- Develop resilient communities that are able to effectively plan, prepare, respond and recover from the effects of bushfire and structure fire.
- Develop communities that make informed decisions regarding the risk of fire.

Healthier environments

- Support ecological burning to promote and maintain resilient ecosystems.
- Protect and enhance healthy environments to support a healthy community.

Minimise risk to life and property

- Protection of life and property
- Protection of built, cultural and natural assets
- Protection of agricultural assets
- Participating and exercising planning initiatives
- Engage with those most affected by fires with the development of fire plans
- Manage vegetation to reduce the intensity of fire whilst maintaining ecological values.

4.3. Strategies

Development of risk treatments for the preservation of life and protection of all assets including built, cultural and environmental

- Agency and community participation in community initiatives
- Identification of vulnerable/ at risk community members
- Utilising tools, data and information to develop plans
- Undertake annual program of fire prevention activities.

Education and development for safer communities

- Ongoing education and learning programs for communities and agencies
- Working with vulnerable and at risk community members to ensure that planning occurs
- Building capability within communities to ensure resilience through their participation and understanding of their risks of fire.

Use of fire as a tool for the protection of ecosystems and healthy communities

- Work with control agencies to develop fire operations plans
- Promote the use of planned fire events as a tool for the community
- Support education programs that work to promote an understanding of fire ecology.

Meet legislative requirements

- Fulfil legislative requirements.

4.4. Links to other business programs

Important linkages to other key agencies plans and strategies include:

- Loddon Mallee Regional Strategic Fire Management Plan
- DELWP Fire Operations Plan
- CFA operational and brigade plans
- Powercor Bushfire Mitigation Strategy.
- SP Ausnet Bushfire Mitigation Plan and Vegetation Management Plan
- Roads Bushfire Risk Assessment Guidelines
- CFA Loddon Mallee Community Safety Program
- Neighbouring Shire Fire Management Plans
- The State Fire Management Strategy (2009)
- Recommendations of the 2009 Victorian Bushfires Royal Commission Report.
- Community Information Guides
- Integrated Municipal Emergency Management Plan
- V-Line Fire Management Strategy.

5. FIRE MANAGEMENT RISK STRATEGY

5.1. Risk assessment methodologies

Risk is generally described as the combination of the likelihood of an event occurring and consequence should it happen.

Likelihood X Consequence = Risk

In fire management planning the Crichton Risk pyramid helps people to understand the idea of fire risk in greater detail.

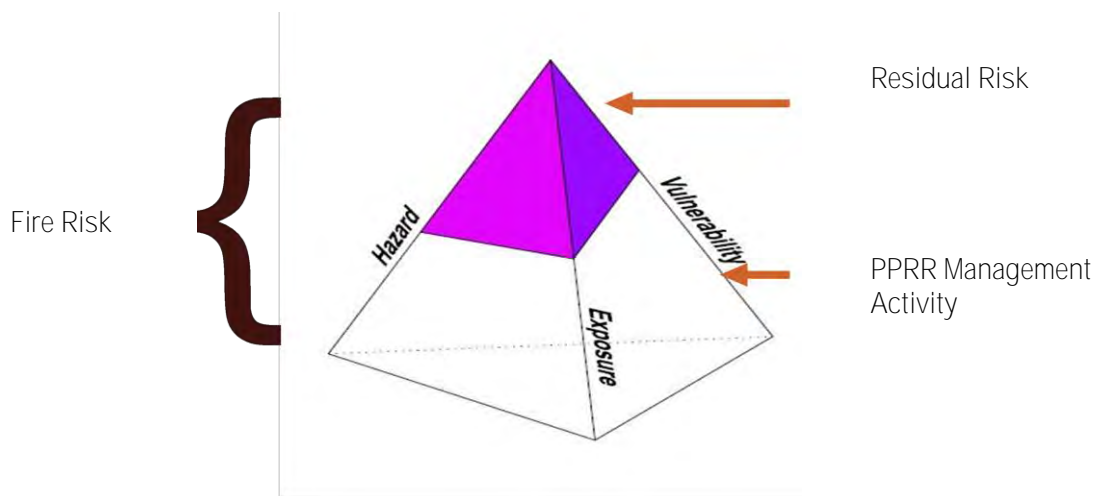


FIGURE 4: RISK PYRAMID

Note: read PPRR as mitigation and prevention of, preparedness for, response to and recovery from emergencies

The diagram above depicts the relationship between the amount of risk generated by the hazard exposure vulnerability relationship and the values (people, property, infrastructure, social and economic, biodiversity, the economy and heritage) of a location.

Typically fire management activities are applied across the pyramid to effectively.

- Reduce the incidence and severity of the hazard,
- Reduce the exposure of assets and values to the hazard and
- Build the resilience (reduce vulnerability) of the assets and values within society.

The Committee considered the following risk statements:

1. The risk of a bush fire igniting spreading and impacting upon assets and values.
2. The risk that the management of fire, is in line with level of exposure and vulnerability of assets and values.

With the development of appropriate tools, the Committee will have the opportunity to further consider risk statements:

1. The risk of a structural fire igniting spreading and impacting upon assets and values.
2. The risk of a hazardous materials incident occurring, catching fire, spreading and impacting upon assets and values.

The committee undertook a risk analysis process where it:

- Identified the characteristics, values and directions of the municipality;
- Established the three fire intensity scenarios for the municipality on days of severe, extreme and Code Red fire danger ratings;
- Identified the primary risks to life, property, the environment, the economy and social values and their contributors;
- Reviewed these risks in line with state wide likelihood and consequence tables and prepared a risk register which:
 - i. identified the current fire management strategies and treatments that are in place
 - ii. considered the adequacy of those strategies and treatments for each scenario
 - iii. identified alternate strategies or treatments where treatments are identified as inadequate
 - iv. reviewed the risk level to establish the perceived effectiveness of the alternate strategies or treatments
 - v. agreed on process to establish improved fire management

To support this approach GIS mapping techniques were used. Mapping of fire hazards, history, treatments, assets, demographics and zoning information was an important tool used in the risk management process.

5.2. Physical Risks Geographical and Systems Risks

The MF MPC as part of the risk management process identified a list of 16 Risk Categories which they felt needed to be addressed as part of this plan. These risk categories are detailed in Table 8 below.

Under each risk category the MF MPC attributed appropriate “Risk Contributors” that made up this risk. Risk contributors were developed using the VFRR, as a basis for key, social, built and environmental assets within the municipality. The committee then identified further risk contributors based on their knowledge and understanding of fire risks within the municipality.

The committee considered the broad range of risks that may occur, and undertook specific analysis for bushfire on days of severe, extreme or Code Red bushfire danger rating. The analysis considered the effectiveness of the current treatments that are in place.

It is important to note that the criteria used in the level of consequence were undertaken in a State wide context (Appendix A). The consequence of even a single fatality is significant to the family, community and emergency services, but combined with likelihood of its occurrence in the Shire means that many ratings are rated as low against the State Bushfire Consequence Table, see Appendix A. Whilst most bushfires occur on days at lower fire danger ratings they are generally manageable and rarely create significant damage to life, property or natural /cultural values.

The following Risk Contributors" were identified through the risk identification processes and detail some of the higher risk assessments for the municipality. See Appendix A.

Flora and Fauna throughout the Shire was rated as high for all scenarios.

All townships and localities were assessed as risk contributors with these towns and assets having a higher risk assessment than others in the municipality.

- Rushworth rating the highest being moderate in a Code Red scenario.
- Both the Rushworth P12 and St Mary's School located in Rushworth were rated as moderate in both the extreme and Code Red scenarios

All other townships and localities were rated as low in all scenarios.

The Special Accommodation Risk Category identified the following caravan parks and other facilities rating moderate for all scenarios:

- Torrumbarry Weir Holiday Park
- Riverlander Caravan Park
- Yarraby Caravan and Holiday Park
- All the Rivers Run Caravan Park
- Rich River Caravan Park
- Miners Pick Caravan Park
- Baroona Youth Healing Centre
- Wharparilla Lodge
- Glanville Village
- BUPA Aged Care.

For specific risk assessments and treatments for all identified risks, refer Appendix A.2.

R01	Loss of human life and damage to property	Majority of Townships in Municipality Southern 80	Low Low/Moderate/High
R02	Loss of or damage to property	Quarries throughout Municipality	Low
R03	Loss of or damage to transport infrastructure	Airfield Highways throughout Municipality	Low Low
R04	Loss of or damage to communications infrastructure	Communication Towers	Low
R05	Loss of or damage to electricity infrastructure and supply	Transmission Lines Sub Stations Power Poles	Low Low Low
R06	Flora and fauna	Threatened Flora Species Threatened Fauna Species	High High
R07	Lack of awareness or understanding of fire risks and associated responsibilities	Campers Itinerant workers Tourists and visitors	Low Low Low
R08	Loss of essential infrastructure eg school, hospital	Majority of Schools in Municipality Health Precincts	Low Low
R09	Lack of suitable access egress from areas of high fire danger	National Parks or Islands on the river Recreation Reserves Murray River	Low Low
R10	Loss of significant cultural, social and natural assets	Kow Swamp Aboriginal Axe Quarry Port of Echuca/Paddle Steamers	Low Low Low
R11	Loss or damage to water infrastructure	Majority of Water Treatment Plants in Municipality	Low
R12	Loss of community infrastructure that supports social connectedness (eg social hub)	Rural Churches and Halls	Low
R13	Loss of agricultural and horticultural infrastructure, productivity and viability	Horticulture/ Cropping / Vineyards Dairy Industry/Piggeries Livestock and Meat Products	Low Low Low
R14	Reduced economic viability and long term sustainability	Riverboat Music Festival Massive Murray Paddle	Low Low
R15	Loss of Major Industry	All identified industry's in Municipality	Low
R16	Loss of special accommodation eg caravan parks, nursing homes	Majority of identified Caravan Parks Nursing Homes/ Retirement Villages	Moderate Low

TABLE 8 - RISK CATEGORIES

Due to low or moderate risk assessments in most risk categories the MFMPC determined that they will develop further proposed treatments. These treatments will be used where it is identified that there is a specific gap or where there is a need for further treatments to alleviate the risk. Where there is nothing further proposed the committee accepts this as the “residual risk”.

In future reviews of this plan, there will be a focus towards further achieving the vision set out by the committee. As such the development of risk treatments for the preservation of life and protection of all assets, including built, cultural and environmental will be the focus.

Risk Categories and “risk contributors” will be monitored through this plan and changed where appropriate. Loss of human life is a key risk category and will continue to be a major focus. The MFMPC is aware of vulnerabilities within the municipality with regard to fire and will continue to build their understanding and look at opportunities to alleviate these risks to life.

Structural and hazardous material risks will be a key focus in future reviews of this plan. These areas will become a focus once appropriate tools are developed by the CFA and other agencies. The MFMP will continue to monitor bushfire risks as appropriate. As further tools for bushfire risk are developed these will be implemented into the applicable processes.

5.3. Treatments and Actions

Many organisations undertake activities in the Shire to treat the fire related risks to keep them at a lower level. These activities may reduce the size of a fire event or prevent it from occurring. They may also reduce the exposure of places and things that are important or that we value, or help to build the resilience of people and assets should a fire occur.

No single action or treatment will effectively manage the fire risk and each relies on the other to reduce the real risk to what that is acceptable by the community. In Campaspe Shire the fire services, community, land managers, and support agencies of government all work together to achieve this. Generally these activities are considered to be preparedness, prevention, response or recovery based.

The treatments completed by agencies were compared together through the risk process to determine the “control effectiveness” of those treatments in place against the risk contributor.

Further treatments were proposed during the risk process where the committee identified gaps or where there was an identified need. All treatments and programs form the works program as part of this MFMP. During the implementation of the plan, monitoring and improvement of treatments will be a key deliverable in achieving our objectives.

Some of the programs that are conducted in the Shire are as follows:

Prevention activities:

Are undertaken by agencies to prevent the possibility of fire occurring within the municipality. Activities include slashing programs by Council, DELWP vegetation management on public land and various education programs run by CFA to educate the community about fire.

Bushfire:

Land managers and community members all take a primary role in preventing bushfires. VicRoads, Campaspe Shire, DELWP and Parks Victoria manage an extensive slashing program on road sides in the shire to reduce the incidence of fires started from vehicles. In areas where camping is popular, particularly along the rivers and around lakes, DELWP, Council, Parks Victoria and Police patrol and enforce regulations, including total fire bans, and provide community education to reduce campfires escaping. On days of Code Red fire danger, many public land areas are closed. Fire agencies provide community education and advertising to encourage responsible decisions regarding fire.

Structural fire

The CFA is the lead agency for suppressing structure fires when they occur. The CFA works closely with the building industry and Council to ensure structures are built to regulation, which reduces the incidence of structural fires. In addition, the CFA provides education programs about fire safety within the home and has many publications and programs to facilitate home fire safety plans.

A full list of treatments completed against the risks is included in Appendix A1.

5.4. Introducing and Terminating Fire Danger Periods

The following steps provide an outline of the manner in which all information is gathered to make timely decisions as to the introduction and termination of the fire danger period (FDP) in any given year.

5.4.1. To Introduce Fire Danger Period (DECLARATION)

Timeline (may vary according to the season)	Details
Late September	Grassland curing team, consisting of trained CFA members, input data based on observations
	CFA lead discussion on media program, in conjunction with the Shire and DELWP / Parks, indicating the fire season is coming and owners should prepare their properties now
	Council MFPO discuss start date for slashing program and green waste dates
Early October	Council MFPO send courtesy notices to property owners who were issued Schedule 13 notices the previous year
Mid – late October	Commence issuing Schedule 13 notices. Identification of properties may be based on: <ul style="list-style-type: none"> ▪ Requests from community members ▪ Requests from Brigades ▪ Inspections by Council Officers.
Late October	Consider FDP declaration dates in municipalities north-west of Campaspe, such as Mildura, Swan Hill, Buloke and Gannawarra
	CFA encourage Brigades to discuss date options (feelings) and forward to Group level for discussion about the Fire Danger Period introduction
Early – mid November	CFA District 20 Operations Officer discuss with Group Officers and Group representatives on the Municipal Fire Management Planning Committee (MFMPC), regarding possible dates for the introduction of the Fire Danger Period. <p>Indicators might be based on:</p> <ul style="list-style-type: none"> ▪ Grass curing rate ▪ Increased fire activity ▪ Increased burn off escapes ▪ Ability to suppress fires on first response ▪ Need for multiple appliance back up / response
	CFA District 20 Operations Officer discuss with the Municipal Fire Prevention Officer (MFPO) and DELWP Fire Management Officer, regarding possible dates for the introduction of the Fire Danger Period. This discussion will include the indicators listed above.
	CFA District 20 Operations Officer forward recommendations from above discussion, to the CFA District 20 Operations Manager
	CFA District 20 Operations Manager decide on the date and forward information to the CFA Chief Officer for approval and Fire Danger Period introduction. Note: This process takes 10 days from the CFA Chief Officer approval and Government Gazettal.
	All agencies undertake media campaign to inform community when Fire Danger Period starts and that there will be a zero tolerance policy
Once FDP declared	<ul style="list-style-type: none"> ▪ No permits to burn will be issued by Council ▪ The zero tolerance period will commence



- Increase in day time response for all Brigades
- Fire Danger Period signs will be opened across the Municipality

5.4.2. To Rescind Fire Danger Period (TERMINATION) – Permits to Burn

Task	Details
Notice change in conditions	<p>There is:</p> <ul style="list-style-type: none"> ▪ Dew ▪ Rainfall. <p>There are:</p> <ul style="list-style-type: none"> ▪ Cooler conditions (long term) ▪ Lower fire danger indexes ▪ Less fire occurrences, fires more easily extinguished, first attack success rates increase ▪ Requests from landowners for permits.
Media campaign to start	<p>Stating:</p> <ul style="list-style-type: none"> ▪ Summer is not over ▪ Care still needs to be taken with regard to campfires ▪ Zero tolerance of fires remains in place
Increase in enquiries	Primary producers seeking permits to burn for agricultural purposes
Discuss possibility of permits to burn	MFPO discuss conditions with CFA District 20 Operations Officer
	CFA District 20 Operations Officer discuss conditions with Group Officers (MFMPC representatives), who in turn discuss the situation with Brigades
Discuss dates and conditions	Brigades bring their comments / thoughts back through the Group Officers (MFMPC representatives) to the CFA District 20 Operations Officer, MFPO and DELWP Fire Management Officer (FMO)
	CFA District 20 Operations Officer, MFPO and DELWP FMO discuss dates and conditions suggested by Brigades with CFA District 20 Operations Manager
Decision on date to commence issuing permits to burn	CFA District 20 Operations Manager makes the decision on the appropriate date at which permits to burn can be issued
Media campaign	Agencies undertake media campaign advising the FDP is still in force, however applications can be made for permits to burn for agricultural purposes only.

5.4.3. Termination of Fire Danger Period

Task	Details
Notice change in conditions	<p>There is:</p> <ul style="list-style-type: none"> ▪ Dew ▪ Rainfall. <p>There are:</p> <ul style="list-style-type: none"> ▪ Cooler conditions (long term) ▪ Lower fire danger indexes ▪ Less fire occurrences, fires more easily extinguished, first attack success rates increase
Media campaign to start	<p>Stating:</p> <ul style="list-style-type: none"> ▪ Summer is not over ▪ Care still needs to be taken with regard to campfires ▪ Zero tolerance of fires remains in place
Increase in enquiries	Primary producers seeking permits to burn for agricultural purposes
Discuss possibility of termination of FDP	MFPO discuss conditions with CFA Operations Officer
	CFA District 20 Operations Officer discuss conditions with Group Officers (MFMPC representatives), who in turn discuss the situation with Brigades
Discuss dates and conditions	Brigades bring their comments / thoughts back through the Group Officers (MFMPC representatives) to the CFA District 20 Operations Officer and MFPO
	CFA District 20 Operations Officer and MFPO discuss dates and conditions suggested by Brigades with CFA District 20 Operations Manager
Decision on date to terminate FDP	<p>CFA District 20 Operations Manager makes the decision on the appropriate date at which the FDP is terminated.</p> <p>Note 1: This process takes 10 days from the CFA Chief Officer approval and Government Gazettal.</p> <p>Note 2: Within this 10 day period, permits to burn may be issued with an earlier light up time. This will be dependent on discussions between the CFA District 20 Operations Officer and the Shire MFPO).</p>
Media campaign	Agencies undertake media campaign advising the FDP has been terminated and permits for burns are no longer required (Reference Council Local Laws and the Summary Offences Act as and where appropriate)
Signage	Fire Danger Period signs will be closed across the Municipality

5.5. Cross Boundary Arrangements

There are cross border arrangements with neighbouring Victorian and New South Wales Councils to assist each other as necessary in the event of emergencies. There are also ongoing discussions about linking treatments at borders to provide a landscape approach rather than a municipal approach.

5.6. Municipal capabilities supporting Fire Management Planning

The following arrangements and procedures are in place and support the municipal fire management process by addressing risks that have been identified within the plan.

5.6.1. Community Information Guides (CIG)

There is one Community Information Guide that has been developed and signed off by the CFA for the Shire of Campaspe municipal district. This Guide is for the township of Rushworth. It is shown in Appendix B.1.

5.6.2. Neighbourhood Safer Places – Place of Last Resort (NSP)

In May 2011 the Echuca South Recreation Reserve Oval was designated as a Neighbourhood Safer Place – Bushfire Place of Last Resort (NSP). This is the only NSP that has been designated for the Shire of Campaspe. While there was extensive discussion regarding a NSP for Rushworth, no suitable location was found that complied with the set criteria.

The Neighbourhood Safer Places – Places of Last Resort Plan, is found in Appendix B.2. The Minutes of the Council meeting at which the oval was designated as a NSP can be sourced from the Campaspe Shire Council (Minute Book Ref 15853 – 15857 15 June 2010).

5.6.3. Community Fire Refuges

There are currently no Community Fire Refuges in the Shire of Campaspe.

5.6.4. Hazardous Trees

For procedures in relation to notification about hazard trees see Appendix B.3.

5.6.5. Fire Access Road Subsidy Scheme Tank Locations

There are three FARSS tank locations in the Shire of Campaspe. They are as follows:

1. Northern Highway, Creek View , midway between Elmore and Toolleen
Opposite 3756 Northern Highway
2. Colbinabbin Fire Station
3. Muskerry East School Road / Toolleen Angle Road intersection

6. IMPROVEMENT AND PLAN REPORTING AND REVIEW PROCESS

6.1. MERI - Monitoring, Evaluation, Reporting and Improvement

The integrated fire management planning process is a continuous cycle of analysis, review and improvement, which operates within a complex and challenging environment.

Within this complex environment there are limited and competing resources to achieve the desired outcome of acceptable levels of residual risk to the community. Therefore, fundamental to its success is the establishment and preservation of healthy stakeholder partnerships that allow for continued transparent and robust dialogue in the interest of achieving the **plan's objectives in the long-term**. It is the role of the MFMPC to spearhead relationship management for this purpose.

