Surf Coast Fire Management Plan

2011 – 2015, updated to March 2017

Version 8 – August 2015

Department of Environment, Land, Water & Planning

State Government Victoria

CFA

Foreword

The Surf Coast Fire Management Plan outlines how Council, fire agencies and other relevant authorities and organisations will work together to prepare for, respond to and recover from major fires in the Surf Coast.

The Plan is a sub-plan of the Shire's Municipal Emergency Management Plan and reflects the State Government's direction to increase integration on fire management planning between agencies and the community. The Plan was produced collaboratively by members of the Surf Coast Shire Municipal Fire Management Planning Committee. The Committee is made up of representatives from the Surf Coast Shire, the Country Fire Authority, the Department of Environment, Land, Water and Planning, Parks Victoria, the Department of Health & Human Services, Victoria Police and the Great Ocean Road Coast Committee.

Integrated fire management planning is risk based and tenure blind. In preparing this Plan, two main tools have been used to identify and assess bushfire risk in the Shire:

- the **Victorian Fire Risk Register**, a systematic process to identify assets at risk, assess the level of bushfire risk and record a range of measures to mitigate the risks. These measures may include activities such as fuel reduction, community education programs and the creation of strategic fire breaks; and
- **Landscape level bushfire modelling** undertaken by the Department of Environment, Land, Water and Planning (DELWP) to assess bushfire risk across the Otways landscape, including the Surf Coast. DELWP's work has evaluated fire regimes across the entire landscape and identified opportunities to manage fuels and fire regimes across both public and private land.

Community engagement associated with the Plan has also helped to identify any additional assets at risk and inform implementation of treatment measures.

Consistent with DELWP's landscape level approach, Surf Coast Shire and Colac Otway Shire have collaborated on development of their Municipal Fire Management Plans. A coordinated strategic approach allows for better agency integration and reflects the broader landscape level bushfire risks impacting both Shires.

This Plan recognises, but doesn't duplicate, the extensive work already being undertaken in fire management and planning activities across the Surf Coast Shire. This document is essentially a plan for improving integration of this existing work and developing new ways of working together with the community.

Since the preparation of the 2011-2015 version of this Surf Coast Fire Management Plan, DEWLP has prepared the Strategic Bushfire Management Plan for the Barwon Otway bushfire risk landscape – taking a risked based approach and utilising extensive fire modelling. The next version of the Municipal Fire Plan will be fully informed by, and align with this new approach.

Context Statement

This 8th version of the plan is an update of version 7 which was originally approved and adopted on 22 August 2012. Under direction from Emergency Management Victoria, and pending state and regional level direction, this update rectifies gross errors which have emerged since the earlier version was approved. In summary, these changes incorporate: machinery of government changes, VFRR township priority ratings and Neighbourhood Safer Place - Place of Last Resort changes.

A new fire management plan will be developed under a new planning model during 2015/2016. This new planning process will see strategic coordination between emergency management agencies and Surf Coast, Colac Otway and Corangamite shires.

Once the new fire management plan is approved it will supersede this plan.

Comments on this Plan are welcome and should be sent to:

Surf Coast Shire
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Torquay VIC 3228
Comments may also be submitted by email to: info@surfcoast.vic.gov.au

Version Control Table

Version	Release Date	Author	Changes
2	28 July 2011	Kate Smallwood	
3	August 2011	Kate Smallwood	Sections 1 – 4 amended and Sections 5 – 7 and Appendices added
4	September 2011	Kate Smallwood	DELWP description of landscape modelling added; Section 5.6 revised to include more shelter options; Appendix B: agency work plan updated; Appendix F: Terminology – expanded.
5	June 2012	Kate Smallwood	Plan amended to include consideration of structural and chemical fires and incorporate stakeholder feedback on Version 4 of the Plan.
6	July 2012	Kate Smallwood	Final changes to incorporate stakeholder feedback on Version 5 of Plan.
7	July 2012	Kate Smallwood	Plan amended and endorsed by Municipal Fire Management Planning Committee on 16 July 2012 to include addition of regional objectives in Section 5 and to delete incorrect website for risk register. Plan amended and endorsed by Municipal Emergency Management Planning Committee on 26 July 2012 to include two amendments proposed by VicRoads (regarding Great Ocean Road traffic diversion and road bushfire risk assessment) and addition of regional objectives to Section 4.
8	July 2015	Kerrie Williams Peter Ashton Cheryl Nagel	Update and rectify errors in accordance with EMV direction, including: • machinery of government changes, • update NSP-PLR update, • VFRR township table update • context update.