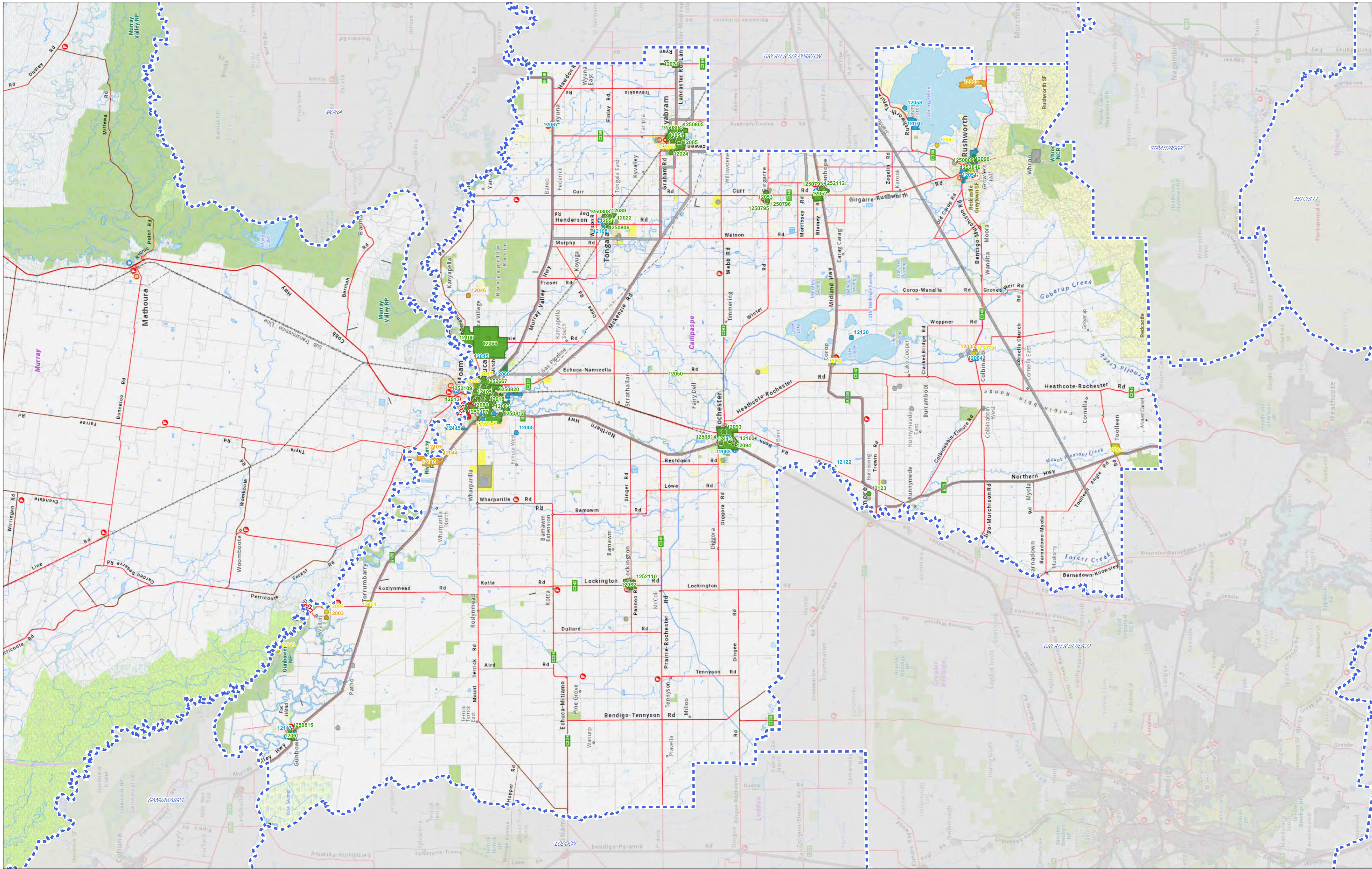
In **addition to monitoring the 'health' of the process, implementation of the plan itself must be monitored and reported upon** to enable continuous improvement. The table below summarises the proposed implementation, reporting and review activities:

Frequency	Task / Action	Responsible Party
Ongoing	Implement treatments, as per agreed Work Plan	All treatment owners
	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 implementation, including an evaluation of treatment appropriateness, impact, effectiveness, efficiency, and legacy	All treatment owners
	Update Risk Register and 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
Triennially (every 3 years)	Conduct end-to-end review of plan, with particular focus on the environment scan and objectives	MFMPC

7. APPENDICES

Appendix	Title	Note
Appendix A	Risk Management Register	
A.1	Victorian Fire Risk Register Mapping (VFRR)	
A.2	VFRR Tables	
A.3	VFRR Likelihood and Consequence Tables	Likelihood and state consequence tables.
Appendix B	Statutory Audit Obligations	
B.1	Community Information Guides	Rushworth Community Information Guide
B.2	Neighbourhood Safer Places –Places of Last Resort Plan	Plan details criteria for determining the appropriateness of a NSP-PLR site
B.3	Hazardous Trees	Hazard Trees Identification & Notification Procedure
Appendix C	Environmental Scan	
C.1	Environmental Scan	
C.2	Map 1: Fire Intensity on Severe Day	Possible fire intensity on Severe day in the shire
C.3	Map 2: Fire Intensity on Extreme Day	Possible fire intensity on Extreme day in the shire
C.4	Map 3: Fire Intensity on Code Red Day	Possible fire intensity on Code Red day in the shire
C.5	Map 4: Rushworth Township Fire History	Showing burns completed
Appendix D	Acronyms used in this plan	
Appendix E	References	

The Victorian Fire Risk Register maps are shown on the following pages.



Municipal : **Campaspe**
 Municipal ID : **12**
 Version Number : **V5**
 Date Produced : **28/06/2018**

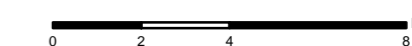
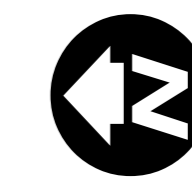
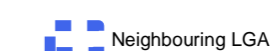
HUMAN SETTLEMENT

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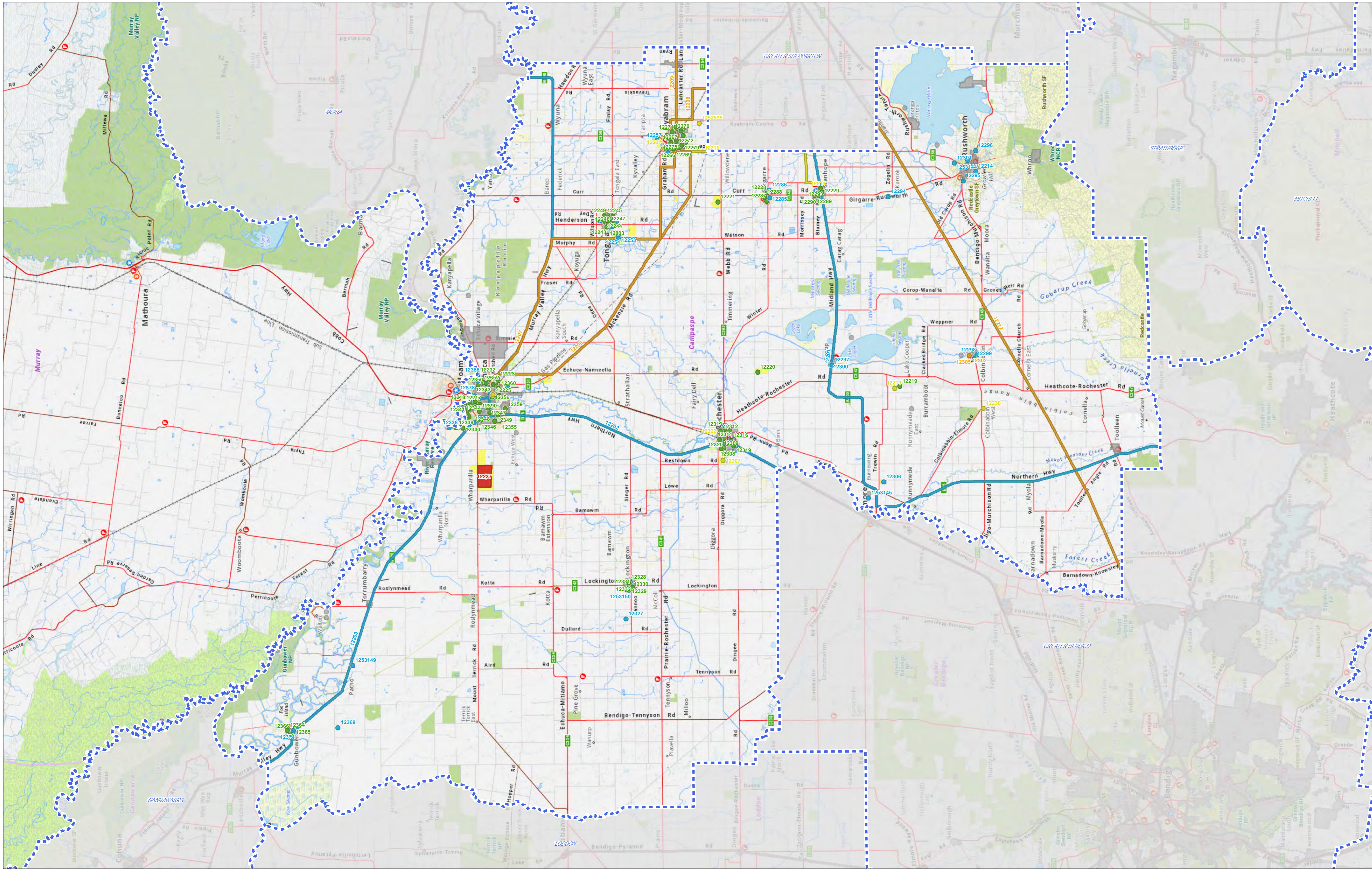
VFRR-B Risk Rating

- Extreme
- Very High
- High
- Medium
- Low
- NA
- Another Asset Class



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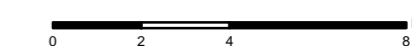
ECONOMIC

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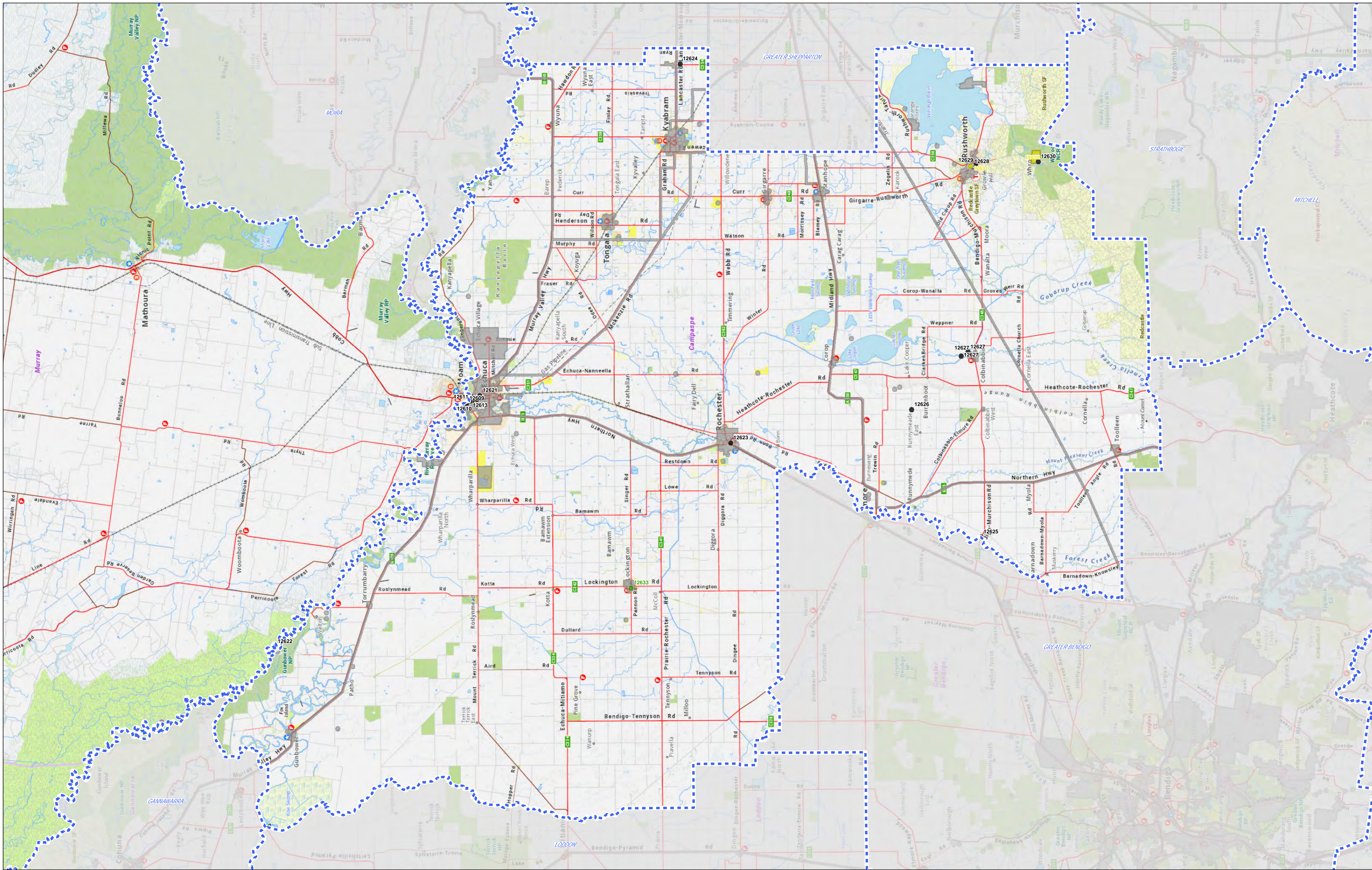
VFRR-B Risk Rating

- Extreme
- Very High
- High
- Medium
- Low
- NA
- Another Asset Class



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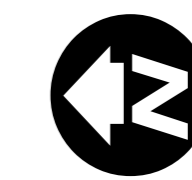
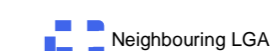
CULTURAL HERITAGE

This map displays cultural heritage assets only



VFRR-B Risk Rating

- Extreme
- Very High
- High
- Medium
- Low
- NA
- Another Asset Class



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Victorian Fire Risk Register tables are shown on the following pages.

Human Settlement



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Hazard	Separation Distance	Threat Rating	Susceptibility	Consequence Rating	Do Ignitions occur frequently?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12003	Special Fire Protection	Welton PS	School RD Torrumbary	Public	Semi-arid woodlands (grassy) : >0-5 Degrees	<20m	Medium	High	Major	No	Yes	Likely	Very High	2A	Ember attack + Smoke Impact	South West	109,212	EDU_primary_56639 Unaware of plans
12004	Special Fire Protection	All The Rivers Run Caravan Park	Headworks RD Torrumbary	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Direct Flame (Grassfire)	North West	204,212,224,303,307,307,415,424	REC_CP Vegetation Red Gum Forrest
12005	Special Fire Protection	Echuca West PS	189 Echuca West School RD Echuca	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	212,409	EDU_primary_56629 Unaware of plans Irrigated
12008	Special Fire Protection	Echuca College	20-50 Butcher ST Echuca	Other	Grassy woodland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	212,409	EDU_secondary_56365 Vegetation Red Gum Unaware of plans
12012	Special Fire Protection	Echuca Caravan Park	52 Croftan ST Echuca	LGA	Grassy woodland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	North West	204,207,212,224,303,307,415,424	REC_CP Vegetation Red Gum Forrest
12017	Special Fire Protection	Rich River Caravan Park	40 Crescent ST Echuca	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact	North West	204,212,224,303,307,307,415,424	REC_CP
12018	Special Fire Protection	Echuca Regional Health Precinct	17 Francis ST Echuca	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_HOSP HLTH_CHCC HLTH_AC Consider other consequences of fire. Site includes Glanville Village
12019	Special Fire Protection	Lancaster PS	Weller RD Lancaster	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	East	212,409	EDU_primary_55137 Unaware of plans
12022	Special Fire Protection	Tongala Caravan Park	23 Finlay RD Tongala	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212,303	REC_CP
12024	Special Fire Protection	Western Gums Caravan Park	McEwen RD Kyabram	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	North West	212,303,409	REC_CP
12026	Special Fire Protection	Kyabram and District Health Service Precinct	Fenaughty ST Kyabram	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_NH HLTH_CHCC Includes Kyabram Nursing Home
12031	Special Fire Protection	Rushworth P12 College	Heily ST Rushworth	Public	Rainforest : >0-5 Degrees	>60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Smoke Impact + Direct Flame (Bushfire)	North	212,409,700	EDU_prisec_56710 Vegetation Box Iron Bark Unaware of plans
12032	Special Fire Protection	St Mary's PS	Hume ST Rushworth	Private	Rainforest : >0-5 Degrees	>60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Ember attack + Smoke Impact + Direct Flame (Bushfire)	South West	700,800	EDU_primary_54979 Vegetation Box Iron Bark Unaware of plans
12035	Special Fire Protection	Colbinabbin PS	Mitchell ST Colbinabbin	Other	Grassy woodland : >0-5 Degrees	20-60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Smoke Impact + Direct Flame (Bushfire)	Surrounds	212,409	EDU_primary_55391 Unaware of plans
12041	Special Fire Protection	Nanneella Estate PS	Store RD Nanneella	Public	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	212,409	EDU_primary_55364 Unaware of plans
12043	Special Fire Protection	Torrumbary Weir Holiday Park	835 Weir RD Torrumbary	Private	Grassy woodland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Ember attack + Direct Flame (Bushfire)	South West	204,212,224,303,307,307,415,424	REC_MISC Vegetation Red Gum
12044	Special Fire Protection	Riverlander Caravan Park	48 Pianta RD Echuca	Private	Grassland : >0-5 Degrees	<20m	High	Moderate	Major	No	Yes	Likely	Very High	2A	Direct Flame (Grassfire)	South	204,212,224,303,307,307,415,424	REC_CP
12045	Special Fire Protection	Yarraby Caravan and Holiday Park	75 River AVE Echuca	Other	Grassy woodland : >0-5 Degrees	<20m	High	Moderate	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	204,212,224,303,307,307,415,424	REC_CP REC_MISC Vegetation Red Gum Forrest
12046	Special Fire Protection	Billabong Ranch and Holiday Park	2831 Tehan RD Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Direct Flame (Grassfire)	Surrounds	204,212,224,303,307,307,415,424	REC_CP REC_MISC Vegetation Red Gum Forrest Unaware of plans Also acts as school camp and day visitor site
12047	Special Fire Protection	Lake Waranga Caravan Park	Waranga Basin RD Rushworth	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	Surrounds	212,303,700	REC_CP REC_MISC
12048	Special Fire Protection	Rochester Caravan Park	Church ST Rochester	DSE	Grassy woodland : >0-5 Degrees	<20m	High	Moderate	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	212,303	REC_CP Vegetation Red Gum Forrest
12049	Special Fire Protection	Miners Pick Caravan Park	Moora RD Ruschworth	Private	Rainforest : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	Surrounds	212,303,700	REC_CP Vegetation Box Iron Bark
12050	Other	Nanneella	Nanneella	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigation around town
12051	Residential	Rushworth Interface	Rushworth	Private	Rainforest : 0 Degrees & Upslope	<20m	Medium	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	100,109,217,231,232,303,418,420,423	Vegetation Box Iron Bark
12052	Residential	Stanhope	Stanhope	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigated around town
12053	Residential	Girgarre	Girgarre	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigated around town
12054	Residential	Kyabram	Kyabram	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact	Surrounds	109,303	
12056	Residential	Tongala	Tongala	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigated around town

12057	Special Fire Protection	Southern 80	Murray River Echuca to Torrumbarry	Other	Grassy woodland : >0-5 Degrees	<20m	High	High	Catastrophic	Yes	Yes	Almost certain	Extreme	1A	Ember attack + Smoke Impact + Direct Flame (Bushfire) + Direct Flame (Grassland)	Surrounds	101,204,224,307,307,415,417,424	IHSM_LV1 Vegetation Red Gum Forest Vulnerability due to lack of local knowledge and access and egress and alcohol Plan in place for event Held in first weekend in Feb Risk is the campers along the river Up to an estimated 20,000 campers
12058	Special Fire Protection	Waranga Boat Club	Tatura RD Waranga	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	700,800	REC_MISC REC.CG Unregistered camping site Unaware of plans
12059	Residential	Echuca - Banyule	Echuca	Private	Grassy woodland : >0-5 Degrees	<20m	High	Low	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Bushfire)	North	100,231,303,416	Vegetation: Red Gum
12060	Residential	Echuca Interface	Echuca South	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	303,402	
12061	Residential	Gunbower	Gunbower	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigated around town
12062	Residential	Lockington	Lockington	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	100,109,303	Irrigation around town to be restructured
12063	Residential	Rochester West Interface	Rochester	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	West	109,303	Irrigation around town to be restructured
12064	Residential	Colbinabbin	Colbinabbin	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	109,303	Cropping and irrigation around town
12065	Other	Toolleen	Toolleen	Private	Rainforest : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Bushfire)	Surrounds	109,222,223,303	Vegetation: Box Iron Bark
12066	Other	Echuca Village	Echuca Village	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109	Scattered irrigation around village. Good access egress and water supply. Residents may not be able to stay and defend.
12067	Other	Wyuna	Wyuna	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	109,223,303	Scattered irrigation around town
12068	Other	Corop	Corop	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	South East	109,208,303	
12069	Other	Harrimans Point	Harrimans Point	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Direct Flame (Grassfire)	South	303	Assessment based on internal polygon threat. Limited evacuation access and no reticulated water supply.
12070	Other	Waranga Shores	Waranga Shores	Private	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	100,101,109,223,303	
12071	Other	Lancaster	Lancaster	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	Irrigation around town
12072	Special Fire Protection	Murray River Camping	Murray River Campaspe	Other	Grassy woodland : >0-5 Degrees	<20m	High	High	Catastrophic	Yes	Yes	Almost certain	Extreme	1A	Ember attack + Smoke Impact + Direct Flame (Bushfire) + Direct Flame (Grassland)	Surrounds	204,224,307,307,415,424	REC.CG Vegetation Red Gum Regular and more responsible campers
12074	Special Fire Protection	St Marys PS Echuca and OSHC	15-33 Bridlington AVE Echuca	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_chilrensreservices_54922 Unaware of plans
12075	Special Fire Protection	River City Christian College	29 Rose ST Echuca	Other	Grassy woodland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_prisec_56919 Vegetation Red Gum Unaware of plans
12077	Special Fire Protection	Echuca PS	High ST Echuca	Other	Grassy woodland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	212,409	EDU_primary_55180 Vegetation Red Gum Unaware of plans
12079	Special Fire Protection	Wharparilla Lodge	Hartshorn DR Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_AC
12080	Special Fire Protection	Shackell Street CRU	Shackell ST Echuca	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_CRU
12081	Special Fire Protection	Engelbert Lodge	70 Haverfield ST Echuca	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_AC
12082	Special Fire Protection	Towle Court CRU	Towle CRT Echuca	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_CRU
12085	Special Fire Protection	Warramunda Village Hostel	Warramunda DR Kyabram	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_AC
12089	Special Fire Protection	R M McHale Hostel	Purdey ST Tongala	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_AC
12090	Special Fire Protection	Waranga Aged Care Hostel	14 High ST Rushworth	Other	Grassy woodland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	700,800	HLTH_AC Vegetation Box Iron Bark