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Authorisation and Endorsement

This Plan was adopted by the Surf Coast Shire Council in partnership with the committees and agencies listed below.

Surf Coast Shire	Country Fire Authority	Department of Environment, Land, Water and Planning
…….....	…….....	…….....
Date: / /	Date: / /	Date: / /

Plan endorsed by the Surf Coast Shire Municipal Fire Management Planning Committee on

Date: 4/8/2015

Plan endorsed by the Surf Coast Shire Municipal Emergency Management Planning Committee on

Date: 4/8/2015

Plan reviewed by the Barwon South West Regional Strategic Fire Management Planning Committee on

Date: 7 / 9 / 2015

Plan adopted by the Surf Coast Shire Council on:

Date: / /

Powercor _____ Date: / /	VicRoads _____ Date: / /
Parks Victoria _____ Date: / /	Victoria Police _____ Date: / /
Great Ocean Road Coast Committee _____ Date: / /	

1 Introduction

1.1 Overview

Victoria has a range of characteristics that predispose it to bushfires generally and to the occasional ferocious bushfire in particular. There are few other locations in the world with similar characteristics.[1]

The high bushfire risk in Victoria is the consequence of a number of factors, including vegetation, topography, climate and population patterns, which show population density increasing in bushfire-prone areas[2], like the Surf Coast Shire.

Bushfires have shaped, and continue to shape, all aspects of our environment – landscape, ecosystems, biological diversity and culture.[3] They occur both naturally and as a result of human actions. While bushfires can be vital to the continued rejuvenation of the natural landscape, the human, social and economic impacts can be enormous. Fire management needs to address both the threats to life and property and the role that fire plays in the environment.

Fifty-two significant bushfires have been recorded in Victoria since 1851, with two-thirds of them in the past 60 years.[4] The last decade has seen a dramatic increase in the number, size and severity of bushfires in Victoria, as evidenced by:

- the 2003 Alpine fires,
- the 2006 Grampians fires
- the 2006/2007 Great Divide fires; and
- the 2009 Black Saturday fires.

The most significant recent bushfire to impact the Surf Coast Shire was the 1983 Ash Wednesday fire. Across Victoria, 47 lives were lost and around 210,000 hectares were burnt. In the Otway Ranges, one of the areas most severely affected by the Ash Wednesday fires, three people died, 782 buildings were lost and over 41,000 hectares were burnt.[5]

1.2 Shared Responsibility for Bushfire Safety

The 2009 Victorian Bushfires Royal Commission was guided by two overarching principles in conducting its work and preparing its Final Report – the protection of human life and shared responsibility.

The concept of shared responsibility recognises that individuals, fire authorities and all levels of government are responsible for preparing for fire and improving people's safety.[6] Educated and engaged communities are critical to successful fire management and planning. The Commission indicated that:

A long term goal of Victorian bushfire policy and legislative frameworks should be to build strong, proactive communities that understand bushfire risk and make sound decisions about how they will manage and respond to those risks. This goal brings with it roles for individuals, agencies and government.[7]

In describing these roles further, the Commission noted that:

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[1] 2009 Victorian Bushfires Royal Commission, *Final Report – Volume 1: The Fires and the Fire-Related Deaths*, p. xxiv
[2] Ibid.
[3] Ibid. at p. 2
[4] Ibid. at p. 2.
[5] Department of Sustainability and Environment, Fire and Other Emergencies – Ash Wednesday bushfire – 1983, available at www.delwp.vic.gov.au
[6] Ibid. at p. xxviii
[7] Ibid.

- **Individuals** should be encouraged, to the extent of their capabilities, to make their own preparations to protect themselves and their communities from bushfire;
- **Agencies** should educate, prepare and help protect individuals by ensuring that they have access to the information needed to make sound decisions. It is also vital that agencies provide accurate and prompt warnings that are easy for the public to understand.
- **Government**'s role is to create the legislative foundation, fund fire services, facilitate community education and support, and provide essential infrastructure and local support to help communities stay safe.