12091	Special Fire Protection	Goulburn Valley Health Precinct Waranga	Coyle ST Rushworth	Other	Rainforest : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact	Surrounds	700,800	HLTH_NH HLTH_HOSP HLTH_CHCC Vegetation Box Iron Bark Includes Waranga Nursing Home
12092	Special Fire Protection	Waranga Nursing Home	Coyle ST Rushworth	Other	Rainforest : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Bushfire)	South West	700,800	HLTH_NH Vegetation Box Iron Bark
12093	Special Fire Protection	High ST CRU	High ST Rochester	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_CRU
12094	Special Fire Protection	Rochester and Elmore District Health Service Precinct	Pascoe ST Rochester	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_NH ACC_MISC HLTH_CHCC
12095	Special Fire Protection	Rochester and District Hostel	Pascoe ST Rochester	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_HOSP HLTH_AC
12096	Special Fire Protection	Rochester Nursing Home Annexe	Rochester	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_NH
12102	Special Fire Protection	Rest Down Retirement Village	Village DR Rochester	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	HLTH_RV
12105	Residential	Echuca	Echuca	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,117,303	
12106	Other	Echuca Village North	Echuca Village	Private	Grassy woodland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	North	109,303	Vegetation: Red Gum
12107	Special Fire Protection	Baroona Youth Healing Centre	Murray Valley HWY Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Smoke Impact + Direct Flame (Grassland)	Surrounds	800	HLTH_RHAB Unaware of plans
12108	Special Fire Protection	Tongala Community Activities Centre	624 Henderson RD Tongala	Private	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_childrengservices_60691 Unaware of plans
12112	Special Fire Protection	Girgarre Preschool	School RD Girgarre	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_childrengservices Kyabram Preschool Management Committee Unaware of plans
12113	Residential	Rochester	Rochester	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303	
12114	Other	Torrumbarry	Torrumbarry	Private	Grassland : >0-5 Degrees	20-60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	800	
12115	Other	Wharparilla DR	Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	West	109,420	
12116	Other	Pianta RD	Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	High	Major	No	Yes	Likely	Very High	2A	Smoke Impact + Direct Flame (Grassland)	West	100,222,303	
12117	Special Fire Protection	Gunbower Preschool Play Centre	Wilson ST Gunbower	LGA	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_childrengservices_58058 Unaware of plans
12118	Special Fire Protection	Lockington Kindergarten	8 Burns ST Lockington	LGA	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_childrengservices_58059 Unaware of plans
12119	Special Fire Protection	Kyabram P12	Fischer ST Kyabram	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	EDU_primary_56123 Unaware of plans
12120	Special Fire Protection	Currumbene Camp	Darrigan RD Corop	Private	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	REC_SC Unaware of plans Accommodates up to 100 EDU_childrengservices Play Group Unaware of plans Committee of Management
12121	Special Fire Protection	Girgarre Community Activity Centre	27 Olympic ST Girgarre	Other	Grassland : >0-5 Degrees	>60m	Medium	High	Major	No	No	Unlikely	Medium	4	Smoke Impact	Surrounds	800	REC.CG Unaware of plans Committee of Management
12122	Special Fire Protection	Aysons Reserve	Burnewang RD Burnewang	Other	Grassland : >0-5 Degrees	20-60m	Medium	High	Minor	No	No	Unlikely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	800	Unaware of plans Committee of Management
12123	Special Fire Protection	Elmore Events Centre	Midland HWY Elmore	Other	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	800	TRSM_EVNT Committee of Management
1250791	Special Fire Protection	Colbinabbin Preschool	Recreation reserve	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	Surrounds	(blank)	EDU_childrengservices_58223
1250793	Special Fire Protection	Stanhope PS	Midland HWY Stanhope	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_55392
1250794	Special Fire Protection	Stanhope District and Kindergarten	1 Godley PL Stanhope	Public	Grassland : >0-5 Degrees	20-80m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrengservices_58222
1250795	Special Fire Protection	Girgarre PS	Winter RD	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_55399
1250796	Special Fire Protection	Girgarre Community Kindergarten	School RD	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrengservices_58139
1250797	Special Fire Protection	Kyabram P-12 College	Dawes RD	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_secondary_56124
1250798	Special Fire Protection	St Augustine's College	Church ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_pisec_54933
1250799	Special Fire Protection	Early Learning Centre Kyabram	28 Unwin ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrengservices_58598
1250801	Special Fire Protection	Unwin ST Preschool	8 Unwin ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrengservices_57789

1250802	Special Fire Protection	Kyabram Community and Learning Centre	21-25 Lake RD	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57790
1250803	Special Fire Protection	Kyabram Munciple Preschool	1488 Fenaughty ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57788
1250804	Special Fire Protection	Kyabram P-12 College OSHC	33-35 Haslem ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_59477
1250805	Special Fire Protection	Kyabram P12 College	57 Fischer ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_secondary_56125
1250806	Special Fire Protection	Tongala Kindergarten	8 Nihil ST Tongala	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57482
1250807	Special Fire Protection	St Patrick's School	Manjan ST Tongala	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_54857
1250808	Special Fire Protection	Tongala PS	28 Miller ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_56021
1250809	Special Fire Protection	Rushworth Kindergarten and Childcare	32 Esmonde ST	Public	Rainforest : 0 Degrees & Upslope	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	700	EDU_childrensnservices_58220 Vegetation Box Iron Bark
1250810	Special Fire Protection	St Joseph's School	Campaspe ST Rochester	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_54928
1250811	Special Fire Protection	Rochester Kindergarten	Fraser ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_58057
1250812	Special Fire Protection	Rochester and District Childcare Centre	35 Mackay ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_58060
1250813	Special Fire Protection	Rochester PS	George ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_56118
1250814	Special Fire Protection	Rochester SC	Edward ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_secondary_56747
1250815	Special Fire Protection	Lockington Consolidated School	Bums ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_56013
1250816	Special Fire Protection	Gunbower PS	School RD	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_55200
1250817	Special Fire Protection	ABC Development Learning Centre Echuca	112 Northern HWY	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	South West	(blank)	EDU_childrensnservices_59055
1250818	Special Fire Protection	Echuca South PS	McKenzie ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_55666
1250819	Special Fire Protection	Echuca South Community Preschool	232 High ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57540
1250820	Special Fire Protection	Echuca Specialist School	High ST South	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_special_55860
1250821	Special Fire Protection	Echuca War Memorial Aquatic Centre	CRN High ST and Service ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_62022
1250823	Special Fire Protection	Echuca Holiday and OSHC	Sutton ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_60063
1250824	Special Fire Protection	Echuca East PS	21-31 Eyre ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_primary_55236
1250825	Special Fire Protection	Berrimba Child Care	94 Hare ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_60739
1250826	Special Fire Protection	Campaspe Community Children's Centre	392-400 High ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_58424
1250827	Special Fire Protection	Echuca Central Kindergarten	287 Anstruther ST	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57538
1250829	Special Fire Protection	St Joseph's College Echuca	21 Dickson ST	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_secondary_54925
1252107	Special Fire Protection	Echuca CLG	Crofton ST Echuca	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_secondary_8855_2?
1252108	Special Fire Protection	Echuca East Preschool	115 Stawell ST Echuca	Public	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	EDU_childrensnservices_57539
1252109	Special Fire Protection	1st Echuca	106 Mitchell ST Echuca	Private	Grassland : >0-5 Degrees	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252110	Special Fire Protection	1st Lockington	24 Clare AVE Lockington	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252111	Special Fire Protection	1st Rochester	Victoria ST Rochester	Public	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252112	Special Fire Protection	1st Stanhope	Recreation ground and Midland HWY Stanhope	LGA	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252113	Special Fire Protection	Cunningtons Camp Site	Prairie RD Lockington	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252295	Special Fire Protection	1st Kyabram	Racecourse Reserve and CNR Racecourse RD Kyabram	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Sct
1252685	Special Fire Protection	Kyabram Guide Hall	Tulloh ST Kyabram	Private	Grassland : >0-5 Degrees	>60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Guides
1252686	Special Fire Protection	Tongala Guide and Scout Centre	St James ST Tongala	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC_Guides

1252667	Special Fire Protection	Echuca Guide Hall	Stawell ST Echuca	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	(blank)	REC Guides
1252848	Residential	Rushworth	Rushworth	Private	Rainforest : 0 Degrees & Upslope	>60m	Medium	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	109,303,420	Vegetation Box Iron Bark
1252847	Residential	Echuca West Development	Echuca	Private	Grassland : >0-5 Degrees	<20m	High	Low	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	West	109,303,420	
	Special Fire Protection	Greens Lake Camping Ground	Greens Lake RD Corop	Private	Grassland : >0-5 Degrees	20-60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	South East	(blank)	Goulbourn Murray Water

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Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do Ignitions occur frequently ?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12201	Infrastructure	Midland HWY	Campaspe	VicRoads	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire) + Direct Flame (Grassland)	Surrounds	223	
12202	Infrastructure	Northern HWY	Campaspe	VicRoads	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	223	Coliban Water
12203	Infrastructure	Murray Valley HWY	Campaspe	VicRoads	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	223	
12206	Infrastructure	Kyabram - Echuca 66KV Sub-transmission Line 1	Kyabram to Echuca	Private	Regional	Low	Moderate	Yes	Yes	Almost certain	Very High	2C	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,219,401	Powercor
12207	Infrastructure	Kyabram - Echuca 66KV Sub-transmission Line 2	Kyabram to Echuca	Private	Regional	Low	Moderate	Yes	Yes	Almost certain	Very High	2C	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,219,401	Powercor
12208	Infrastructure	Shepparton - Kyabram 66KV Sub-transmission Line 1	Shepparton to Kyabram	Private	Regional	Low	Moderate	Yes	Yes	Almost certain	Very High	2C	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,219,401	Powercor
12209	Infrastructure	Shepparton - Kyabram 66KV Sub-transmission Line 2	Shepparton to Kyabram	Private	Regional	Low	Moderate	Yes	Yes	Almost certain	Very High	2C	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,219,401	Powercor
12210	Infrastructure	Kyabram - Stanhope 66KV Sub-transmission Line	Kyabram to Stanhope	Private	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,219,401	Powercor
12211	Infrastructure	Stanhope Zone Substation	Stanhope	Private	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	108,214,219,401	Powercor
12212	Infrastructure	SHTS-FVTS-BETS Transmission Line	Shepparton to Bendigo	Private	National/ State	Moderate	Major	No	Yes	Likely	Very High	2A	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	427	If two lines are lost this would have a major impact on the regional area and potential state-wide impact Fosterville Gold mine Tee Off SP AusNet
12213	Infrastructure	Mt Burramboot Communications Towers	Mt Burramboot	Other	Regional	Low	Moderate	No	Yes	Likely	High	3A	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	206,212,214	Optus Emergency Services Communications Mobile phone and switching system to Snowy Mountains
12214	Infrastructure	Growlers Hill Communications Tower	Rushworth	Other	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	217	Emergency Services Communications CFA, Mobile Phone and Fire Watch Tower
12215	Infrastructure	Echuca Aerodrome R	Echuca	LGA	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	207,405,409	Ambulance Victoria and water filling point for fire bombing

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Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do Ignitions occur frequently ?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12216	Tourist & Recreational	Southern 80	Murray River Echuca	Other	Regional	Low	Moderate	Yes	No	Possible	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	100,101,204, 307,307,401, 409,415,417, 424	Up to 35,000 people
12217	Tourist & Recreational	Murray River Marathon	Murray River Campaspe	Other	Local	Low	Minor	Yes	No	Possible	Low	NA	Ember attack + Smoke Impact + Direct Flame (Bushfire) + Direct Flame (Grassland)	Surrounds	409	Late December
12230	Commercial	Reid Stock Feeds	Colbinabbin	Private	Regional	Low	Moderate	No	Yes	Likely	High	3A	Direct Flame (Grassfire)	North	103,205,206, 212,409	
12234	Infrastructure	Echuca WTP	Echuca	Water Author	Regional	Moderate	Major	Yes	Yes	Almost certain	Extreme	1C	Smoke Impact + Direct Flame (Grassland)	Surrounds	103,214,223, 406	Coliban Water Regional impact to business and industry
12237	Infrastructure	Echuca WWTP	Echuca	Water Author	Regional	Moderate	Major	Yes	Yes	Almost certain	Extreme	1C	Smoke Impact + Direct Flame (Grassland)	Surrounds	103,214,223, 406	Coliban Water
12238	Infrastructure	Rochester WTP	Rochester	Water Author	Regional	Moderate	Major	Yes	Yes	Almost certain	Extreme	1C	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12239	Infrastructure	Rochester SPS 6	McKenzie ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Bushfire)	Surrounds	207,209,214, 406,414	Coliban Water
12241	Infrastructure	Tongala SPS 11	Finlay RD Tongala	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			800	Goulburn Valley Water
12242	Infrastructure	Tongala SPS 11	Finlay RD Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12243	Infrastructure	Tongala SPS 2	McGowan ST Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12244	Infrastructure	Tongala SPS 3	Gooda ST Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12245	Infrastructure	Tongala SPS 4	CNR Gooda and Purdy ST Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12246	Infrastructure	Tongala SPS 8	Henderson RD Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12247	Infrastructure	Tongala SPS 1	Henderson RD Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12248	Infrastructure	Tongala SPS 5	Miller ST Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12249	Infrastructure	Tongala SPS 9	Purdey ST Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12250	Infrastructure	Tongala SPS 10	Deakin GR Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12251	Infrastructure	Tongala SPS 7	Finlay RD Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12252	Infrastructure	Tongala SPS 6	Finlay RD Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12253	Infrastructure	Tongala WWTP WPS	Tongala	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12254	Infrastructure	Tongala WWTP	Tongala	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Bushfire)	Surrounds	212	Goulburn Valley Water
12255	Infrastructure	Tongala Raw Water Reserve 1	Tongala	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			212	Goulburn Valley Water

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12256	Infrastructure	Tongala WTP	Tongala	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12257	Infrastructure	Kyabram WWTP	Kyabram	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12258	Infrastructure	Kyabram Raw Water Storage and WPS	Kyabram	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12259	Infrastructure	Kyabram SPS 33	Wood RD Kyabram	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12260	Infrastructure	Kyabram SPS 28	Wood RD Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12261	Infrastructure	Kyabram SPS 29	Crichton RD Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12262	Infrastructure	Kyabram SPS 23	Albion ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12263	Infrastructure	Kyabram SPS 19	Barton RD Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12264	Infrastructure	Kyabram SPS 21	McCormick RD Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12265	Infrastructure	Kyabram SPS 22	Mellis ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12266	Infrastructure	Kyabram SPS 18	Banyule CRT Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12267	Infrastructure	Kyabram SPS 20	Markham ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12268	Infrastructure	Kyabram WTP	Kyabram	Water Author	Local	Moderate	Moderate	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12269	Infrastructure	Kyabram SPS 17	Prunus CRT Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12270	Infrastructure	Kyabram SPS 7	Station ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12271	Infrastructure	Kyabram SPS 30	Oswald ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12272	Infrastructure	Kyabram SPS 15	Wight ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12273	Infrastructure	Kyabram SPS 16	Dawes RD Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12274	Infrastructure	Kyabram SPS 24	Saunders ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12275	Infrastructure	Kyabram SPS 5	Fenaughty ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12276	Infrastructure	Kyabram SPS 9	Showgrounds Allan ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12277	Infrastructure	Kyabram SPS 8	Allan ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12278	Infrastructure	Kyabram SPS 14	Wattle ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12279	Infrastructure	Kyabram SPS 13	Tehan AVE Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water

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12280	Infrastructure	Kyabram SPS 12	Fischer ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12281	Infrastructure	Kyabram SPS 32	Koala CRT Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12282	Infrastructure	Kyabram SPS 11	Lancaster ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12283	Infrastructure	Kyabram SPS 10	Tweedle ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12284	Infrastructure	Kyabram SPS 27	Station ST Kyabram	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12285	Infrastructure	Girgarre WTP	Winter RD Girgarre	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12286	Infrastructure	Girgarre WWTP	Girgarre	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12287	Infrastructure	Girgarre SPS 2	School RD Girgarre	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12288	Infrastructure	Girgarre SPS 1	Olympic ST Girgarre	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12289	Infrastructure	Stanhope SPS 3	Railway AVE Stanhope	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12290	Infrastructure	Stanhope SPS 2	Railway AVE Stanhope	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12291	Infrastructure	Stanhope WPS	Stanhope	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA			212	Goulburn Valley Water
12292	Infrastructure	Stanhope SPS 4	Midland HWY Stanhope	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12293	Infrastructure	Stanhope SPS 1	Midland HWY Stanhope	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	212	Goulburn Valley Water
12294	Infrastructure	Rushworth/Stanhope WWTP	Stanhope	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			212	Goulburn Valley Water
12295	Infrastructure	Rushworth SPS 2	Moora RD Rushworth	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			212	Goulburn Valley Water
12296	Infrastructure	Rushworth SPS 1	Murchison RD Rushworth	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	212	Goulburn Valley Water
12297	Infrastructure	Corop WTP	Midland HWY Corop	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12298	Infrastructure	Colbinnabbin WTP	Cemetery LN Colbinnabbin	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12299	Infrastructure	Colbinnabbin Tower	Meade LN Colbinnabbin	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12300	Infrastructure	Corop Raw WPS	School RD Corop	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12301	Infrastructure	Rushworth CWS	Dunlop Hill Rushworth	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	Goulburn Valley Water
12302	Infrastructure	Colbinnabbin WPS 52	Colbinnabbin	Water Author	Regional	Moderate	Major	No	Yes	Likely	Very High	2A			214	Coliban Water
12303	Infrastructure	Colbinnabbin WPS 51	Colbinnabbin	Water Author	Regional	Moderate	Major	No	Yes	Likely	Very High	2A			214	Coliban Water
12304	Infrastructure	Echuca SPS 11	Terricks RD Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	800	Coliban Water
12305	Infrastructure	Colbinnabbin WPS 53	Colbinnabbin	Water Author	Regional	Moderate	Major	No	Yes	Likely	Very High	2A			214	Coliban Water

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12306	Infrastructure	Elmore WRP	Elmore	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12307	Infrastructure	Rochester WRP	Rochester	Water Author	Regional	Low	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12308	Infrastructure	Bendigo SPS 4	Dudley ST Rochester	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12309	Infrastructure	Rochester SPS 13	William ST Rochester	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12310	Infrastructure	Rochester SPS 1	Northcote ST Rochester	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12311	Infrastructure	Rochester SPS 2	Charles ST Rochester	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12312	Infrastructure	Rochester SPS 12	Gray ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12313	Infrastructure	Rochester SPS 11	Lowry ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12314	Infrastructure	Rochester SPS 14	Kyabram RD Rochester	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12315	Infrastructure	Rochester SPS 5	Echuca RD Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12316	Infrastructure	Rochester SPS 8	Fraser ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact	Surrounds	214	Coliban Water
12317	Infrastructure	Rochester SPS 10	Church ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12318	Infrastructure	Rochester SPS 9	Everard ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12319	Infrastructure	Rochester SPS 7	Railway RD Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12320	Infrastructure	Rochester SPS 2	Charles ST Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12321	Infrastructure	Rochester WPS 40	Rochester	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12322	Infrastructure	Rochester WPS 41	Rochester	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12323	Infrastructure	Rochester WPS 42	Rochester	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12324	Infrastructure	Rochester Clearwater WSR 137	Rochester	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12325	Infrastructure	Rochester Clearwater WSR 137	Rochester	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12326	Infrastructure	Rochester High Level Tower WSR 140	Rochester	Private	Regional	Low	Moderate	Yes	Yes	Almost certain	Very High	2C	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12327	Infrastructure	Lockington SWR	Lockington	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	800	Coliban Water

Economic



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do ignitions occur frequently?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12328	Infrastructure	Lockington SPS 5	Barton ST Lockington	Private	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Bushfire)	Surrounds	214	Coliban Water
12329	Infrastructure	Lockington SPS 4	King ST Lockington	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12330	Infrastructure	Lockington SPS 1	Joyce ST Lockington	Private	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12331	Infrastructure	Lockington SPS 2	Elizabeth ST Lockington	Private	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12332	Infrastructure	Lockington SPS 3	Lucas ST Lockington	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12333	Infrastructure	Lockington Basin 1	Lockington	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12334	Infrastructure	Lockington Basin 2	Lockington	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12335	Infrastructure	Lockington High Water Storage Tank	Lockington	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12336	Infrastructure	Lockington WTP Clear Water Storage	Lockington	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12337	Infrastructure	Echuca SWR	Echuca	Water Author	Regional	Moderate	Major	No	Yes	Likely	Very High	2A			214	Coliban Water
12338	Infrastructure	Echuca SPS 19	Wharparilla DR Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12339	Infrastructure	Echuca SPS 20	Wharparilla DR Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12340	Infrastructure	Echuca SPS 21	Wharparilla DVE Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12341	Infrastructure	Echuca SPS 3	Watson ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12342	Infrastructure	Echuca SPS 18	Hansen ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12343	Infrastructure	Echuca SPS 2	Sturt ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact	Surrounds	214	Coliban Water
12344	Infrastructure	Echuca SPS 1	Anstruther ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12345	Infrastructure	Echuca SPS 24	Woodlands CRT Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12346	Infrastructure	Echuca SPS 29	Echuca West	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12347	Infrastructure	Echuca SPS 9	McBride PDE Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12348	Infrastructure	Echuca SPS 5	Murray Valley HWY Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12349	Infrastructure	Echuca SPS 25	Wearne RD Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12350	Infrastructure	Echuca SPS 6	Bowen ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12351	Infrastructure	Echuca SPS 28	Sunrise GLY Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12352	Infrastructure	Echuca SPS 11	Terricks RD Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Bushfire)	Surrounds	214	Coliban Water

Economic



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do Ignitions occur frequently ?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12353	Infrastructure	Echuca SPS 30	Mitchell RD Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	South West	214	Coliban Water
12354	Infrastructure	Echuca SPS 8	Mitchell ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12355	Infrastructure	Echuca SPS 26	Sunset AVE Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12356	Infrastructure	Echuca SPS 4	High ST Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12357	Infrastructure	Echuca SPS 17	Northern HWY Echuca	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12358	Infrastructure	Echuca SPS 10	High ST South	Water Author	Local	Low	Minor	Yes	No	Possible	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12359	Infrastructure	Echuca SPS 16	Chelsworth Park Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12360	Infrastructure	Echua SPS 27	McKenzie RD Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12361	Infrastructure	Echuca SPS 13	Matong RD Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12362	Infrastructure	Echuca South Clearwater Storage Tank	Echuca	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	214	Coliban Water
12363	Infrastructure	Echuca South Elevated Tank	Echuca South	Water Author	Local	Low	Minor	Yes	Yes	Almost certain	High	3D	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12364	Infrastructure	Gunbower SPS 3	Cnr Island RD and Pavone RD Gunbower	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact	Surrounds	214	Coliban Water
12365	Infrastructure	Gunbower SPS 1	Cnr Wilson ST and Gunbower ST Gunbower	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12366	Infrastructure	Gunbower SPS 2	Cnr Island RD and Brown ST Gunbower	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12367	Infrastructure	Gunbower Elevated WT	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12368	Infrastructure	Gunbower WTP	Gunbower	Water Author	Local	Moderate	Moderate	No	Yes	Likely	High	3A			214	Coliban Water
12369	Infrastructure	Gunbower SWR	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12370	Infrastructure	Echuca WPS 27	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke impact + Direct Flame (Grassland)	Surrounds	800	Coliban Water
12371	Infrastructure	Lockington WTP	Lockington	Water Author	Local	Moderate	Moderate	No	Yes	Likely	High	3A			214	Coliban Water
12372	Infrastructure	Gunbower Clearwater Storage Tank 2	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			214	Coliban Water
12373	Infrastructure	Gunbower Clearwater Storage Tank 4	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			214	Coliban Water