Shared responsibility is an essential part of effective fire management planning in the Surf Coast Shire.

1.3 Integrated Fire Management Planning

Integrated Fire Management Planning (IFMP) is a central component of the State Fire Management Planning Strategy 2009. IFMP involves bringing communities, fire agencies and State and local government departments together to deliver fire management planning.

The three key documents guiding IFMP are:

- The Integrated Fire Management Planning Framework[8], which provides an overview of how IFMP works and who is involved;
- The State Fire Management Strategy 2009[9], which is based on the IFMP Framework and provides a broad, strategic vision and direction for fire management in Victoria; and
- The Integrated Fire Management Planning Guide[10], which outlines the regional and municipal fire management planning process, including the process for developing this Municipal Fire Management Plan.

IFMP builds on existing processes to support the integration, consistency and coordination of fire management planning activities of government, the fire management sector and communities. IFMP is designed to operate under existing state fire and emergency management legislation and therefore does not replace existing statutory roles and responsibilities.

Under IFMP, collaborative agency fire management planning will occur through Municipal Fire Management Planning Committees. Agency plans will be aggregated to form the basis of Municipal Fire Management Plans. Fire management planning will be aligned with each organisation's planning and business processes through:

- the implementation of common planning models and methodologies
- allocation of resources and accountabilities
- participation in common decision making through the committee process
- collaborative delivery of fire management activities
- cooperative engagement

IFMP also links fire management planning across the State to a standard risk management approach. The alignment of the IFMP planning cycle with the Australian Risk Management Standard AS/NZ ISO 3100 2009 is outlined in Table 3 below.

[8] Available at www.ifmp.vic.gov.au
[9] Available at www.ifmp.vic.gov.au
[10] Available at www.ifmp.vic.gov.au

TABLE 3. IFMP ALIGNMENT WITH AS/NZS ISO 31000:2009	
Stage of the IFMP planning cycle	**Relevant aspect of the AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines**
Engagement Plan	Communicate and consult
Environmental Scan	Establish the context
Risk Assessment > Analyse	Identify the risk > Analyse the risk > Evaluate the risk
Decide > Publish	Determine and document treatment options
Deliver	Treat the risk
Monitor and Improve	Monitor and review

1.4 Authority for Plan

The Surf Coast Fire Management Plan (the Plan) has been produced by and with the authority of the Surf Coast Shire Council pursuant to Section 20 of the Emergency Management Act 1986 and will be deemed to fulfil Section 55A (Municipal Fire Prevention Plans) of the Country Fire Authority Act 1958.

The Plan is a sub-plan of the Surf Coast Shire Council Municipal Emergency Management Plan.

1.5 Period of Plan

Municipal Fire Management Plans have a three year planning cycle. This Plan was originally endorsed for a three year period, commencing from the date of Council adoption of the Plan, and this 2015 update will extend the life of the plan until March 2017. Municipal Fire Management Plans are reviewed annually.

1.6 Planning Process

This Plan has been prepared by the Surf Coast Shire Municipal Fire Management Planning Committee in accordance with the IFMP Framework, the IFMP Planning Guide and the Emergency Management Manual Victoria, Part 6A – Guidelines for Municipal Fire Management Planning.

The 2015 update of this plan has occurred in accordance with EMV instructions.

The Plan has been developed consistent with the IFMP process as described in figure 2 below.

Figure 2. Integrated Fire Management Planning process

Development of the Plan has been undertaken by representatives of the various agencies that comprise the Surf Coast Shire Municipal Fire Management Planning Committee. This Plan is not intended to duplicate existing agency plans but to consolidate and coordinate the significant range of plans that exist within the Surf Coast Shire regarding fire.

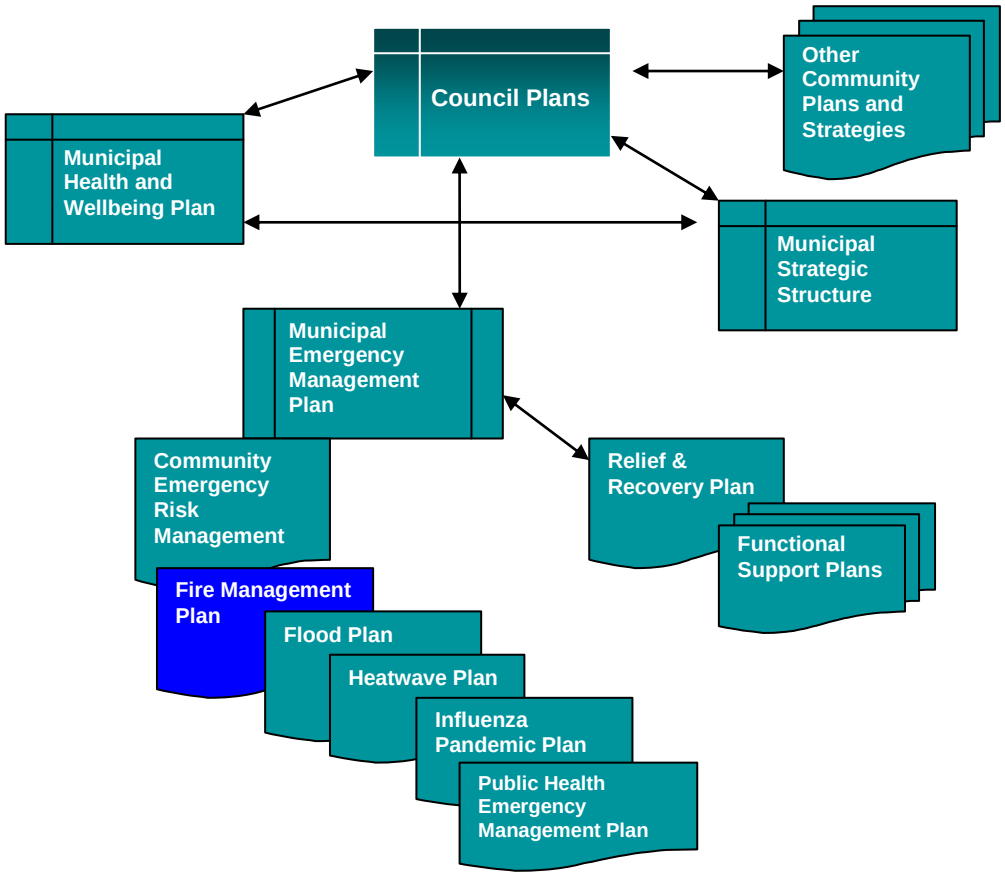
1.7 Relationship to Municipal Fire Prevention Plan

This Plan replaces the Shire's Municipal Fire Prevention Plan.

As part of the transition under Integrated Fire Management Planning from Municipal Fire Prevention Plans to integrated Municipal Fire Management Plans, both plans initially operated in tandem. The initial draft Municipal Fire Management Plan addressed bushfires, grassfires and environmental burns and the Municipal Fire Prevention Plan addressed structural and chemical fires. This Plan now addresses all fire risks.

1.8 Municipal Planning Structure

The Surf Coast Shire's planning structure and the relationship of this Plan to other plans endorsed by Council is outlined in the diagram below:



1.9 Plan Review and Updates

The Plan will be reviewed and updated annually to ensure it:

- incorporates any new strategies, programs and tools developed by the State Fire Management Planning Committee and the Barwon South West Regional Strategic Fire Management Planning Committee;
- reflects agency updates and annual work plans; and
- meets community needs and expectations.

1.10 Community and Organisational Engagement Process

Stakeholder and community engagement and participation is an essential element of fire management planning.

Section 2 of this Plan outlines the engagement process that has been undertaken by the Municipal Fire Management Planning Committee for developing this Plan.

2 Engagement and Communications

2.1 Integrated Fire Management Planning Engagement Process

Community and organisational engagement is required throughout the Integrated Fire Management Planning (IFMP) process. The aim is for communities and organisations to participate together in the collaborative development, delivery and monitoring of Municipal Fire Management Plans.

Consistent with the IFMP Planning Guide, the Surf Coast Shire Municipal Fire Management Planning Committee (MFMPC) has developed a Community and Organisational Engagement Plan (the Engagement Plan). The Engagement Plan outlines community and organisational engagement that has been undertaken by the MFMPC to develop this Plan. A copy of the Engagement Plan is included in Appendix D.