Economic



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do ignitions occur frequently?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12374	Infrastructure	Gunbower Clearwater Storage Tank 1	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12375	Infrastructure	Gunbower Clearwater Storage Tank 3	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12376	Infrastructure	Gunbower Clearwater Storage Tank 5	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12377	Infrastructure	Echuca High ST Tower	Echuca	Water Author	Regional	Low	Moderate	No	Yes	Likely	High	3A	Smoke Impact	Surrounds	214	Coliban Water
12378	Infrastructure	Echuca Clearwater Tank	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12379	Infrastructure	Echuca WTP Sediment WT 2	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12380	Infrastructure	Echuca WTP Sediment WT 1	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			214	Coliban Water
12381	Infrastructure	Backwash Water Settling Tank	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12382	Infrastructure	Echuca Lagoon	Echuca	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Colian Water
12383	Infrastructure	Gunbower WPS 7	Gunbower	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12384	Infrastructure	Echuca WPS 16	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4			214	Coliban Water
12385	Infrastructure	Echuca WPS 24	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12386	Infrastructure	Echuca WPS 25	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12387	Infrastructure	Echuca WPS 26	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12388	Infrastructure	Echuca WPS 2	Echuca	Water Author	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	800	Coliban Water
12389	Infrastructure	Echuca SPS 7	Bynan ST Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12390	Infrastructure	Echuca SPS 14	Stratton CRT Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
12391	Infrastructure	Echuca SPS 22	Comelia Creek RD Echuca	Water Author	Local	Low	Minor	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	214	Coliban Water
125253	Infrastructure	Rushworth WTP	Rushworth-Tatura RD Rushworth	LGA	Local	Low	Minor	No	Yes	Likely	Medium	4	Direct Flame (Bushfire) + Direct Flame (Grassland)	West	212	Goulban Valley Water
125259	Infrastructure	Kyabram Automatic Weather Station		Private	Local	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact + Direct Flame (Grassland)	Surrounds	212	BOM_AWS
125314	Infrastructure	Rushworth mobile site	Rushworth-Tatura RD Rushworth	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	206,214	Optus
125314	Infrastructure	Elmore Central mobile site	48 Rosaia RD Elmore	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	206,214	Optus

Economic



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Level of Impact	Recovery	Consequence Rating	Do ignitions occur frequently ?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
125314	Infrastructure	Rochester mobile site	Moore ST Rochester	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact	Surrounds	206,214	Optus
125314	Infrastructure	Kyabram mobile site	33 Barton RD Kyabram	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact	Surrounds	206,214	Optus
125314	Infrastructure	Echuca mobile site	142 Anstruther ST Echuca	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact	Surrounds	206,214	Optus
125314	Infrastructure	Patho mobile site	Murray Valley HWY Patho	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	206,214	Optus
125315	Infrastructure	Lockington mobile site	Lot 1 King ST Lockington	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	206,214	Optus
125315	Infrastructure	Tongala mobile site	1994 Finlay ST Tongala	Private	Local	Low	Minor	No	Yes	Likely	Medium	4	Smoke Impact + Direct Flame (Grassland)	Surrounds	206,214	Optus
	Commercial	Bio Mix Compost	980 Two Trees RD Carag Carag	Private	Regional	Low	Moderate	No	Yes	Likely	High	3A	Direct Flame (Grassfire)	Surrounds	(blank)	

Cultural Heritage



Asset ID	Asset Subclass	Asset Name	Location	Land Manager	Separation Distance	Threat Rating	Susceptibility	Consequence Rating	Do Ignitions occur frequently?	Expected to spread and reach assets?	Likelihood Rating	Risk Rating	Priority Rating	Hazard Impact	Impact Direction	Treatments Identified	Notes
12601	Non-Indigenous	Echuca Wharf	Echuca	Other	>60m	Medium	High	Moderate	Yes	Yes	Almost certain	Very High	2C	Ember attack + Smoke Impact + Direct Flame (Bushfire)	Surrounds	800	Victorian Heritage Register Red Gum Forest
12607	Non-Indigenous	Red Gum Memorial Archway	Echuca Caravan Park	Private												800	Victorian Heritage Register
12608	Non-Indigenous	Echuca Court House	Dickson ST	Private												800	Victorian Heritage Register
12609	Non-Indigenous	Former Police Station	Warren ST	Public												800	Victorian Heritage Register
12610	Non-Indigenous	Hopwood Hotel	High Street	Private												800	Victorian Heritage Register
12611	Non-Indigenous	Former Permewan Wright Offices	High ST	Private												800	Victorian Heritage Register
12612	Non-Indigenous	Former Custom House	High ST	Private												800	Victorian Heritage Register
12613	Non-Indigenous	Former Murray Hotel		Private												800	Victorian Heritage Register
12614	Non-Indigenous	Former Echuca Town Hall	Heygarth ST	LGA												800	Victorian Heritage Register
12615	Non-Indigenous	Former Dr Crossons Residence & Surgery	Heygarth ST	Private												800	Victorian Heritage Register
12616	Non-Indigenous	Former Pumping Station		Private												800	Water Authority? Victorian Heritage Register
12617	Non-Indigenous	St Andrews Uniting Church	Pakenham ST	Private												800	Victorian Heritage Register
12618	Non-Indigenous	Echuca Baby Health Centre	Hare ST	Private												800	Victorian Heritage Register
12619	Non-Indigenous	Echuca Flour Mill	Darling ST	Private												800	Victorian Heritage Register
12620	Non-Indigenous	Echuca Railway Complex	Sturt ST	Public												800	DOT? Victorian Heritage Register
12621	Non-Indigenous	Former Railway Engine Shed	Sturt ST	Public												800	DOT? Victorian Heritage Register
12622	Non-Indigenous	Torrumberry Wind Lock Chamber Complex	River RD	Private												800	Victorian Heritage Register
12623	Non-Indigenous	Rochester Court House	Moore ST	Private												800	Victorian Heritage Register
12624	Non-Indigenous	Karlsruhe	Bymeside Kyabram	Private												800	Victorian Heritage Register
12625	Non-Indigenous	Fergusons Bridge	Bendigo Murchison RD	Private												800	Victorian Heritage Register
12626	Non-Indigenous	Colbinabbin Community Well	Two Chain RD	Private												800	Victorian Heritage Register
12627	Non-Indigenous	Colbinabbin Homestead	Channel RD	Private												800	Victorian Heritage Register
12628	Non-Indigenous	Former Rushworth Chronicle Printing Office	Esmonde ST	Private												800	Victorian Heritage Register
12629	Non-Indigenous	Rushworth Court House	Rushworth Margamie RD	Private												800	Victorian Heritage Register
12630	Non-Indigenous	Whroo Gold Puddling Machine		Private												800	Victorian Heritage Register
12631	Other	Rushworth Township Heritage	Rushworth High ST	Private	>60m	Medium	Moderate	Moderate	No	Yes	Likely	High	3A	Smoke Impact	Surrounds	100,101,104,109,110,202,203,207,208,215,217,218,222,223,224,303,307,404,405,411,415,416,417,418,419,423,424,500,700	Veg: Box Iron Bark
12632	Other	Whroo Historical Area	Whroo	Parks Vic	<20m	High	Moderate	Moderate	No	Yes	Likely	High	3A			800	Veg Box Iron Bark Includes Balaclava Mine
12633	Other	Lockington Heritage Centre	Lockington	Other	>60m	Medium	High	Moderate	No	No	Unlikely	Low	NA	Smoke Impact + Direct Flame (Grassland)	Surrounds	100,101,104,109,110,202,203,207,208,215,217,218,222,223,224,303,307,404,405,411,413,415,416,417,418,419,423,424,500	Surrounding Wooden Buildings

Likelihood and Consequence Tables

Likelihood Table				
LEVEL	DESCRIPTOR	GENERIC DESCRIPTION	STATE DESCRIPTION	Spread
A	ALMOST CERTAIN	IS EXPECTED TO OCCUR IN MOST CIRCUMSTANCES	CLOSE TO 100%-ANNUALLY	Always
B	LIKELY	WILL PROBABLY OCCUR IN MOST CIRCUMSTANCES	33% (ONCE IN EVERY 3 YEARS)	1 in 3 occasions
C	POSSIBLE	MIGHT OCCUR AT SOME TIME	10% (ONCE IN EVERY 10 YEARS)	1 in 10 occasions
D	UNLIKELY	COULD OCCUR AT SOME TIME	3% (ONCE IN EVERY 30 YEARS)	hardly ever
E	RARE	MAY OCCUR IN EXCEPTIONAL CIRCUMSTANCES ONLY	1% (ONCE IN EVERY 100 YEARS)	Rarely

STATE BUSHFIRE CONSEQUENCE TABLE							
GENERIC DESCRIPTOR	STATE DESCRIPTOR BUSHFIRE	People - bushfire	Infra-structure - bushfire	Public Admin - Bushfire	Environment - bushfire	Economy - Bushfire	Social Setting
CATASTROPHIC	National (Catastrophic)	50+ lives lost. Hundreds injured 1000+ houses destroyed. 2000+ people displaced. 30,000 + 10,000 livestock lost.	Loss of critical infrastructure and/or services for 24-48 hours to the Melbourne metropolitan area.	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	State (Major)	10 fatalities as a direct result of the bushfire event. 300+ houses destroyed. 500+ people displaced. 30,000 - 10,000 livestock lost. Significant loss of breeding stock.	Loss of critical infrastructure and/or services for up to 8-16 hours to the Melbourne metropolitan area. Loss of services to a major regional city/several suburbs for up to 1 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.
MODERATE	Regional (Serious)	5 fatalities as a direct result of the bushfire event. Large number of people affected by smoke. 100+ houses lost. 200+ people displaced 3000 - 10000 livestock lost.	Loss of critical infrastructure and/or services for up to 2-5 hours to the Melbourne metropolitan area. Loss of services to a major regional city/several suburbs for 3-4 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.
MINOR	Municipal (Significant)	Single fatality and/or multiple serious injuries requiring hospitalisation as a direct result of the bushfire event. Up to 30 houses lost. 50+ people displaced. 3,000 + 1,000 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.
LOCAL	Community (Important)	Serious injury and disability, upto 50 people displaced, upto 2000 livestock lost	Loss of services to regional town for a day. Loss of services to local community of upto 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		CONSEQUENCE				
		COMMUNITY IMPORTANT	MUNICIPAL SIGNIFICANT	REGIONAL SERIOUS	STATE MAJOR	NATIONAL CATASTROPHIC
A	ALMOST CERTAIN	MODERATE	MODERATE	HIGH	EXTREME	EXTREME
B	LIKELY	LOW	MODERATE	HIGH	HIGH	EXTREME
C	POSSIBLE	LOW	LOW	MODERATE	HIGH	HIGH
D	UNLIKELY	LOW	LOW	MODERATE	MODERATE	HIGH
E	RARE	LOW	LOW	LOW	MODERATE	MODERATE

The Rushworth Community Information Guide is shown on the following pages.

Prepare - Act - Survive



Why Rushworth is at risk of bushfire

Fire Authorities have assessed Rushworth as having a HIGH bushfire risk. Local residents and visitors should be prepared for fire and have a plan for when the Fire Danger Rating is **SEVERE**, **EXTREME** or **CODE RED**.

This community information guide includes a map containing key elements of Rushworth's bushfire risk. At the time of publication, there are **NO** designated Neighbourhood Safer Places – Places of Last Resort at Rushworth.

Important community bushfire safety information is provided to help you make informed decisions about how to survive a bushfire, whether you're a local resident or a visitor to the area. Planning and preparation can save lives in a bushfire. Use this community information guide to help you and your family to prepare.



Prepare

It's important if *you* live, work and travel in this area, to plan what *you* will do if a bushfire threatens.

Understand **your** bushfire risk

- Rushworth has been assessed as having a HIGH bushfire risk in accordance with the Victorian Fire Risk Register.
- This assessment takes into account local factors such as undulating box ironbark forest and open grassland.
- Learn about the bushfire risk and history in your area.
- Assess and prepare the capability of your property to withstand a bushfire.
- Be aware it is impossible for emergency services to protect every individual home or property.
- Remember that your usual travel routes may be limited or blocked. Know your local roads.
- In extreme wind conditions, and without any occurrence of fire in the area, roads and tracks may become blocked by falling trees, preventing residents from leaving early.
- Know the daily Fire Danger Rating in the district where you live or travel www.cfa.vic.gov.au

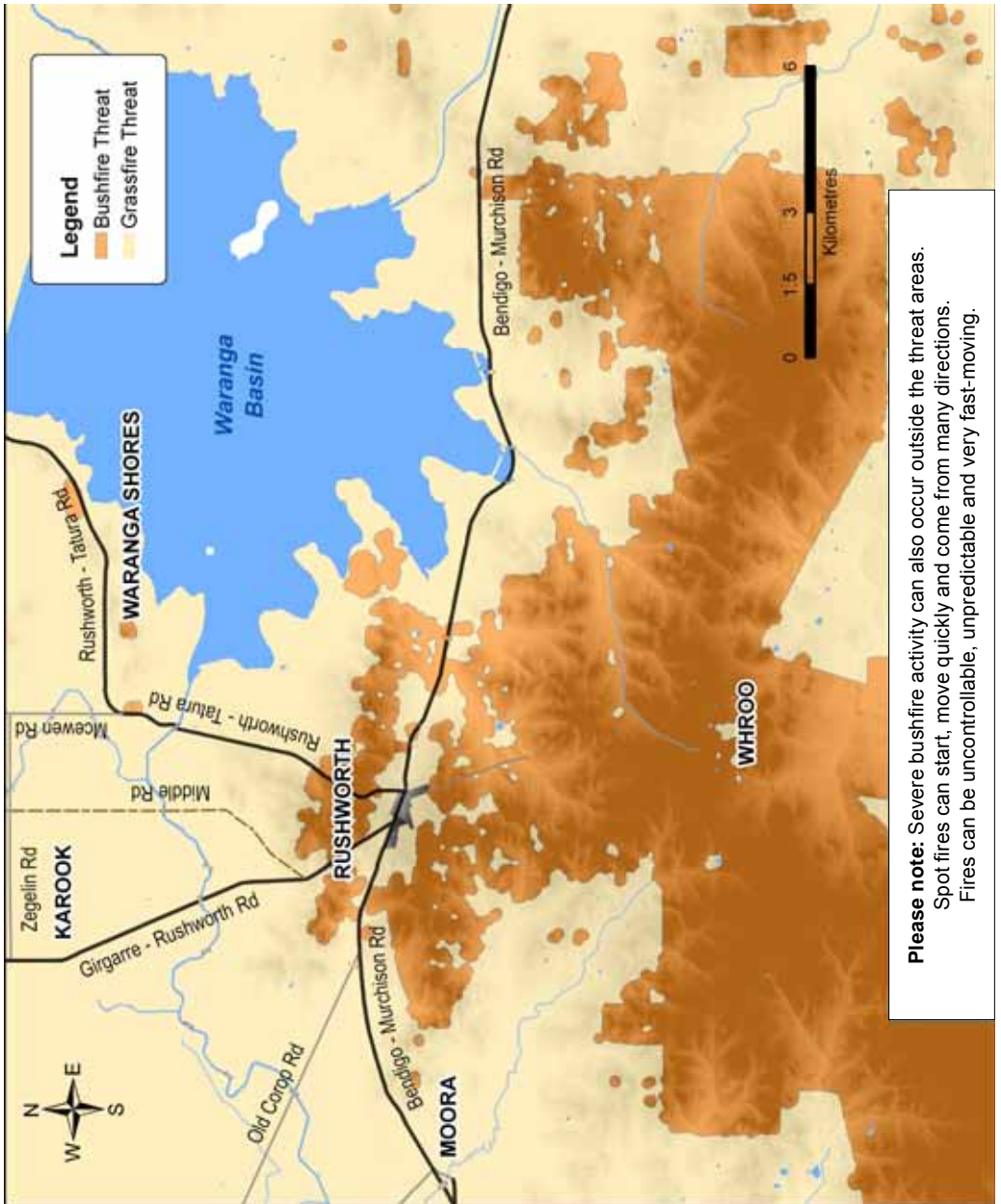
Reduce **your** bushfire risk

- Residents and organisations should seek advice from the fire brigade about burning off dangerous areas on private land.
- Consult the Rushworth Community Fire Plan on-line or check the corresponding booklet for detailed local advice <http://docs.com/FIQE>
- Homes with too much vegetation and other flammable materials close to them are difficult to protect from bushfire.
- Take advantage of rubbish removal and green waste disposal opportunities.
- Prepare your home and property against bushfire, burning embers and radiant heat.
- Even if your plan is to leave early, a well-prepared home has a greater chance of not being destroyed by bushfire.
- Assist your neighbours to reduce their bushfire risk as this may help make your property safer.
- **Develop and practise your Bushfire Survival Plan.**
- **You will also need to plan for your pets' safety.**
- You can attend or join:
 - A local Fire Ready Victoria meeting
 - A Bushfire Planning Workshop
 - A neighbourhood Community Fireguard Group
- **The Household Bushfire Self-Assessment Tool is available to help individuals assess the bushfire risk on their own property.**



You can download the CFA FireReady kit, containing the full Leaving Early Planning Template from cfa.vic.gov.au, or call **1800 226 226 (TTY 1800 122 969)**

Rushworth Bushfire Threat Map





Prepare

FACT

It is your responsibility to prepare yourself, your family and your home for the threat of bushfire. You need to act decisively in accordance with your **Bushfire Survival Plan** when bushfires threaten. Your survival depends on your preparations and the decisions you make.



Leave early

Leaving early is always the safest option.

Leaving early is more important when:

- The Fire Danger Rating is **CODE RED**. Homes aren't designed to withstand a bushfire during these conditions. Any fire that starts and takes hold will be so intense that you won't be safe to stay and defend your home – no matter how well prepared it is.
- There are children, elderly or disabled people in your home. People who are vulnerable due to age, health or any other reason, should always leave early.
- You have not prepared yourself or your property to give you and your home the best level of protection from a fire.
- Your house is not defensible. Some homes are not safe to defend because of their location or construction.

If you plan to leave, then you should leave well before a fire reaches your area and well before you are under threat. Follow the actions recommended for the Fire Danger Rating of the day (see pages 6 and 7). **Visit CFA website www.cfa.vic.gov.au**

Where will you go?

- Is it a safe choice? You may choose somewhere that suits your personal needs and circumstances, e.g. a family member's house in an urban area with a backyard for your pet, or shopping centre complex, or central business district of a large regional centre.
- If you don't have any other options, you may wish to consider the following townships:
Bendigo or Shepparton.
- Always tell someone that you are leaving and where you are planning to go.

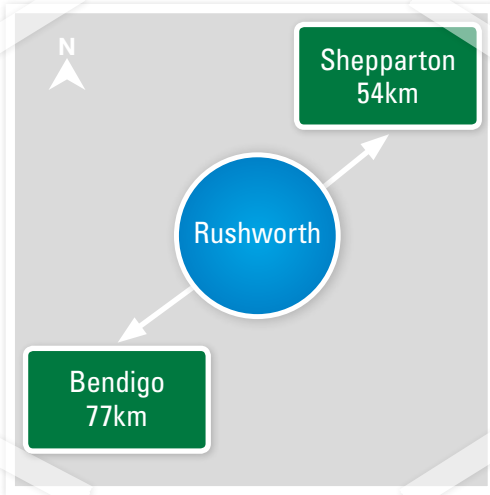
If you - or someone you care for - will need help to prepare and leave early when there is high fire risk, obtain a Red Cross **Bushfire: Preparing to leave early guide** at www.cfa.vic.gov.au or request a copy by phoning the **VicEmergency Hotline** on **1800 226 226**

PREPARE. ACT. SURVIVE.

PREPARE. You must make important decisions before the fire season starts.

ACT. The higher the Fire Danger Rating, the more dangerous the conditions.

SURVIVE. Fires may threaten without warning, so you need to know what you will do to survive.



- When travelling on high risk days avoid heavily treed roads; stick to main roads and freeways.
- The one-lane bridge over the Waranga Outlet Channel presents a very real collision threat. Consult the Rushworth Community Fire Plan on-line or check the corresponding booklet for more information <http://docs.com/FIQE>



How you can stay in touch

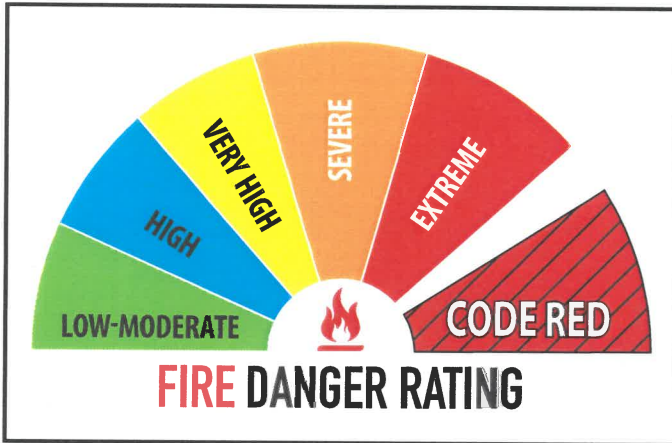
- Bookmark the CFA incidents webpage (www.cfa.vic.gov.au/fires).
- Follow CFA on Twitter (www.twitter.com/cfa_updates).
- Join the CFA Facebook page (www.facebook.com/cfavic).
- Access the CFA mobile website at www.cfa.vic.gov.au/mobile or if you have a smartphone, download the VicEmergency app for iPhone, Blackberry, Android and Windows.
- Beware, cordless home phones will NOT work if the mains power supply is cut.
- Wireless communications, internet and landlines may vary between service providers.
- Mobile phone coverage in and around Rushworth is generally good, but may not be accessible during times of emergency and may vary between service providers.
- There are no community-alerting sirens operating in this township.
- Sirens sounding nearby are a trigger for you to seek information, as they may indicate fire activity in your area. When you hear a siren, further information may be available via ABC local radio, commercial and designated community radio stations, and SKY News TV (see page 16).



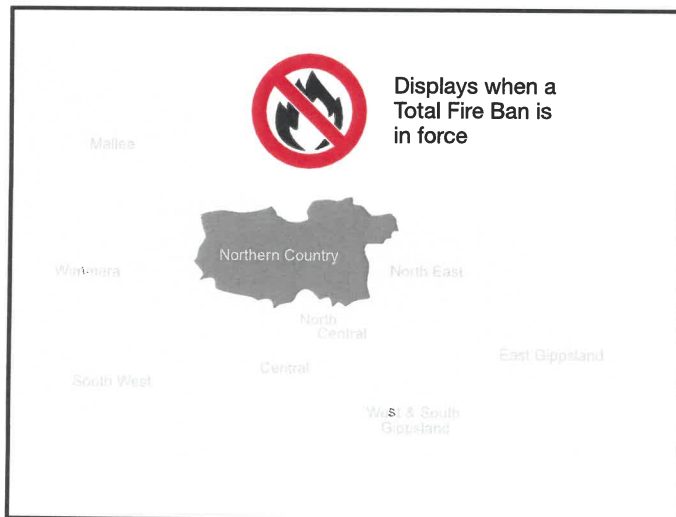
For more information on developing a plan for high risk days and assessing bushfire risk at your property, contact the **Victorian Bushfire Information Line: 1800 240 667**

Act

Note *your* district's Fire Danger Rating daily as *your* trigger to act.



Rushworth is in the Northern Country Fire District



Triggers



Actions

What does it mean?	What should I do?
<p>These are the worst conditions for a bush or grass fire.</p> <p>Homes are not designed or constructed to withstand fires in these conditions.</p> <p>The safest place to be is away from high risk bushfire areas.</p>	<p>Leaving high risk bushfire areas the night before or early in the day is your safest option – do not wait and see.</p> <p>Avoid forested areas, thick bush and long, dry grass.</p> <p>Know your trigger.</p> <p>Make a decision about:</p> <ul style="list-style-type: none"> –when you will leave –where you will go –how you will get there –when you will return –what you will do if you cannot leave
<p>Expect extremely hot, dry and windy conditions.</p> <p>If a fire starts and takes hold, it will be uncontrollable, unpredictable and fast moving. Spot fires will start, move quickly and will come from many directions.</p> <p>Homes that are situated and constructed or modified to withstand a bushfire, that are well prepared and actively defended, may provide safety.</p> <p>You must be physically and mentally prepared to defend in these conditions.</p>	<p>Consider staying with your property only if you are prepared to the highest level. This means your home needs to be situated and constructed or modified to withstand a bushfire, you are well prepared and you can actively defend your home if a fire starts.</p> <p>If you are not prepared to the highest level, leaving high risk bushfire areas early in the day is your safest option.</p> <p>Be aware of local conditions and get information by listening to ABC Local Radio, commercial and designated community radio stations or Sky News TV, going to www.cfa.vic.gov.au or call the VicEmergency Hotline on 1800 226 226.</p>
<p>Expect hot, dry and possibly windy conditions.</p> <p>If a fire starts and takes hold, it may be uncontrollable.</p> <p>Well prepared homes that are actively defended can provide safety.</p> <p>You must be physically and mentally prepared to defend in these conditions.</p>	<p>Well prepared homes that are actively defended can provide safety – check your bushfire survival plan.</p> <p>If you are not prepared, leaving bushfire prone areas early in the day is your safest option.</p> <p>Be aware of local conditions and get information by listening to ABC Local Radio, commercial and designated community radio stations or Sky News TV, going to www.cfa.vic.gov.au or call the VicEmergency Hotline on 1800 226 226.</p>
<p>If a fire starts, it can most likely be controlled in these conditions and homes can provide safety.</p> <p>Be aware of how fires can start and minimise the risk.</p> <p>Controlled burning off may occur in these conditions if it is safe – check to see if permits apply.</p>	<p>Check your bushfire survival plan.</p> <p>Monitor conditions.</p> <p>Action may be needed.</p> <p>Leave if necessary.</p>

Act Planned Emergency Service Actions



Understanding Warnings

- A warning will be issued when any type of emergency could impact you or your property.
- Warnings aim to provide you with the best advice and information on what is happening to help you make good decisions to protect yourself and others.
- Remember: don't rely on an official warning to leave. Emergencies can start quickly and threaten you within minutes.
- Always use more than one source for your emergency information.

Evacuation

You may be advised to evacuate by police or emergency services. In fast-moving situations, you may not always receive a warning or recommendation to evacuate. Stay informed, aware of local conditions and the Fire Danger Rating, so that you can plan ahead and make the right decision in a bushfire. Leaving early is always the safest option. Refer to 'Community Evacuation Information', available at www.police.vic.gov.au

Should a recommendation to evacuate be made, the following advice would apply:

- A fire is rapidly advancing.
- If advised, travel to the evacuation destination as advised by emergency services.
- Strictly follow all instructions and advice.



Community information

- A newsletter containing updates for communities affected by an emergency.
- Can also be used as notification that an incident has occurred but there is no threat to community.



Advice

- An incident is occurring or has occurred in the area. Access information and monitor conditions.
- Can also be used as a notification that activity in the area has subsided and is no longer a danger to you.



Warning (Watch & Act)

- An emergency is developing nearby. You need to take action now to protect yourself and others.



Emergency Warning

- You are in imminent danger and need to take action immediately.



Prepare to evacuate/evacuate now

- An evacuation is recommended or procedures are in place to evacuate.

Emergency Service Actions

Fire Agencies

- Protecting life is the highest priority
- Issue advice and warnings via official channels (see page 16)
- Control and manage fire fighting activities
- Where safe to do so, protect:
 - Identified community assets
 - Property
 - The environment

Victoria Police

- Keep people safe and property secure
- Control traffic in bushfire areas
- Manage evacuations
- Register people who have evacuated
- Work with other agencies to keep the community informed

Rushworth

- Residents and visitors, know your risk and act in accordance with the Fire Danger Rating triggers on pages 6 and 7

Campaspe Shire

- Activate and support the Emergency Relief Centres when required
 - Assist and support the Community to recover from the emergency
- NOTE: On Code Red days, council services may not be available

VicRoads

- Manage arterial road closures on advice from Police and Fire Agencies. This information can be found on the VicRoads website
- Undertake safety inspections of roads prior to re-opening

Red Cross

- Looks after people at Emergency Relief Centres (ERC)
- At ERC, provides basic care and comfort (personal support) to evacuated persons
- At ERC, assists VicPol with registration of evacuated persons
- At ERC, provides catering and Emergency First Aid services

Bushfire Survival

Options

WHAT TO DO

Leave Early

- When the Fire Danger Rating is Code Red, leaving early is always the safest option
- Leave early destinations could include homes of families & friends who live outside the risk area, a nearby town or built up area

Always the safest option



For more information on how to prepare your own
www.cfa.vic.gov.au VicEmergency Hotline

Well Prepared

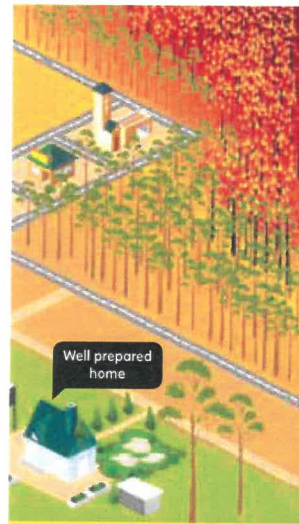
If leaving the high-risk area is no longer an option, there may be options close to where you are that could protect you. These include:

Your safety is



- A well prepared home (yours or your neighbours') that you can actively defend on Severe & Extreme Fire Danger Rating days only
- Private Bushfire Shelter (bunker) that meets current regulations
- Designated community fire refuge

not guaranteed

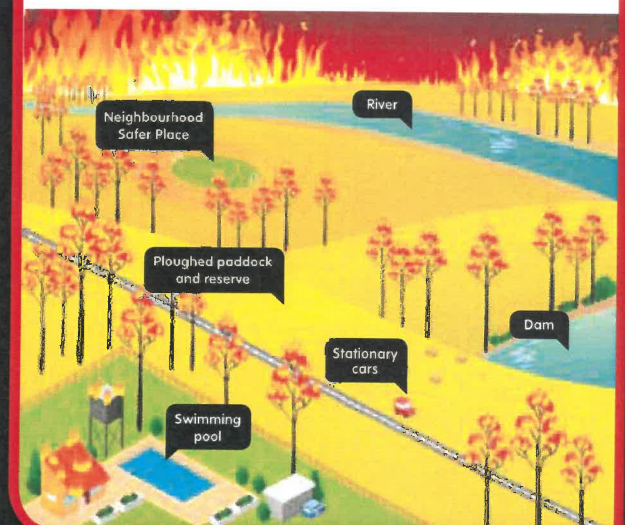


Last Resort

In situations where no other options are available to you, taking shelter in one of the below may protect from radiant heat:

- Neighbourhood Safer Place (place of last resort)
- Stationary car in a clear area
- Ploughed paddock or reserve
- Body of water (i.e. beach, swimming pool, dam, river, etc.)

High risk of trauma, injury or death



Bushfire Survival Plan:
1800 226 226

Survive

Fire may threaten without warning, so you need to know what to do to survive.

Community Fire Refuges

- A Community Fire Refuge is a place that is a building open to the public that can provide short-term shelter from immediate life-threatening effects of a bushfire event.
- There is no Community Fire Refuge located in Rushworth.

Activate **your** bushfire survival plan **early**

- Remember, bushfires can happen when least expected. Planning and preparation are essential.
- A last-minute decision may cost you and your family your lives.
- **You may not receive an official warning about a bushfire.**
- Do NOT expect a fire truck at your property.
- Your survival and safety depend on the decisions you make.
- Protecting people will always be more important than property.
- Always tell someone what you are planning to do.
- Observe the weather, including the direction the wind is blowing.
- Watch what is happening around you and where a bushfire may be located.

Leaving late is **DANGEROUS**

- Travel on roads in this area during a fire is dangerous.
- You may be impacted by fire, and visibility may be poor due to smoke.
- The roads may be blocked due to falling trees, collisions or emergency vehicles.
- Usual travel routes may not be accessible.
- Don't assume you can turn back, as the road may have become blocked behind you.
- Lives are more likely to be lost when people make a last-minute decision to flee a bushfire.
- The risk of being overrun by bushfire is very real.
- People caught in the open are likely to face severe and often fatal levels of radiant heat.
- Leaving late is a deadly option.

There are **no** Neighbourhood Safer Places – Places of Last Resort in Rushworth

It is important that you plan to leave early (see page 4). Assemble a relocation kit.

Your relocation kit

Have a relocation kit with essential items already prepared and make sure it is stored in an easily accessible place.

Some of the things that you might like to include in your kit are:

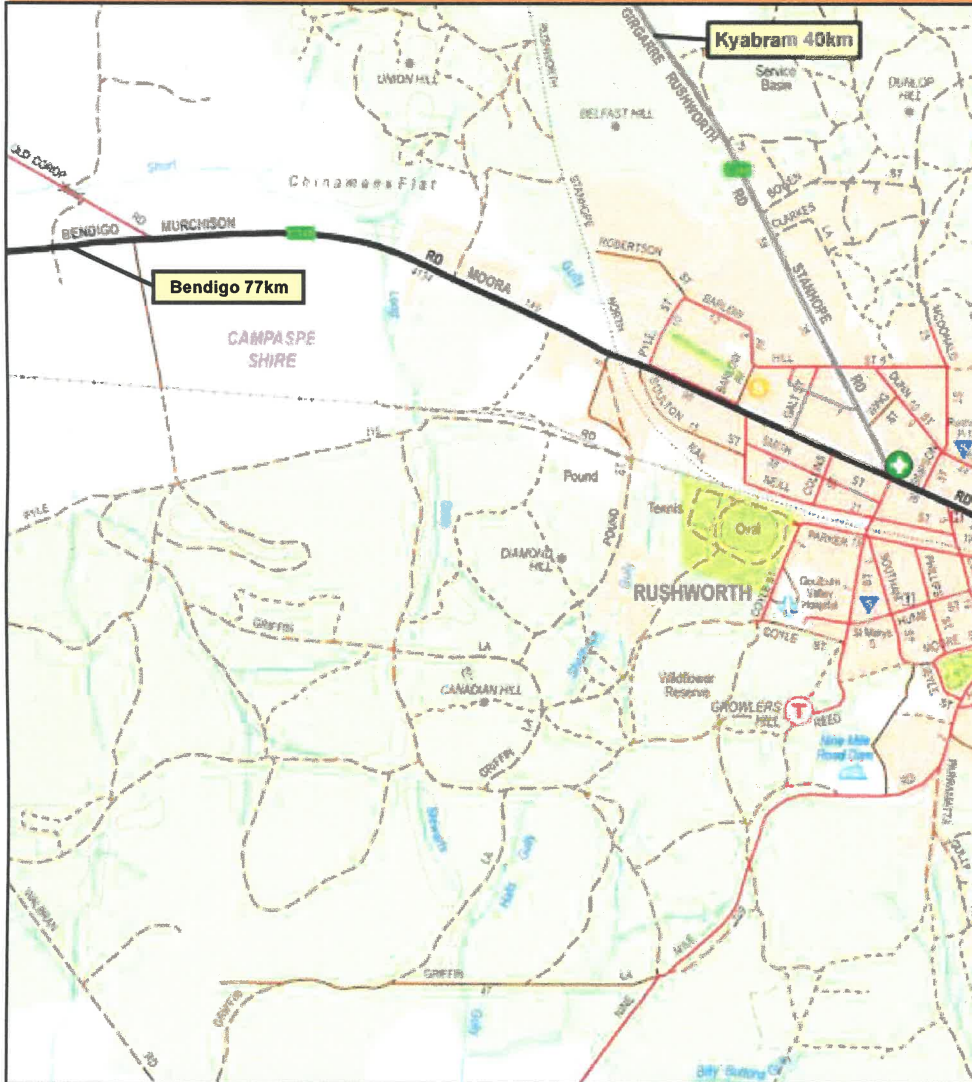
Relocation checklist

- | | |
|---|---|
| <input type="checkbox"/> Protective clothing made from natural fibres | <input type="checkbox"/> Important documents |
| <input type="checkbox"/> Woollen blankets | <input type="checkbox"/> First aid kit |
| <input type="checkbox"/> Water and medications | <input type="checkbox"/> Cash, ATM/credit cards |
| <input type="checkbox"/> Toiletries and sanitary supplies | <input type="checkbox"/> Valuables and photos |
| <input type="checkbox"/> Mobile phone and charger | <input type="checkbox"/> Battery powered radio |

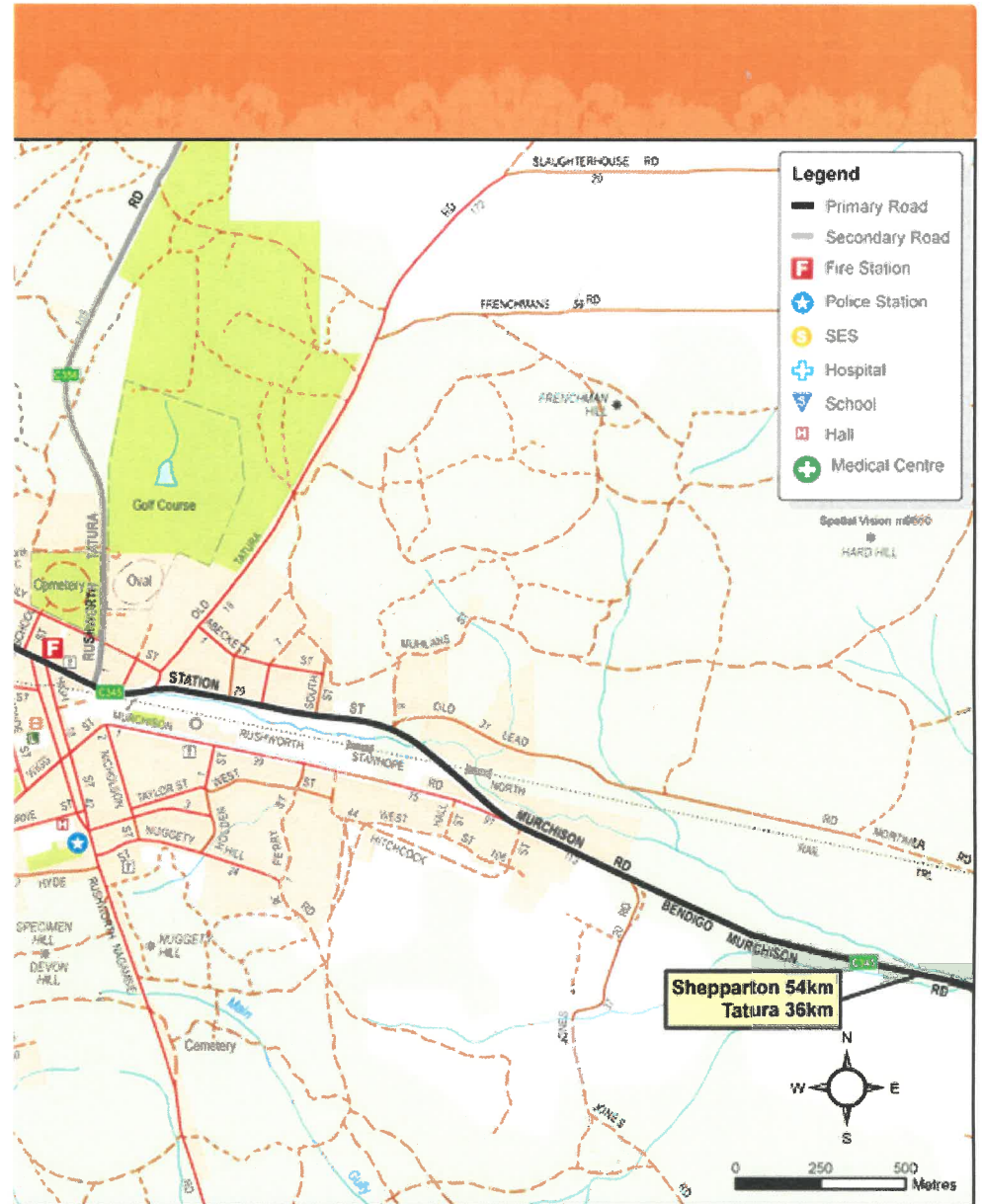




Rushworth Community Map



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In EMERGENCY dial 000 (TTY 106)

Do not call Triple Zero for information or advice. Calling Triple Zero unnecessarily may put others who are in a genuine emergency situation at risk.

VicEmergency Hotline: 1800 226 226

Emergency Contact Information

Download the VicEmergency app, the official Victorian Government App for access to community information and warnings.

Monitor the VicEmergency App and tune into your emergency broadcaster and VicEmergency website (www.emergency.vic.gov.au) on days of high fire danger ratings is the most reliable way of staying informed. Mains power may be unavailable, or fail, during fire and emergencies – keep a battery powered radio available.

Emergency Broadcasters: Sky News TV, ABC 91.1 FM, ABC 774 AM, EasyMix 1071 AM, EasyMix 98.3 FM, 3BO FM 93.5, 91.9 Star FM, 3SR 95.3 FM, 96.9 Star FM.

Road closures:	13 11 70 www.vicroads.vic.gov.au
National Park, State Forest and Park closures:	13 19 63 www.parkweb.vic.gov.au
School, early childhood services and bus route closures:	www.education.vic.gov.au
24 Hour Wildlife Emergency:	13 000 WILDLIFE or 1300 094 535
24 Hour NURSE-ON-CALL:	1300 60 60 24

Bushfire Information:

VicEmergency website:	www.emergency.vic.gov.au
CFA website:	www.cfa.vic.gov.au
Follow CFA on Twitter:	www.twitter.com/cfa_updates
Join the CFA Facebook page:	www.facebook.com/cfavic
FFMvic website (Planned burning):	www.ffm.vic.gov.au



Further Information

Dept of Human Services:	www.dhs.vic.gov.au/emergency
Forest Fire Management Victoria:	13 61 86 www.ffm.vic.gov.au
Weather:	www.bom.gov.au
CFA District Office:	(03) 5450 3406 (non emergency calls only)
Shire of Campaspe:	(03) 5481 2200 www.campaspe.vic.gov.au

Deaf, hearing impaired or speech impaired? **Contact the National Relay Service on 1800 555 677** if you use a **TTY, 1800 555 727** if you use Speak and Listen, and then ask for: **1800 226 226**

NEIGHBOURHOOD SAFER
PLACES –
PLACES OF LAST RESORT
PLAN

EXECUTIVE SUMMARY

The Victorian Government introduced the *Emergency Services Legislation Amendment Act 2009 (Vic)* (ESLA Act) which amends the *Country Fire Authority Act 1958 (Vic)* (CFA Act) and the *Emergency Management Act 1986 (Vic)* (EM Act). The effect of these amendments requires the Country Fire Authority (CFA) to certify “Neighbourhood Safer Places – **Places of Last Resort**” (NSPs) against the CFAs Fire Rating Criteria, and **Victoria’s Councils to identify, designate, establish and maintain suitable places as NSPs in their municipal districts.**

This Plan is a “Neighbourhood Safer Places – **Places of Last Resort**” Plan (NSPP) for the purpose of the legislation and once adopted, must be available for inspection at the Council Offices and be published on **Council’s website.**

NSPs are not community fire refuges or emergency relief centres. NSPs are places of last resort during the passage of a bushfire, and are intended to be used by persons whose primary bushfire plans have failed. NSPs are places of relative safety only.

This Plan is a Neighbourhood Safer Places Plan for the purposes of the legislation, and contains guidelines in:

1. Identifying by Council;
2. Assessing and certifying by the CFA;
3. Assessing by Council;
4. Designating by Council;
5. Establishing and maintaining by Council
6. Annual inspecting by Council.

When reading this Plan, any reference to Neighbourhood Safer Place should be read as “Neighbourhood Safer Place – Place of Last Resort”. Any reference to the Neighbourhood Safer Places Plan should be read as “Neighbourhood Safer Places – Places of Last Resort” Plan.

Places as NSPs within its municipal district

The steps to be undertaken are:

1. NSPs should be identified by the Municipal Emergency Resource Officer (MERO) and / or the Municipal Fire Prevention Officer (MFPO) and / or the Municipal Emergency Coordinator (MEC) with input from other appropriate Council personnel and CFA as required. This should be done by 31 May each year.
2. The CFA is required to assess potential NSPs identified by Council against the CFA Fire Rating Criteria. If the potential NSP meets the CFA Fire Rating Criteria, the CFA certify to that effect. A copy of certification will be forwarded to Council containing a summary of the criteria and assumptions used.
3. The factors Council should consider when assessing NSPs within the municipal district include:
 - Number of persons who can be accommodated;
 - Consents and rights of access;
 - Access and egress;
 - Maintenance of potential NSP in accordance with CFA assessment criteria;
 - Opening of the NSP;
 - Defendable space and fire suppression activities;
 - Ember attack on buildings / open spaces;

MUNICIPAL FIRE MANAGEMENT PLAN

- Car parking;
 - Travel time;
 - Nearby hazards;
 - Signage;
 - Maintenance and maintainability;
 - Universal access;
 - Alternative uses of potential NSP;
 - Communication with the community;
 - Public liability insurance;
 - Provision for pets / livestock;
 - Proximity to bushland fire hazard;
 - CFA requirements;
 - Other relevant matters.
4. If Council is satisfied that a place is suitable it designates the place as a NSP by 31 July. The MFPO must then provide a list of NSPs to the CFA.
5. Following designation, Council must establish the NSP including appropriate signage, publishing the location on Councils website and updating the Municipal Emergency Management Plan and Municipal Fire Management Plan. This should be done by 30 October. NSP also need to be maintained.
6. Councils must also undertake annual inspection and review of NSPs by 31 August each year. The CFA must also assess each NSP against the CFA Fire Rating Criteria.

INTRODUCTION AND BACKGROUND

In its Interim Report, the 2009 Victorian Bushfires Royal Commission recommended that neighbourhood safer places, or ‘NSPs’, be identified and established to provide persons in bushfire affected areas with a place of last resort during a bushfire.¹

In response to this recommendation, the Victorian Government introduced the *Emergency Services Legislation Amendment Act 2009* (Vic) (ESLA Act) which amends the *Country Fire Authority Act 1958* (Vic) (CFA Act) and the *Emergency Management Act 1986* (Vic) (EM Act). The effect of these amendments requires the Country Fire Authority (CFA) to certify “Neighbourhood Safer Places – **Places of Last Resort**” (NSPs) against the CFAs **Fire Rating Criteria, and Victoria’s Councils to identify, designate, establish and maintain suitable places as NSPs in their municipal districts.**

NSPs are not community fire refuges or emergency relief centres. NSPs are places of last resort during the passage of a bushfire, and are intended to be used by persons whose primary bushfire plans have failed. NSPs are places of relative safety only. They do not guarantee the survival of those who assemble there. Furthermore, there may be serious risks to safety encountered in travelling, and seeking access, to NSPs during bushfire events. Depending on the direction of a particular fire, it may not be a safer place to assemble than other places within the municipal district.