The Engagement Plan identifies key stakeholders and communities and the level, method and timing of engagement. For the purposes of the Engagement Plan, 'stakeholder' means agencies responsible for fire management planning in the Surf Coast Shire.

The Engagement Plan has been developed using International Association for Public Participation Australasia (IAP2) principles. These principles are as follows:

Inform

Provide appropriate detailed and accurate information to assist stakeholders develop a shared understanding of the complexity of issues, alternatives and possible solutions.

Consult

Utilise stakeholder expertise and diversity to obtain input into analysis, alternatives and develop key decisions.

Involve

Work directly with the suite of key stakeholders throughout the various processes to ensure key issues and intent are understood and considered.

Collaborate

Partner with key stakeholders in each aspect of decision making. This includes the development of alternatives, and the identification of contributions and priority actions with a clear understanding of the responsibilities of each stakeholder.

Empower

Foster and promote transparent and accountable processes that allow each stakeholder organisation to empower themselves through key actions and the implementation of responsibilities.

2.2 Stakeholder Analysis

Stakeholders for this Plan have been grouped into three categories according to their chosen level of participation in integrated fire management planning and their information requirements. The three engagement categories are:

- Primary (permanent MFMPC members);
- Secondary (attend MFMPC by request); and
- Tertiary (other agencies, organisations and interested groups that could support the Municipal Fire Management Plan)

This stakeholder analysis helped inform the development of the Engagement Plan, including determining the level and timing of stakeholder participation.

2.3 Community Engagement Principles

The Surf Coast Shire recognises the value of local knowledge and the unique contribution the community can make to local fire management planning. Effective community engagement in fire management planning is required to:

- Promote acceptance, understanding and joint problem solving;
- Raise knowledge and skills of fire management through participation;
- Produce plans that support community and organisational expectations; and
- Incorporate community and organisational needs into the development of fire management plans.

Community interest in fire management planning is usually greatest at the local level. The MFMPC will endeavour to ensure that community feedback on local fire management planning is incorporated into this Plan, where relevant and appropriate.

2.4 Agency Engagement and Plan Approval

This Plan was produced collaboratively by members of the Surf Coast Shire MFMPC. The Committee is made up of representatives from the Surf Coast Shire, the Country Fire Authority, the Department of Environment, Land, Water and Planning, Parks Victoria, the Department of Health & Human Services, Victoria Police and the Great Ocean Road Coast Committee.

As a sub-plan of the Surf Coast Shire Municipal Emergency Management Plan, the draft Plan was provided to the Shire's Municipal Emergency Management Planning Committee (MEMPC) for review and comment. The MEMPC has broader representation that includes the Victorian State Emergency Service, the Department of Education and Early Childhood Development, the Department of Health & Human Services, the Department of Health, VicRoads, Barwon Water, the Australian Red Cross and the Lorne Community Hospital. Agencies represented on the MFMPC are also represented on the MEMPC.

The draft Plan was then submitted to Council for approval prior to consultation with the community in accordance with the Engagement Plan.

The draft Plan was revised based on community and organisational feedback and submitted for formal endorsement by the MFMPC and the MEMPC. The Plan will then be sent to the Barwon South West Regional Strategic Fire Management Planning Committee for comment, prior to recommendation to Council for consideration and adoption.

2.5 Outcomes

The desired outcomes from the community and organisational engagement process are:

- Relevant stakeholders are engaged at the appropriate stage of Plan development and actively participate in shaping and implementing this Plan;
- The roles and responsibilities of individuals, agencies and government in preparing for fire and improving people's safety are well understood;
- Agency fire management activities are better integrated and coordinated in the Shire;
- Community knowledge and understanding of fire risks and fire management in the Shire is significantly increased; and
- The Plan supports, or is revised to support, community and organisational needs.

3 Summary of the Environmental Scan

3.1 Location and land tenure

The Surf Coast Shire is located in south western Victoria between 10 and 60 kilometres south west of Geelong. The Shire is bordered by Colac Otway Shire to the west, Golden Plains Shire to the north and the City of Greater Geelong to the north east.

Surf Coast Shire encompasses a diversity of rapidly changing communities ranging from small coastal hamlets and sparsely populated rural communities to larger coastal towns. The southern part of the Shire consists of a linear pattern of coastal townships including Torquay, Jan Juc and Anglesea.