NSPs will be assessed by the CFA as providing some protection from immediate risk of direct fire attack and radiant heat, but not necessarily from other risks, such as flying embers. A NSP may be used for other operational purposes at other times.

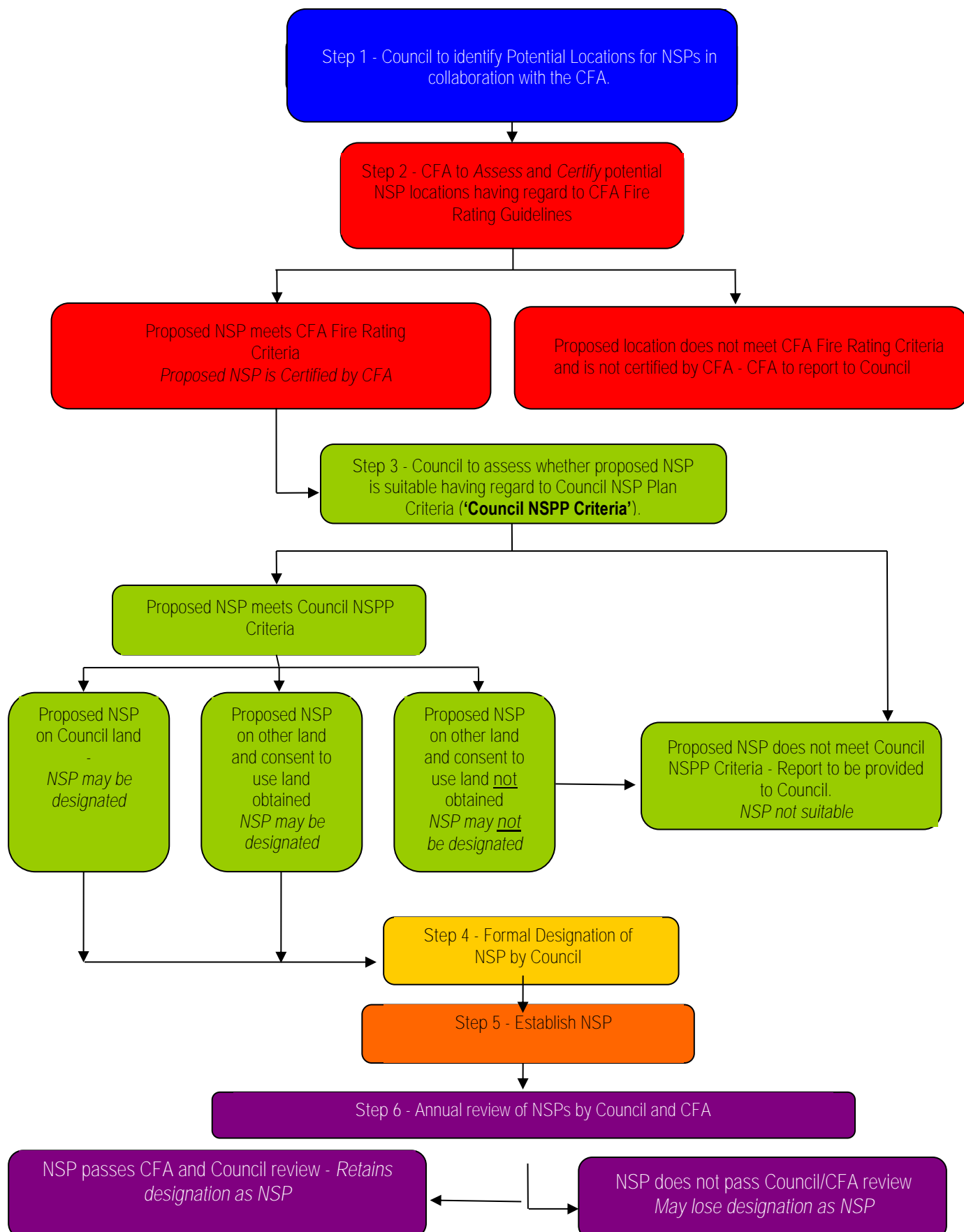
This Plan is a “Neighbourhood Safer Places – **Places of Last Resort**” Plan (NSPP) for the purposes of the legislation, and contains guidelines which have been developed by the Municipal Association of Victoria (MAV) to assist the Council.

When reading this Procedure, any reference to Neighbourhood Safer Place should be read as “Neighbourhood Safer Place – Place of Last Resort”. Any reference to the Neighbourhood Safer Places Plan should be read as “Neighbourhood Safer Places – Places of Last Resort” Plan.

¹ Recommendation 8.5, 2009 Victorian Bushfires Royal Commission Interim Report

MUNICIPAL FIRE MANAGEMENT PLAN

FLOWCHART OF THE PROCESS FOR ESTABLISHING AND MAINTAINING NSP'S AFTER ADOPTION OF THIS PLAN BY COUNCIL



DETAILS OF STEPS FOR ESTABLISHING NSPS.

1. Identification of Potential NSP Locations

1.1 Who is responsible for identifying places as potential NSPs?

Generally across the State for the 2009 / 2010 fire season, the Country Fire Authority ('CFA') assumed lead responsibility for identifying potential locations for NSPs. This was done in consultation with Councils. The initial focus was upon the identification of proposed NSPs within those municipalities with CFA Township Protection Plan ('TPP') areas in place. However, identification efforts have now expanded beyond these localities.

From 2010 onwards, Council is responsible for identifying potential places as NSPs within its municipal district. Section 50G of the CFA Act requires Council to identify potential NSP locations.

Council's identification of potential NSP locations should be undertaken by the Municipal Emergency Resource Officer (MERO) and / or the Municipal Fire Prevention Officer (MFPO) and / or the Municipal Emergency Coordinator (MEC), with input from other appropriate Council personnel and CFA as required.

1.2 When do potential NSPs need to be identified?

From 2010 onwards, Councils will identify potential places as NSPs by 31 May in each year. This should allow sufficient time for:

- (a) (CFA Certification) first, assessment and certification of the potential NSP by the CFA;
- (b) (Council Designation) designation of the potential NSP location by the Council; and
- (c) (Establishment) thirdly, and subject to the outcome of the assessment and designation process, establishing the NSPs, including the erection of signage and other steps by Council.

The process of NSP identification is ongoing. Following each fire season, Council will assess whether any additional potentially suitable NSP locations can be identified within the municipal district.

1.3 What factors should be considered when identifying potential NSP locations?

When identifying potential NSP locations, Council will consider many factors. The factors listed in Section 3 of this NSP Plan should be taken into consideration.

1.4 Who should undertake the identification of potential NSPs?

Under the CFA Act, all Councils whose municipal district is located wholly or partly in the 'country area' of Victoria are required to identify and designate NSPs.

Council should ensure that the following actions are completed prior to making any determinations regarding the assessment, designation and certification of NSPs:

- (a) *An assessment considering the matters outlined in Section 3 excluding CFA assessment, must be undertaken by Council's Municipal Emergency Resource Officer and/or Municipal Fire Prevention Officer ("MFPO") (which may be initiated through the Municipal Fire Management Planning Committee as a sub-committee of the Municipal Emergency Management Planning Committee ("MEMPC")), using appropriate available information which may include any Integrated Fire Management Planning Data and/or Victorian Fire Risk Register data and any applicable Township.*
- (b) *The MEMPC must review the results of the assessment, as summarised in the MEROs, and / or MFPOs and / or MECs report prepared under section 1.4(a) (above).*
- (c) *The MEMPC must determine if all, some or more of the potential sites are to be assessed by the CFA. If any sites are to be assessed, the MEMPC should determine that the sites be designated by Council subject to CFA certification. If any sites have already been assessed by the CFA and have been certified, then the MEMPC can recommend to Council to designate the sites.*

2. CFA TO ASSESS AND CERTIFY POTENTIAL NSP LOCATIONS

2.1 Who is responsible for assessing potential NSPs against **guidelines issued by the CFA ('CFA Fire Rating Guidelines')**?

Under section 50G(5) of the CFA Act, the CFA is responsible for assessing potential NSP locations against the CFA Fire Rating Guidelines.² This will be done by appropriately qualified and experienced CFA personnel.

Council is not responsible for the assessment and certification of potential NSPs against the CFA guidelines.

2.2 What criteria must the CFA take into account in assessing potential NSP locations?

In assessing potential NSP locations which have been identified by the Council, the CFA must consider the criteria and other considerations as set out in the CFAs Fire Rating Guidelines as issued from time to time by the CFA.

The key matters to be considered by the CFA under the current CFA Fire Rating Criteria are:

- (a) For Open Spaces
 - (i) *the appropriate separation distance between the outer edge of the potential NSP and the nearest fire hazard ('Buffer Zone')*³ *should be at least 310 metres; or*
 - (ii) *an alternative Buffer Zone distance may be prescribed by the CFA, which will ensure that the maximum potential radiant heat impacting on the site is no more than 2 kw/m².*
- (b) For Buildings
 - (i) *the Buffer Zone between the outer edge of the building and the nearest fire hazard should be at least 140 metres; or*
 - (ii) *an alternative Buffer Zone distance may be prescribed by the CFA, which will ensure that the maximum potential radiant heat impacting on the building is no more than 10 kw/m².*

2.3 When does the CFA assess a potential NSP?

Following identification of a place which may be suitable as an NSP, the potential NSP is assessed by the CFA as soon as practicable. This is likely to occur shortly after identification.

² The CFA Act refers to "Country Fire Authority Assessment Guidelines". For ease of reference in the context of this MNSP Plan, these guidelines are referred to as the CFA Fire Rating Guidelines.

³ The CFA Guidelines refer to "separation distances". However, for ease of understanding, the term "Buffer Zone" is used throughout this MNSP Plan.

2.4 When does the CFA certify potential NSP locations?

Once the assessment of a potential NSP is completed by the CFA, the CFA will certify the potential NSP if the place meets the CFA Fire Rating Criteria. The CFA will provide a copy of the CFA certification in relation to a potential NSP to Council upon completion of certification, and a summary of the criteria and assumptions upon which the assessment is based.

Council should ensure that the boundaries of both the potential NSP as certified by the CFA, and any Buffer Zone surrounding it, are clearly defined in the CFA assessment.

For reasons of community safety, it is a requirement of the CFA Act, that only those places assessed and certified by the CFA may be considered for designation as NSPs by the Council. The Council must not designate a place as an NSP unless it has CFA certification.

3. COUNCIL ASSESSMENT OF NSPs FOLLOWING CFA CERTIFICATION

3.1 Who is responsible for undertaking the Council assessment of potential NSPs?

A report prepared by the MERO, MFPO or MEC detailing whether or not the potential NSP meets the criteria listed in this plan should be prepared and provided to:

(a) the IMEMPC, where it is practicable for the MEMPC to be involved in the Council assessment process. The IMEMPC must assess the potential NSP against this plan, taking into account the MEROs, MFPOs or MECs report, and make a recommendation to Council as to whether or not to designate the potential NSP; and

(b) the Council.

3.2 When are potential NSP locations required to be assessed by Council?

Any potential NSPs certified by the CFA should be assessed by Council no later than 30 June each year, so as to allow time for the places to be designated and established as NSPs by Council, and for any appropriate amendments to be made to the MEMP and MFPP prior to the commencement of the bushfire season.

This timing is obviously subject to the CFA assessing and certifying the potential NSP location in a timely manner.

3.3 What factors should be applied by Councils in assessing the suitability of a place as a potential NSP location?

Council must assess potential NSPs in accordance with the factors outlined below to determine whether it is suitable to be designated as an NSP. Unless a potential NSP satisfies each of the criteria outlined below, it should not be designated by Council as an NSP. Following certification of a place as an NSP by the CFA, and once Council has received the CFA assessment and any criteria and CFA assumptions which underpin the assessment, Council must assess the place in accordance with the factors outlined below.

Council will then consider the CFA assessment and assumptions which underpin the assessment.

Council's assessment of CFA-certified potential NSPs may, if reasonably practicable, be conducted by the Integrated Municipal Emergency Management Planning Committee ('IMEMPC'), with a preliminary assessment to be provided to the IMEMPC by the MERO, MFPO or MEC.

The factors to determine the suitability of the place as an NSP are as follows: (NSPP Criteria):

(a) Number of persons who can be accommodated

Objective:

Council should consider if the NSP is of sufficient size to accommodate the potential numbers of people. An estimated 11.5% of the surrounding population has been adopted as guidance (ie $25\% \times 46\% = 11.5\%$ of the population).

This figure has been based on a survey conducted by the Office of the Emergency Services Commissioner of 616 households located in the 52 identified high bushfire risk townships⁴. **The survey found that “if there is a fire in their general area, almost 36% of the respondents stated that they intend to leave and go to a place in their local area. Another 46% reported that they intend to go ‘to some other place’ and while 7% said they would not leave at this time. A further 12% said that they intend to go to a designated relief centre outside their area. Of the 46% of people who said they would go to ‘some other place’, one-quarter of these respondents identified places within their local area such as friends, public places and assembly points”.**

Criteria:

Is there sufficient area for the potential numbers of people, allowing for the buffer zone, including cars, animals, disabled, etc.

(b) Consents and rights of access

Objective:

There must be appropriate land access and tenure arrangements so that Council has the right to:

- use the place as an NSP;
- access the site and surrounding areas for maintenance; and
- erect appropriate signage at the NSP, including the OESC signage and additional NSP information signage.

If the potential NSP is on land owned or controlled by Council, appropriate rights of land access and tenure are unlikely to be an issue. However, Council will need to ensure that where Council land is leased or licensed to a third party, it must be possible to put in place appropriate arrangements on reasonably satisfactory and acceptable terms with the tenant or licensee permitting Council to use the land as a potential NSP. In taking these matters into account, Council should consider what alternative uses may be made, whether temporarily or semi-permanently, of land under Council control or management.

⁴ Office of the Emergency Services Commissioner, December 2009, “Where Are They Going?” People movement during bushfires ‘ pp. 13

If the potential NSP is on Crown land not owned or controlled by Council, then the consent of the Crown land manager is likely to be required. If the land has been leased or licensed to a third party, such as a caravan park operator, then the consent of the tenant or licensee to use the place as a potential NSP will also be required. In obtaining the consent of the relevant Crown land manager, it will be necessary to consider whether or not the Crown Grant or reservation authorises the place to be used as a potential NSP.

Where it is proposed that a place on privately owned land is to be used as an NSP, then the consent of the relevant landowner (and, where applicable, occupier) for the place to be designated and used as an NSP is required. If the landowner (or occupier) does not consent to the place being designated and used as an NSP on terms which are reasonably satisfactory and acceptable to the Council, it must not be so designated and used.

Where a potential NSP is located on non Council land, with the result that consent and rights of access need to be negotiated with the owner and (where necessary) occupier, a draft form of consent document will be provided to the owner/occupier for their consideration.

If amendments are requested to the draft consent document and it is not possible or appropriate for Council to agree, then the proposed NSP should not be designated by Council.

Criteria :

Does Council have rights of access to the proposed NSP, or reasonably expect to get access?

(c) Access and Egress

Objective:

Council must assess whether there is sufficient access to the potential NSP which will allow:

- the anticipated potential numbers of people to move to and from the place; and
- the CFA and other emergency services to attend the place for asset and personnel protection activities and operations.

Council must assess potential access and egress routes, bearing in mind the fact that NSPs are places of last resort.

As people may be seeking access to an NSP in a rushed or panicked state, a number of people could be seeking access in a relatively short time and visibility could be affected by smoke, easily navigable routes to and from an NSP are crucial.

If appropriate and satisfactory access and egress routes are not available, then the proposed NSP should not be designated by Council.

Criteria :

- (i) Is the condition of the road surface suitable for the anticipated traffic?;
- (ii) Is the proximity of the NSP to major roadways appropriate?;
- (iii) Is the type and amount of vegetation along access routes appropriate to allow access? (ie consider whether vegetation could be affected by fire and pose a risk of harm to those seeking access to the potential NSP, or otherwise block access to the NSP);
- (iv) Can the capacity of access routes accommodate potential numbers of vehicles, and accommodate potential vehicle break-downs?;
- (v) Are the access roads suitable if visibility is impacted by smoke?
- (vi) Is the area free of any hazards that may exist for persons accessing the place by foot, including in the buffer zone?;
- (vii) Is the access / egress satisfactory considering any relevant matter **contained in Council's Road Management Plan prepared pursuant to the Road Management Act 2004 (Vic).**

(d) Maintenance of potential NSP in accordance with CFA assessment criteria

Objective:

Council must ensure that the potential NSP can be maintained in accordance with the criteria taken into account by the CFA in arriving at its fire rating assessment.

If additional information is required from the CFA to understand the criteria they have considered in arriving at their fire rating assessment, Council should seek this information from the CFA. If necessary, Council may request the CFA to undertake a further assessment to provide Council with additional information.

Criteria:

Can the site be maintained in accordance with CFA requirements (as listed in its assessment)?

(e) Opening of the NSP

Objective:

The NSP must be available as a place of last resort. It should be capable of being available 24 hours a day and be reliant on a process to open it which could testify the circumstances of being required as a place of last resort.

Criteria:

- (i) Is it possible or practicable to open the potential NSP or otherwise make it available for use on a 24 hour basis during the declared fire danger period?
- (ii) Is it unlikely that the NSP would be adversely affected due to the potential for damage or interference to the place during times that it is open and available for an alternative use?;
- (iii) Is any potential cost to Council associated with (i) and (ii) above reasonable?; and
- (iv) Is it likely that a potential NSP will not be affected by any unintended use, such as *an emergency relief centre*?

(f) Defendable space and fire suppression activities

Objective:

CFA have advised that there is no guarantee that fire units will attend an NSP, and that individuals who use NSPs are doing so at their own risk. There should be no expectation that fire units or other emergency services personnel will attend an NSP during a bushfire. Despite this, the potential NSP should be surrounded by sufficient open space to enable the CFA and other fire services to conduct asset protection and fire suppression operations around the place. If necessary, advice should be sought from the CFA about their defendable space and fire vehicle access requirements.

When assessing the defendable space factor, Council must consider whether or not approval to clear or disturb flora and / or fauna could be required, whether under legislation such as the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) ('EPBC Act'), *Flora and Fauna Guarantee Act 1988* (Vic) ('FFG Act') or the *Planning and Environment Act 1987* (Vic) ('PE Act'). If such approval is required, then it must be obtained before the potential NSP location is designated.

If the proposed NSP does not have adequate defendable space around it, or if approval to clear or disturb flora and / or fauna is required but cannot be obtained before the NSP is required to be established, or cannot be obtained on reasonably satisfactory conditions, it should not be designated as an NSP by Council.

Any open space should be reasonably free of obstacles which could hinder fire suppression activities.

The assessment should ask whether there is an area surrounding the NSP available to fire services which is reasonably free of:

- fences;
- buildings and sheds;
- steep inclines in close proximity to the potential NSP;
- vegetation, particularly large trees;
- other land formations, including rocks, boulders or knolls which could substantially hinder fire suppression operations.

Criteria :

Is there sufficient space for the fire agencies to conduct operations?

Is the site free of obstacles such as:

- fences?;
- buildings and sheds?;
- steep inclines in close proximity to the potential NSP?;
- vegetation, particularly large trees (is approval likely to be granted for removal of vegetation)?;
- other land formations, including rocks, boulders or knolls which could substantially hinder fire suppression operations (is approval likely to be granted to remove land formations etc)?

(g) Ember attack on buildings / open spaces

Objective:

If the potential NSP is a building, Council must consider whether or not it is likely to be reasonably free to risk of ember attack.

As the CFA is not required to assess the risk of ember attack to a building in undertaking the CFA fire rating assessment when certifying NSPs, the Council should consider this issue. Further, an open area may also have an unacceptable risk of ember attack. In considering this issue, Council may need to seek expert advice from appropriately qualified CFA personnel.

If there is an appreciable risk of the proposed NSP being compromised by ember attack which cannot be satisfactorily defended, then it is unlikely to be suitable as an NSP and should not be designated by Council.

Criteria :

Is the potential NSP free of appreciable risk of ember attack?

(h) Car Parking

Objective:

Council should assess whether there is sufficient area allowed for parking (and access to that parking) at the NSP which allows for the anticipated potential numbers of vehicles.

The parking area must not be within the buffer zone.

Criteria :

Can sufficient car parking (and access to that parking) be provided whilst still maintaining a sufficient buffer zone?

(i) Travel time

Objective:

The NSP must be close enough to the population being served to meet the need of a place of last resort. Given that the NSP is only intended to be used when all other plans have failed, it needs to be located within a short distance of those who will use it. It should also be assumed that people may not have access to motorised transport if all plans have failed. As such a travel distance to the NSP generally no more than a 15 minute walk would be desirable.

Criteria:

Is the NSP generally located no more than a 15 minute walk from the population being served?

(j) Nearby hazards

Objective:

Council should consider if there are any nearby hazards that would present an unacceptable risk to the users of the NSP or people accessing the NSP (eg fuel tanks). If there is such a hazard, the NSP should not be designated by Council.

Criteria:

Is the nearby area nearby the potential NSP free of hazards presenting an unacceptable risk?

(k) Signage

Objective:

Signage must generally be in accordance with the Signage Template, which can be **found on the Municipal Association of Victoria's e-library**.

Council must refer to the Signage Template when considering whether or not appropriate signage can be erected at or near the entry to the potential NSP.

If signage must be placed on private land, then the consent of the landowner will be required.

Criteria :

Is it possible to have appropriate signage at the entry to, and in the vicinity of, the potential NSP?

(l) Maintenance and maintainability

Objective:

Specifically, any place must be capable of being maintained so as to ensure continuing compliance with the CFA Fire Rating Criteria and the Council NSPP Criteria. If it is not possible to maintain a potential NSP, then it must not be designated as such. This is needed to ensure that NSPs remain suitable for use during each fire season.

When assessing the maintainability of the potential NSP, both the NSP and the Buffer Zone may require various maintenance activities to be undertaken on a periodic basis. The potential introduction of hazards into the Buffer Zone, such as structures, animals and vehicles, should be taken into account.

There may be cases where maintenance activities can only be undertaken by, or with the consent of, an adjoining landowner. This may, in turn, require assurances from such landowners that the place, and areas surrounding it, will be maintained to a satisfactory level.

When assessing the maintainability of a potential NSP, Council must consider whether or not approval to clear or disturb flora and / or fauna could be required, whether under legislation such as the EPBC Act, FFG Act or the PE Act. If such approval is required, then it must be obtained before the potential NSP location is designated.

If the proposed NSP is not capable of being satisfactorily maintained, then it should not be designated by Council.

Criteria:

- (i) Is ongoing maintenance of the proposed NSP, and the surrounding area, both possible and practical, having regard to the resources reasonably available to the Council?
- (ii) Is it possible for the total number of NSPs proposed to be reasonably maintained within the municipal district?

(m) Universal access

Objective:

Consideration must be given to access to the potential NSP by disabled and those with impaired mobility. In considering this issue, regard should be had to such matters as whether or not it would be necessary for cars or other vehicles to enter the NSP area to allow persons with disabilities to be dropped off within the place.

If the NSP is a building, it must meet the requirements of the Building Code of Australia 2009 and AS 1428.1 - Design for access and mobility.

Criteria :

Are there clear means of access for disabled and mobility impaired persons to the potential NSP?

Does the building meet the requirements of the Building Code of Australia 2009 and AS 1428.1 - Design for access and mobility?

(n) Alternative Uses of potential NSP

Objective:

Council must consider what other uses may be made of the potential NSP which could impact upon its ability to properly function as an NSP.

Where a potential NSP which is used for another purposes has been assessed by the CFA as meeting the criteria in the CFA Fire Rating Guidelines, and has been certified by the CFA, then the CFA has advised that those other activities will be able to continue (to the extent practicable in the circumstances) while the place is being used as an NSP.

If the place is used for other uses which could compromise its ability to be used as an NSP, then it should not be designated as an NSP by Council.

Criteria :

Is the potential NSP free of other (potential) uses which would adversely impact to the extent it should not be designated a NSP?

(o) Communication with the community

Objective:

Council must be able to communicate the location of the potential NSP to the community. There should be good community awareness of the location of the place, together with the risks that relate to the use of the potential NSP, and the risks associated with travelling to the potential NSP in the event of a bushfire.

Criteria :

Is the NSP situated such that it can be readily communicated to the community?

(p) Public liability insurance

Objective:

As a matter of prudent risk management, Council should have regard to:

- **any additional factors which are relevant to Council's maintenance of** insurance coverage for legal claims relating to the identification, designation, establishment, maintenance and decommissioning of a place as an NSP, as well as travel to an NSP; and
- any statutory defences to claims.

Criteria:

Have all (or can all) insurance issues been satisfactorily resolved?

(q) Provision for pets / livestock

Objective:

People may well bring their pets / livestock to the NSP. There should be sufficient area to accommodate them without generating unacceptable risks.

Criteria :

Is there anywhere animals could be housed safely to avoid an unacceptable risk to people or other animals?

(r) Proximity to bushland fire hazard

Objective:

Most farming zones within the Shire consist of sparsely treed areas with lower fire risks than bushland areas, therefore generally communities in farming zones will not require a NSP.

However, Council should consider if the community to be served by the potential NSP is within a declared **BMO**, or within or adjacent to a bushland area. Communities within or adjacent to bushland areas are more likely to need a NSP.

Criteria:

If the area is within the farming zone, is the community to be served within or adjacent to a bushland area or within a Wildfire Management Overlay?

(s) CFA requirements

Objective:

This will be determined by the CFA and is described in Section 2.
Council must not designate a NSP unless it has CFA certification.

Criteria:

Has the NSP been certified by the CFA?

(t) Other relevant matters

Any other matter the assessors deem to be significant.

4. DESIGNATION OF NSPS

4.1 When should Council consider the designation of a potential NSP?

Following preparation of report by the MERO and / or MFPO and / or MEC and an assessment of a potential NSP by the MEMPC, Council should determine whether or not to designate a potential NSP location by no later than 31 July. This will enable any necessary establishment works to be undertaken prior to the fire season.

4.2 Preconditions for designation of a NSP

Council needs to have obtained official consent, including government gazettal, prior to designating a new NSP on State Government owned or managed land.

4.3 Who is responsible for designation of NSPs?

Council must formally determine whether or not to designate a place as an NSP. Council should not designate a place as an NSP unless it is satisfied that the place is suitable, having regard to the Council NSPP Criteria.

4.4 What must the MFPO do once a potential NSP is designated by Council?

Once the Council has designated a place as an NSP, the MFPO must provide an updated list of all designated NSPs within the municipality to the CFA under section 50K of the CFA Act. This updated list must be provided by no later than 30 September in each year.

4.5 Proof of designation

The MAV require proof of the consideration of designation of a NSP. The MAV needs to view the section of the minutes showing the Council resolution regarding the designation of the NSP (ie they do not require the whole set of minutes).

5. ESTABLISHMENT AND MAINTENANCE OF NSPS FOLLOWING DESIGNATION

5.1 Who is responsible for establishing NSPs?

Following designation, Council is to establish all designated NSPs within the municipal district.

5.2 What must be done when establishing NSPs?

To establish a NSP after its designation, Council must:

- erect appropriate signage at and near the NSP;
- undertake any necessary preparatory works, including the construction or establishment of any required infrastructure and the clearance of vegetation, so as to enable the area to be used as an NSP;
- publish the location of the NSP on the Council website; and
- **update Council's Municipal Emergency Management Plan** (under section 20(2) of the EM Act) and **Municipal Fire Prevention Plan** (under section 55A(2) of the CFA Act) to include the location of the NSP.

Following designation, all designated NSPs within the municipality must be identified in:

- the MFPP, under section 55A(2) of the CFA Act; and
- the MEMP, under section 20(2) of the EM Act.

5.3 When must NSPs be established?

NSPs should be established no later than 30 October each year.

5.4 Maintenance of NSPs

NSPs within the municipality need to be maintained by Council. Maintenance activities must include vegetation management, hazardous tree removal and the maintenance of infrastructure required for the satisfactory functioning of the place as an NSP. If additional works have been required to establish the NSP, then those works should be subject to periodic review.

The fuel load in the vicinity of the NSP must not increase so as to adversely affect the CFA fire rating of the NSP.

Council must ensure that defensible spaces, the Buffer Zone and access and egress routes are appropriately maintained.

Council must inspect the NSP, Buffer Zone and access and egress routes on a periodic basis, and in any event not less than once every month during the declared fire danger period, to ensure that the NSP continues to be capable of functioning as an NSP. If Council identifies issues that may impact upon the functioning of the place as an NSP, then Council must:

- (a) address the issue;
- (b) take reasonable steps to have the issue addressed, such as requesting the owner of the land on which the NSP or Buffer Zone is located to address the issue; or
- (c) consider decommissioning the NSP and revoking the designation of the place as an NSP.

6. ANNUAL INSPECTIONS OF NSPS

6.1 Who is responsible for the annual review of NSPs?

Council must undertake an annual review of all designated NSPs within the municipality.

Council must also request the CFA to undertake an assessment against the CFA Fire Rating Criteria of each NSP within the municipality on an annual basis.

These reviews are intended to ensure that each NSP remains suitable for use as an NSP during the up-coming fire season.

6.2 What must be considered when undertaking inspections?

NSPs should be assessed annually against the Council NSPP Criteria. The CFA will assess NSPs against the CFA Fire Rating Criteria.

If a NSP no longer meets:

- (a) the CFA Fire Rating Criteria, then it must be decommissioned; and
- (b) the Council NSPP Criteria, then Council must determine whether or not it wishes to address any of the identified non-compliances. If it does not, then the NSP must be decommissioned.

6.3 When must NSP locations be inspected?

NSPs must be inspected prior to 31 August each year under section 50J of the CFA Act.

MUNICIPAL FIRE MANAGEMENT PLAN

FACTORS TO CONSIDER IN ASSESSING POTENTIAL NSPS

Category Number	Council NSPP Criteria	Objective Summary	Criteria	Is this achievable? Y / N
1	No of persons who can be accommodated. Refer 3.3(a)	Consider if the NSP is of sufficient size to accommodate the potential numbers of people - an estimated 11.5% of the surrounding population has been adopted as guidance.	Is there sufficient area for the potential numbers of people, allowing for the buffer zone, including cars, animals, disabled, etc?	
2	Consents and Rights of Access Refer 3.3(b)	Consider if the land is: Council owned / controlled Crown land Private land Negotiation required with landowner / manager.	Does Council have rights of access to the proposed NSP, or reasonably expect to get access?	
3	Access and Egress Refer 3.3(c)	Consider if there is sufficient access to the potential NSP which will allow for the anticipated potential numbers of people to move to and from the place and whether the CFA and other emergency services can attend the place for asset and personnel protection activities and operations. Assess potential access and egress routes - as these are places of last resort and people could be panicked, visibility could be poor etc, easily navigable routes to and from the NSP are crucial.	Is the condition of the road surface suitable for the anticipated traffic?; Is the proximity of the NSP to major roadways appropriate?; Is the type and amount of vegetation along access routes appropriate to allow access? (Ie consider whether vegetation could be affected by fire and pose a risk of harm to those	

MUNICIPAL FIRE MANAGEMENT PLAN

Category Number	Council NSPP Criteria	Objective Summary	Criteria	Is this achievable? Y / N
			<p>seeking access to the potential NSP, or otherwise block access to the NSP);</p> <p>Can the capacity of access routes accommodate potential numbers of vehicles, and accommodate potential vehicle break-downs?;</p> <p>Are the access roads suitable if visibility is impacted by smoke?</p> <p>Is the area free of any hazards that may exist for persons accessing the place by foot, including in the buffer zone?;</p> <p>Is the access / egress satisfactory considering any relevant matter contained in Council's Road Management Plan prepared pursuant to the Road Management Act 2004 (Vic).</p>	
4	Maintenance of potential NSP in accordance with CFA assessment criteria <i>Refer 3.3(d)</i>	Council must ensure the potential NSP can be maintained in accordance with the criteria taken into account by the CFA in arriving at its fire rating assessment	Can the site be maintained in accordance with CFA requirements (as listed in its assessment)?	
5	Opening of the NSP <i>Refer 3.3(e)</i>	The NSP must be available 24 hours per day during the fire season.	<p>Is it possible / practicable to open the NSP or make it available for use on a 24 hour basis during the declared fire danger period?</p> <p>Is it unlikely that the NSP would be adversely affected due to the potential for damage or interference to the place during times that it is open and available for an alternative use?;</p> <p>Is any potential cost to Council associated with (i) and (ii) above reasonable?; and</p> <p>Is it likely that a potential NSP will not be affected by any unintended use, such as an emergency relief centre?</p>	

MUNICIPAL FIRE MANAGEMENT PLAN

Category Number	Council NSPP Criteria	Objective Summary	Criteria	Is this achievable? Y / N
6	Defendable space and fire suppression activities <i>Refer 3.3(f)</i>	Consider if there is sufficient open space to enable CFA and other fire services to conduct asset protection and fire suppression operations around the place. Whether approval will be required to clear or disturb flora and / or fauna. Is approval unlikely to be received before date for establishment of NSP, then NSP should not be designated.	Is there sufficient space for the fire agencies to conduct operations? Is the site free of obstacles such as: fences; buildings and sheds; steep inclines in close proximity to the potential NSP; vegetation, particularly large trees (is approval likely to be granted to remove vegetation); other land formations, including rocks, boulders or knolls which could substantially hinder fire suppression operations (is approval likely to be granted to remove land formations etc).	
7	Ember attack on buildings / open spaces. <i>Refer 3.3(g)</i>	Consider if the building / open space is likely to be reasonably free to risk from ember attack. (This is not part of the CFAs assessment of suitability unless specifically requested). If there is an appreciable risk of the building or open space being compromised by ember attack which cannot be satisfactorily defended, then it is unlikely to be suitable.	Is the potential NSP free of appreciable risk of ember attack?	
8	Car Parking <i>Refer 3.3(h)</i>	Consider whether there is sufficient area allowed for car parking, and access to that car parking, and where it is in relation to the buffer zone.	Can sufficient car parking and access to that parking be provided whilst still maintaining a sufficient buffer zone?	
9	Travel time <i>Refer 3.3(i)</i>	The NSP must be close enough to the population being served to meet the need of a place of last resort. It should be located generally no more than a 15 minute walk from the population.	Is the NSP generally located no more than a 15 minute walk of the population being served?	
10	Nearby hazards <i>Refer 3.3(j)</i>	Consider if there are nearby hazards that would present an unacceptable risk to the users of the NSP or people accessing the NSP (eg fuel tanks).	Is the area nearby the potential NSP free of hazards presenting an unacceptable risk?	
11	Signage <i>Refer 3.3(k)</i>	Signage must be in accordance with the signage template shown in Appendix 2 of the NSPP. If signage must be placed on private land, then the consent of the landowner will be required.	Is it possible to have appropriate signage at the entry to, and in the vicinity of, the potential NSP?	

MUNICIPAL FIRE MANAGEMENT PLAN

Category Number	Council NSPP Criteria	Objective Summary	Criteria	Is this achievable? Y / N
12	Maintenance and maintainability <i>Refer 3.3(l)</i>	<p>Assess ongoing maintenance to the potential NSP and the surrounding area - whether it is both possible and practical, having regard to Council resources. Consider this in light of this proposed NSP, as well as the total number of proposed NSPs across the municipality.</p> <p>When looking at the Buffer zone, consider potential introduction of hazards such as structures, animals and vehicles.</p> <p>Consider maintenance if it requires to be done by or with consent of an adjoining landowner.</p> <p>Consider whether approval is required to clear or disturb flor and / or fauna. If so, approval must be obtained before the potential NSP location is designated.</p> <p>If the proposed NSP is not capable of being satisfactorily maintained, then it should not be designated by Council.</p>	<p>Is ongoing maintenance of the proposed NSP, and the surrounding area, both possible and practical, having regard to the resources reasonably available to the Council?</p> <p>Is it possible for the total number of NSPs proposed to be reasonably maintained within the municipal district?</p>	
13	Universal access <i>Refer 3.3(m)</i>	<p>Consider if it is necessary for cars or other vehicles to enter the NSP area to allow persons with disabilities to be dropped off within the place.</p> <p>If the NSP is a building, it must meet the requirements of the Building Code of Australia 2009 and AS 1428.1 - Design for access and mobility.</p>	<p>Are there clear means of access for disabled and mobility impaired persons to the potential NSP?</p> <p>Does the building meet the requirements of the Building Code of Australia 2009 and AS 1428.1 - Design for access and mobility?</p>	
14	Alternative uses of potential NSP <i>Refer 3.3(n)</i>	<p>Consider if the place is used for other purposes which could compromise its ability to be used as a NSP.</p>	<p>Is the potential NSP free of other (potential) uses which would adversely impact to the extent it should not be designated a NSP?</p>	
15	Communication with the community <i>Refer 3.3(o)</i>	<p>Council must be able to communicate the location of the potential NSP to the community.</p>	<p>Is the NSP situated such that it can be readily communicated to the community?</p>	
16	Public liability insurance <i>Refer 3.3(p)</i>	<p>Have regard to:</p> <ul style="list-style-type: none"> ▪ any additional factors which are relevant to Council's maintenance of insurance coverage for legal claims relating to the identification, designation, establishment, 	<p>Have all (or can all) insurance issues been satisfactorily resolved?</p>	

MUNICIPAL FIRE MANAGEMENT PLAN

Category Number	Council NSPP Criteria	Objective Summary	Criteria	Is this achievable? Y / N
		<p>maintenance and decommissioning of a place as an NSP, as well as travel to an NSP; and</p> <ul style="list-style-type: none"> any statutory defences to claims. 		
17	Provision for pets / livestock <i>Refer 3.3(q)</i>	<p>People may well bring pets / livestock to the NSP. There shall be sufficient area to accommodate without generating unacceptable risks.</p>	Is there anywhere animals could be housed safely to avoid an unacceptable risk to people or other animals?	
18	Proximity to bushland fire hazard <i>Refer 3.3(r)</i>	<p>Most farming zones within the Shire consist of sparsely treed areas with lower fire risks than bushland areas, therefore generally communities in farming zones will not require a NSP.</p> <p>However, Council should consider if the community to be served by the potential NSP is within a declared BMO, or within or adjacent to a bushland area. Communities within or adjacent to bushland areas are more likely to need a NSP.</p>	If the area is within the farming zone, is the community to be served within or adjacent to a bushland area or within a Wildfire Management Overlay?	
19	CFA requirements <i>Refer 3.3(s)</i>	<p>These will be determined by the CFA. Council must not designate a NSP unless it has CFA certification.</p>	Has the NSP been certified by the CFA ?	
20	Other relevant matters <i>Refer 3.3(t)</i>	Any other matter the assessors deem to be significant.	Specify	

HAZARD TREES IDENTIFICATION AND NOTIFICATION PROCEDURE

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

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

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

Each responsible organisation should have its 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 ES 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 2015 (the Regulations) further provide that a responsible **person may cut or remove such a tree 'provided that the tree has been assessed by a suitably qualified arborist that holds as a minimum an Arboriculture certificate level 1V including the "assess trees" module and has at least three years field experience; and that assessment/s 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 ES 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 ES 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 ES 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 Campaspe Shire Council

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

- Powercor
- SP Ausnet
- VicRoads
- Campaspe Shire Council.

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 2015*).

Procedures & 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 Management Planning Committee (the Committee), staff of the distribution business(es) 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/height 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 electric line clearance space.
- There is an excessive lean on the tree, or the tree branches 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.

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.

MUNICIPAL FIRE MANAGEMENT PLAN

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)
- The primary reasons given for the tree being identified as potentially hazardous (eg. tree is in proximity to an electric line AND there is evidence of structural weakness and/or excessive lean and/or appears to be encroaching into line clearance space etc.)
- An indication of whether or not urgent action is required.

The PRPR must take all necessary steps to advise the person responsible for the tree that it may be hazardous.

Primary Responsible Person Representative (PRPR)

For the purposes of this part of the Plan, the primary responsible person is Powercor.

All reports of hazard trees to Powercor should be made on the 'Municipal Hazard Tree Notification Form' which is located on the Powercor Website www.powercor.com.au

Contact details for the PRPR are as follows:

Agency name	Powercor
Position title of contact person	Leo Hourigan, Council Liaison Officer - Powercor
Telephone Number	03 9683 4851
Email address	lhourigan@powercor.com.au

The Committee notes that the Primary Responsible Person Representative was consulted in relation to the development of these procedures.

Procedures for Notification of Responsible Persons

Where a potentially hazardous tree has been reported to the PRPR, the PRPR should follow the procedure outlined below.

Step 1	Report provided to PRPR.	
Step 2	PRPR to determine who the responsible person is in relation to the reported tree. (If necessary, the PRPR can seek assistance from ESV for this step.)	
Step 3	Is the responsible person the primary responsible person?	Yes => applicable internal procedure for referral and assessment of potentially hazardous tree to be followed.
		No => proceed to Step 4.
Step 4	Did the report indicate that urgent action is required?	Yes => the responsible person should be notified as soon as possible, and no later than <i>by the close of the next business day</i> .
		No => the PRPR must advise the responsible person of the existence and location of a potentially hazardous tree in accordance with the timelines below.*

* The PRPR should put in place mutually agreed arrangements for the manner in which it passes on reports of potentially hazardous trees to responsible persons.

Reporting Timelines

The PRPR should provide reports to the relevant responsible person as soon as practicable.

In circumstances where:

- The potentially hazardous tree is located within a high bushfire risk area (as per s.80 of the ES 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;

the potentially hazardous tree must be referred to the relevant responsible person for action as soon as possible, and by no later than *close of the next business day*.

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.

Environmental Scan

Note: Read PPRR as MPPRR - mitigation and prevention of, preparedness for, response to and recovery from emergencies

<i>Assumptions</i>	<i>implications for fire management (+/-)</i>
<i>Demographic</i>	
<u>Human</u>	
<i>Population</i>	
<i>Is increasing across the Shire and is growing 0.54 per year to 2019. Smaller towns declining - movement to larger centres.</i>	Lack of volunteers small townships. Lack of support systems for elderly as younger family members move away.
<i>Is concentrating in the larger centres/locations/corridors of the shire (insert key towns/locations)</i>	Longer response times for rural area fires
<i>Shift of younger families away from home location during the day to work in larger centres</i>	Daytime responses from volunteers in rural areas is longer
<i>Transient population of fruit pickers occurs in Kyabram, Colbinabbin. Grey nomads / caravaners</i>	Education programs need to reflect the needs of these groups
<i>Indigenous population is high,</i>	Opportunity for cultural fire partnerships. pockets of public housing,
<i>Ageing infrastructure and absentee landholders</i>	Unmaintained infrastructure due to absentee property owners may result in an increase in structure fires
<i>Fruit picking communities - increasing number of residents in home</i>	transient community, language and cultural issues
<i>Border town with New South Wales</i>	Fires services work well, different equipment and policies - education programs need to be better linked.
<i>Age</i>	
<i>Population is ageing. Current pop for >65 is 6870 17.8%</i>	Less active volunteers. Lack of fire fighters due to age but able to fill other roles and opportunity to assist in recovery programs. Higher vulnerability. Increased risk of fatalities in structure fires.
<i>The number of school age children < 14 is 7825 which is 20.2% of population</i>	Increase in structure fires due to more people at home. Limited in their ability to perform skills in PPRR. May not be able to make decisions in relation to actions to avoid a fire.
<i>Social</i>	
<i>Level of volunteerism 28%</i>	Potential for strong support of CFA model. Smaller rural brigades struggling to maintain members.
	Greater levels of volunteerism due to availability of aging population, although roles not active firefighters more support roles.
<i>Single parent families 13.9%</i>	Low level support for fire planning in the PPRR due to family commitments and time constraints.
<i>Disadvantage</i>	
<i>Concentration of disadvantage/advantage in the Shire, (locations) (IRSED map)</i>	In each location there are areas of low socio economic status of which history has shown that their planning and preparation are significantly lower

MUNICIPAL FIRE MANAGEMENT PLAN

Assumptions	Implications for fire management (+/-)
Where may disadvantage/advantage increase (eg larger regional centres) Lockington, Girgarre, Rochester	Unlikely to undertake long term planning
Health and wellbeing	
Level of core activity need for assistance 5.2%	Most vulnerable in society and will require one on one support
Level of mental health treatment is 1.27%	Psychological impact of fire on mental health clients may be significant
Levels of suffering addiction is 0.63%	Statistics indicate may be involved in more house fires
Poor health which may be exacerbated by smoke from fires	Fire may lead to increased fatalities from associated health effects
Culture and language	
What is the level of low English proficiency is 0.3%	Verbal communication may require interpreters
What is the level of transient and agricultural visa workers	Need to work with worker suppliers in fire education
Level of new immigrants is 0.56%	May not understand the risk of bushfire or actions to undertake
	Refugees may not be comfortable with uniformed staff
	Cultural events involving fire
Land Use	
Rural properties are becoming larger and ownership is more concentrated	
What is the distribution of land use in the municipality is 11% Public and 89% Private	Balance of fire response services required needs to reflect this
What is proposed to change	Wildfire Management Overlay changing to Bushfire Management Overlay
What is the current wildfire management overlay (planning scheme overlay)	Wildfire Management Overlay changing to Bushfire Management Overlay
Housing	
What is the expected level of new housing will be 0.48% where will this be concentrated around Echuca and may increase	New housing will comply with new building standards
What is the level of rental / social housing tenancy and where is it concentrated 5.6% ranked 18 out of 78 in the state.	Rental tenants unlikely to have contents insurance, concentrated in areas of disadvantage.
What is the age breakdown of housing in the municipality older houses in the centre of towns and outlying areas, newer homes ring townships.	Older houses may not be constructed to contemporary housing standards
The incidence of housing > 40% of income is 7.2%	Residents may be over commitment financially and no \$ to maintain property.
New housing in BPA will require BAL assessment (BPA layer)	Improved costs and standards for house construction, however better defendability
Business and Commercial	
What is the extent of business and commercial area, (precincts CFA) approx 10% of town areas	Business and commercial areas are fundamental to the sustainability of communities
The extent of vacant commercial properties low	Structural fires may increase in these premises due to low maintenance