With the exception of Torquay and Jan Juc, these townships are located on the coastal edge of the Otway Ranges and are surrounded by large areas of national park, restricting the potential for outward growth. North of the Otway Ranges is a large rural community with population centres at Winchelsea, Moriac and Deans Marsh. The Shire covers an area of 1,500 square kilometres.

The breakdown of land tenure in the Shire is shown in the map on page 18 of this Plan.

3.2 Natural environment

The Shire is strongly influenced by physical and topographical features, which impact on urban development and land use management. It is characterised by a diverse range of environments including rugged coastline, dense native forests, rolling rural plains and significant rivers, lakes and wetlands. In the course of time these features have contributed to creating distinctive communities with quite different expectations about how their areas should develop or be maintained.

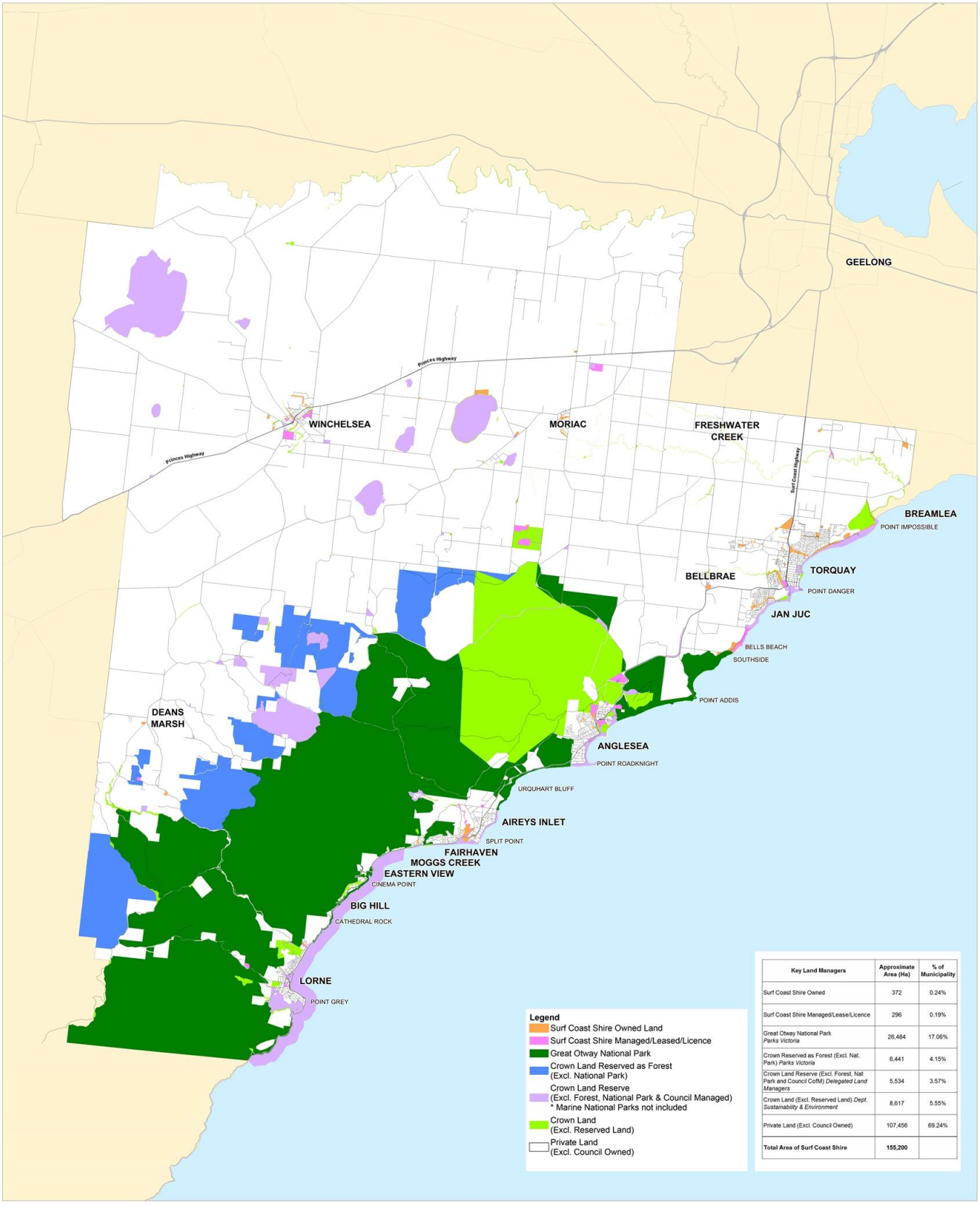
There are three distinct Bioregions within the Surf Coast Shire, known as the Otway Ranges Bioregion, Otway Plain Bioregion and Victorian Volcanic Plain Bioregion. (Bioregions are the broad scale mapping units used for biodiversity planning in Victoria and capture the patterns and ecological characteristics in the landscape.) These are three of the 28 Bioregions found in the state of Victoria.