MUNICIPAL FIRE MANAGEMENT PLAN

Assumptions	Implications for fire management (+/-)
<i>Industrial</i>	
<i>The extent and type of power lines in the municipality 66KV and multiple SWER lines</i>	Private line closures on TFB days
<i>Extent of water industry adjustment (map of water spine)</i>	Reduction in irrigated land use move to piped water
<i>What is the extent of industrial land use / high bushfire fire hazards limited in High bushfire risk areas.</i>	Potential for industrial hazard material ignition however
<i>Extent of industrial area / potential hazardous materials limited hazardous materials kept within shire</i>	Work through dangerous goods officer at CFA and Worksafe
<u><i>Economy</i></u>	
<i>Employment</i>	
<i>The level of unemployment in the municipality 5.7%.</i>	Opportunities for community development through volunteerism
<i>The major employers in the municipality are Fonterra, Simplot, Nestle Australia, Cedenco, Murray Goulburn, Goulburn Murray Water, Echuca Regional Health, Campaspe Shire Council, HW Greenham & Sons, Riverside Meats, Kyabram District Health Service, Rochester & Elmore District Health Service</i>	Fire impacts on major employers have further social and community sustainability consequences
	Fire partner with major employers
<i>Agriculture</i>	
<i>What are the agricultural industries in the municipality Dairy, dryland, cropping, orchards, tomatoes</i>	Susceptibility to bush fire/structural fire/hazardous material contamination
<i>How much of the industry is exposed to water adjustment, significant</i>	Change in land use, population density
<i>Where are the links to supply chain</i>	Silos. road and rail transport
<i>Tourism</i>	
<i>Role of tourism in community/where is it focussed</i>	Mainly on the Port area of Echuca
<i>Municipal events and attractions, Port of Echuca, Southern 80 Ski Race, camping, Riverboats Music Festival, Echuca Steam Rally, Winter Blues Festival, Elmore Field Days, Massive Murray Paddle, Lockington Heritage Rally, Rushworth Easter Festival</i>	Specific event and locations that require emergency management / fire plans?
<i>Service Industries</i>	
<i>What service industries in municipality</i>	
<i>Extent and location of health services (VFRR, DHS map)</i>	Location of vulnerable people,
<i>Extent and location of school, kindergarten etc (VFRR)</i>	Location of vulnerable people
<i>Any "at risk" community services</i>	These services which will not be returned if lost to fire
<i>Manufacturing & Industry</i>	
<i>Where are primary manufacturing and industry sites SE of Echuca</i>	Impact on social community if lost to fire
<i>Where are industrial estates near high hazard environments, None in high hazard environments</i>	Risk of secondary hazardous material event if damaged by fire

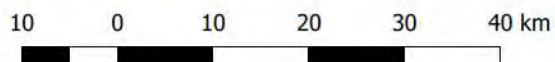
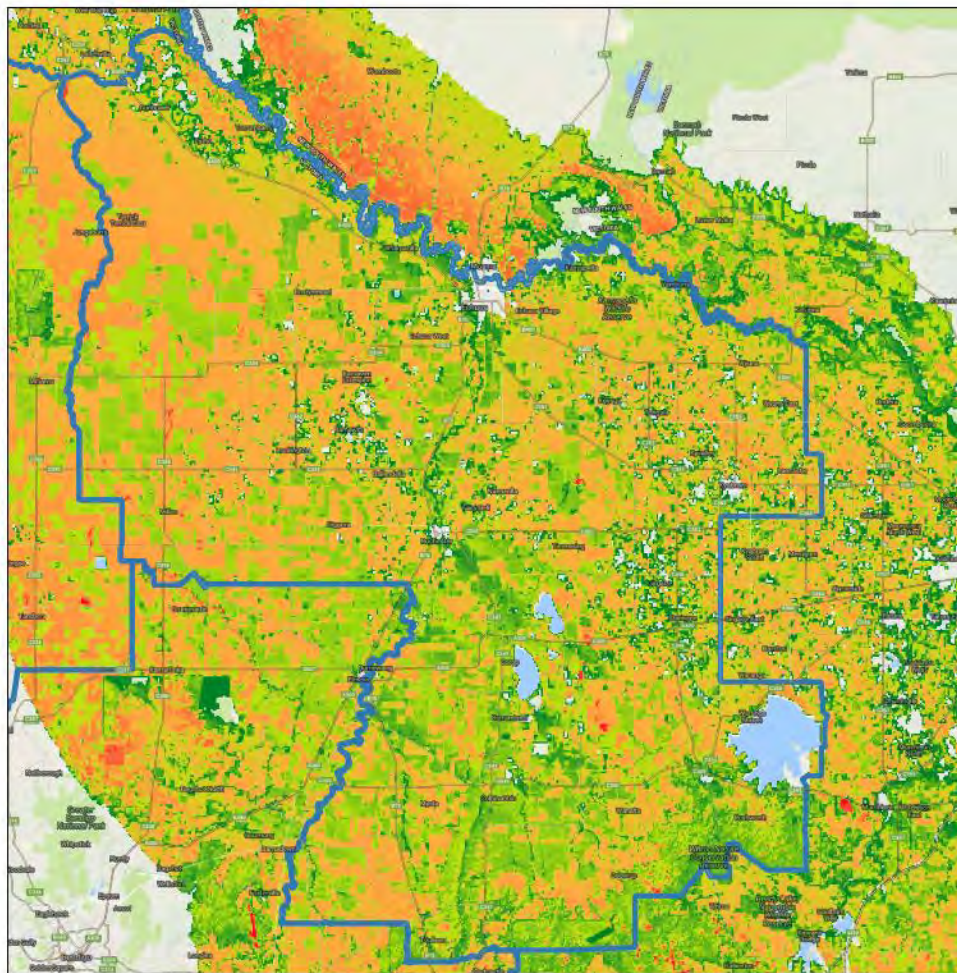
Assumptions	Implications for fire management (+/-)
<i>Emerging and expanded economies</i>	
<i>What are the expanding economies NONE</i>	If new may require new fire management solutions or bring new opportunities
<i>Settlement</i>	
<i>Where are the proposed settlement changes (+), planning scheme , settlement strategies</i>	Areas of increased settlement in high hazard areas
	Areas of abandoned settlement may become prone to arson or electrical fires
<i>What is the settlement distribution and density of the municipality, (planning scheme, COL population)</i>	Greater settlement more chance of fire occurring
	Number of people or properties that may be impacted by a fire
<i>Transport</i>	
<i>23.6% of people live near public transport</i>	Ability to get to community education programs
<i>6.8% of households have no car</i>	Ability to act independently , effectively evacuate
<i>Key highways, railways, density of use (Vic Roads, V/Line), (VFRR) (COL maps)</i>	Source of ignition, exposure of travellers
<i>Bypass routes for heavy traffic</i>	
<i>What are the critical transport connections for industry and business</i>	Possible effects of loss of infrastructure for fire
<i>Where are any designated emergency access or egress routes</i>	To be maintained
<i>Communication</i>	
<i>The level of Home internet access is 49.5%</i>	Communicating communities for PPR
<i>Broadband access is widespread across the shire</i>	Low effectiveness during high traffic demand
<i>Where are the critical communication infrastructure Growlers Hill and Mt Burrumboot.</i>	To be protected and allow for use during response activity
<u><i>The Environment</i></u>	
<i>Biodiversity</i>	
<i>Where will Increased environmental water entitlements be applied</i>	Greater moisture levels in riverine forests through more of bushfire season
	Increase in fine fuel volume through greater production
<i>Where are rare or threatened vegetation/biodiversity on roadside (COL maps) (Roadside management plans)</i>	At risk vegetation on roadsides may require alternate strategies for road side ignition or break management
<i>Where are Revegetation / plantation plantings to occur (catchment strategy)</i>	Change in forest structure of landscape and possible increase in hazard
<i>What is the fire zoning on public land for biodiversity (zone 3/4)</i>	Land managed with fire for ecological outcomes.
<i>Water</i>	
<i>Water management is changing (Connections Project) where will water be delivered in future</i>	Viability of water supply
	Reductions in irrigation water infrastructure
	Increased dryland farming

MUNICIPAL FIRE MANAGEMENT PLAN

<i>Assumptions</i>	<i>Implications for fire management (+/-)</i>
<i>Climate</i>	
<i>Which CSIRO weather zone are you in (Regional plan e-scan)</i>	Fire seasons will change into the future


Note: The information above comes from ABS Data

Note: The information above comes from Committee discussion








SEVERE FIRE INTENSITY MAP

Legend

 LGA Boundaries

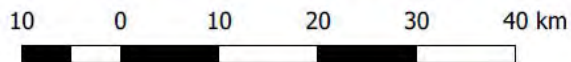
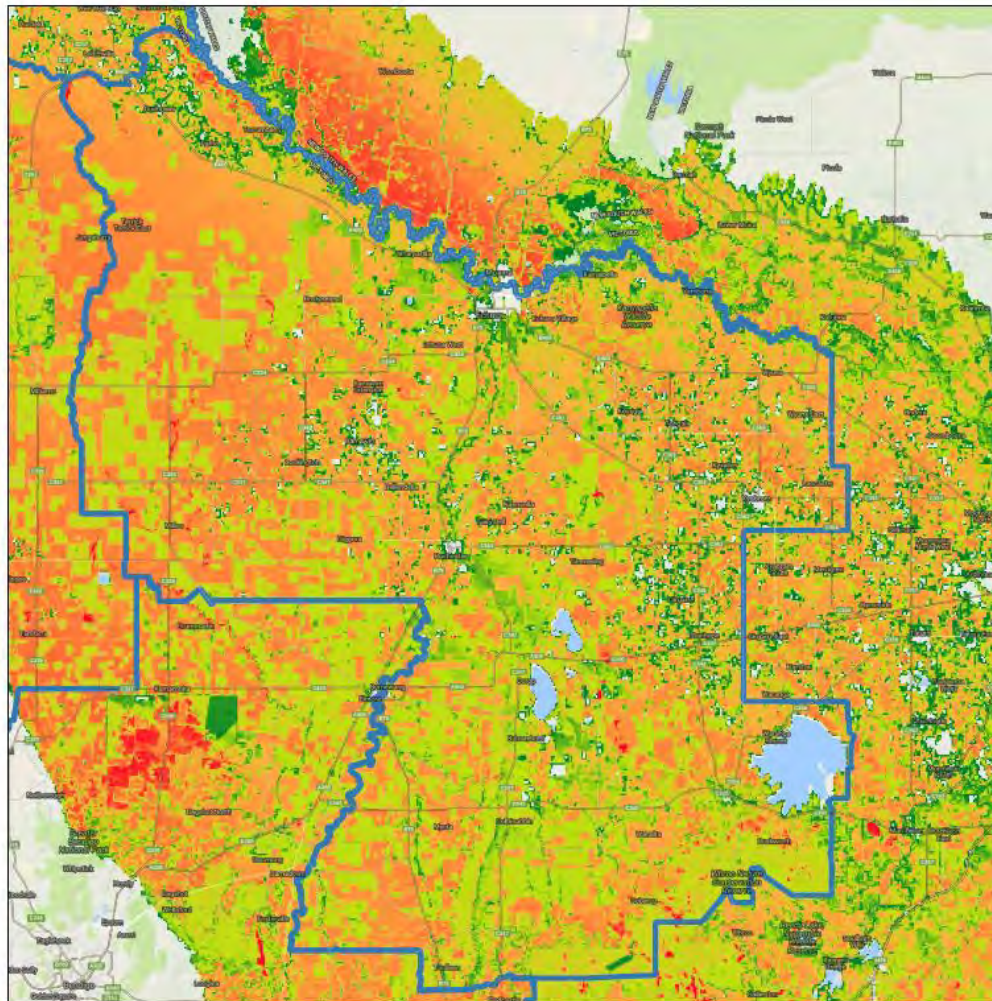
Intensity Thresholds

-  Controlled Burn Levels
-  Direct Attack Possible
-  Indirect Attack Possible
-  Asset Protection Only
-  Asset Protection Not Feasible



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EXTREME FIRE INTENSITY MAP

Legend

LGA Boundaries

Intensity Thresholds

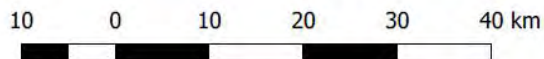
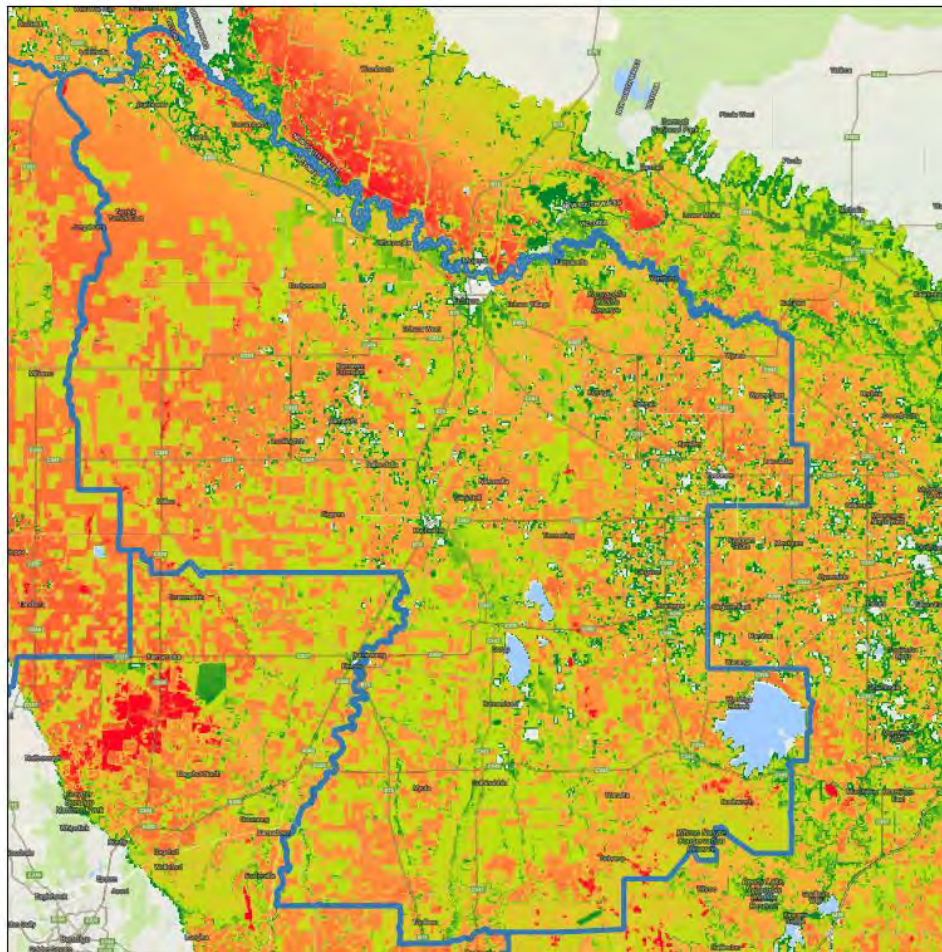
- Controlled Burn Levels
- Direct Attack Possible
- Indirect Attack Possible
- Asset Protection Only
- Asset Protection Not Feasible



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APPENDIX C.4 - FIRE INTENSITY ON CODE RED DAY



CODE RED FIRE INTENSITY MAP

Legend

LGA Boundaries

Intensity Thresholds

- Controlled Burn Levels
- Direct Attack Possible
- Indirect Attack Possible
- Asset Protection Only
- Asset Protection Not Feasible



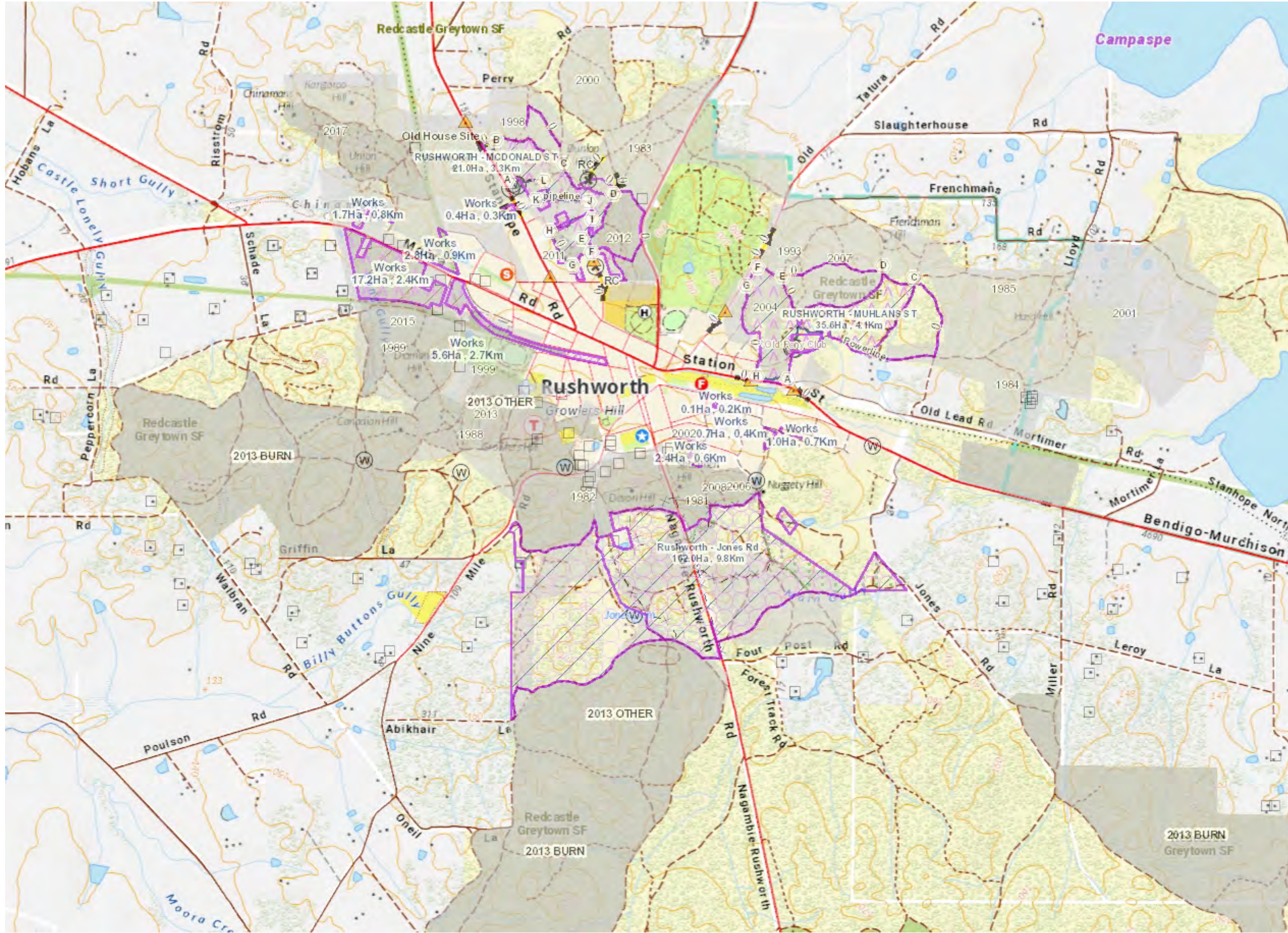
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Assumptions:

- Weather follows a hot north westerly, followed by a south westerly change (as per 10 most destructive fire days in recorded Australian history)
- Fire weather is driven by the underlying hot and dry conditions more than gusting wind speed (as per weather stations on Black Saturday)
- Wind change is blunted in the north (as per Black Saturday) and occurs later into the evening than in the south.
- Used weather from Kyabram automatic weather station based on Black Saturday and then adjusted to suite lower FFDIs
- Underlying drought conditions with a drought factor of 10
- Grassland curing at 100%
- Grassland **fuels at 4T/Ha in 'temperate grasslands' and 2T/Ha in 'eaten out grasses'**
- Utilised 2017 Fire History Layer
- 2km Ignition grid instead of previously used 5km ignition grid
- No disruption layer utilised. This is to more accurately demonstrate fire potential without the risk of fire shadow occurring due to Phoenix Rapidfire program limitations.

Rushworth Township Fire History 50yrs



- ### Legend
- Observations - Point (Editing)
 - Air strip
 - Aerial Ignition - Completed
 - Aerial Ignition - Planned
 - Asset
 - Base camp
 - Control / Operations point
 - Division Extremity (East-West)
 - Division Extremity (NW-SE)
 - Division Extremity (North-South)
 - Division Extremity (SW-NE)
 - Helipad
 - Hot spot within the burn area
 - Point of interest
 - Hazard
 - Point of origin
 - Sector Extremity (East-West)
 - Sector Extremity (NW-SE)
 - Sector Extremity (North-South)
 - Sector Extremity (SW-NE)
 - Spot fire outside of the burnt area
 - Staging area / marshalling point
 - Traffic management point
 - Water point
 - Water point - helicopter access
 - Water point - vehicle access
 - DELWP - CFA Bushfires
 - Going
 - Contained
 - Controlled
 - CFA Other Incidents
 - GOING
 - CONTAINED
 - CONTROLLED
 - SES Incidents - Going
 - New
 - Assessed
 - On Scene
 - Bushfire Observations - Point
 - Aerial Ignition - Completed
 - Aerial Ignition - Planned
 - Air strip
 - Asset
 - Base camp
 - Division Extremity (North-South)
 - Division Extremity (East-West)
 - Division Extremity (NW-SE)
 - Division Extremity (SW-NE)
 - Control / Operations point
 - Helipad
 - Hot spot within the burn area
 - Point of interest
 - Hazard
 - Point of origin



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Produced on: June 21, 2018 7:29:20 PM



0 0.5 1.0 km

1: 25,000



Acronyms used in this plan

ABS	Australian Bureau of Statistics
CIG	Community Information Guide
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CFA	Country Fire Authority
DELWP	Department of Environment, Land, Water and Planning
DHHS	Department of Health and Human Services
EMMV	Emergency Management Manual Victoria
EVC	Ecological Vegetation Class
FFDI	Forest Fire Danger Index
GFDI	Grassland Fire Danger Index
GIS	Geographic Information Systems
IFMP	Integrated Fire Management Planning
IAP2	International Association of Public Participation
LGA	Local Government Area
LMR	Loddon Mallee Region
LMRSFMPC	Loddon Mallee Region Strategic Fire Management Planning Committee
LMRSFMP	Loddon Mallee Regional Strategic Fire Management Plan
IMEMPC	Integrated Municipal Emergency Management Planning Committee
IMEMP	Integrated Municipal Emergency Management Plan
MERI	Monitoring, Evaluation, Reporting and Improvement
MFMP	Municipal Fire Management Planning Committee
MFMP	Municipal Fire Management Plan
MRR	Mitigation, Response, Recovery
NSP	Neighbourhood Safer Place
NVEMC	Northern Victorian Emergency Management Cluster
SWER	Single Wire Earth Return

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Community id. data

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Victorian Fire Risk Register, Country Fire Authority, 2018

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