1. **The Otway Plain Bioregion** includes the coastal plains and dunes, the foothills with river valleys and swamps in the lowlands. The ridges seen today mark the positions of the difference to successive shorelines as the ocean has retreated from these areas over time to where it is today.

2. **The Otway Ranges Bioregion** consists of moderate to steep slopes that are deeply dissected blocks of alternating beds of sandstone, siltstone and shale's and swampy alluvium in the lowlands.

3. **The Victorian Volcanic Plain Bioregion** contains highly significant remnant vegetation communities that are supported by volcanic deposits that form an extensive flat to undulating basaltic landscape.

The Shire acknowledges its unique geographical location and the strengths of its regional position. These include proximity to major road and rail networks, the Port of Geelong and Avalon Airport. Iconic sites such as Bells Beach Surf Recreational Reserve, the Great Ocean Road, the Great Otway National Park as well as beautiful coastal and hinterland areas attract tourists and residents alike.



Key Land Managers	Approximate Area (Ha)	% of Municipality
Surf Coast Shire Owned	372	0.24%
Surf Coast Shire Managed/Lease/Licence	296	0.19%
Great Otway National Park *Parks Victoria*	26,484	17.06%
Crown Reserved as Forest (Excl. Nat. Park) *Parks Victoria*	6,441	4.15%
Crown Land Reserve (Excl. Forest, Nat Park and Council CofM) *Delegated Land Managers*	5,534	3.57%
Crown Land (Excl. Reserved Land) *Dept. Sustainability & Environment*	8,617	5.55%
Private Land (Excl. Council Owned)	107,456	69.24%
Total Area of Surf Coast Shire	**155,200**	

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'The Place of Wellbeing'

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Surf Coast Shire Management Areas

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 m

Scale 1: 100,000

7/07/2015

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GDA
GEOCENTRIC DATUM OF AUSTRALIA

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This map is produced on the Geocentric Datum of Australia (GDA94). GDA94 supersedes the Australian Geodetic Datum 1966 (AGD66).

Surf Coast Shire uses the Map Grid of Australia (MGA94) Zone 55 projection.

3.3 Climate and bushfire season

3.3.1 Climate

The Surf Coast Shire is in a mild temperate climate with defined seasonal change through summer, autumn, winter and spring. Average temperatures range from a maximum of 18 to 20 Celsius to a minimum of 9 to 10 degrees Celsius. The average rainfall varies from over 1000mm in the mountains of the south to around 500mm in on the plains in the north.

The bushfire season generally runs from November to April annually. Generally the most dangerous weather conditions associated with the bushfire season in the Shire are high daily temperatures with north to north-westerly winds, followed by a vigorous west to south-westerly change.

3.3.2 Climate Change

In the Surf Coast, climate change is expected to result in increased bushfire risk, more extreme weather events (e.g. drought, flood, wind storms, storm surges), coastal erosion and inundation due to the effects of sea level rise.

The State Government's regional climate change projections[11] indicate that the Shire can expect:

- More hot days
- More intense droughts as a result of warmer temperatures and higher evaporation rates
- Fewer rainy days, but increased rainfall intensity when it does rain
- More droughts and higher evaporation rates
- Hotter drier conditions with significant reductions in run off for water catchments.

3.3.3 Bushfire considerations

Due to its landscape, the Surf Coast Shire is recognised by fire agencies as being one of the most fire prone areas in the State of Victoria.

There are a number of concerns regarding bushfires, which are unique to this particular region:

- A bushfire during the holiday period, where the population can increase significantly with up to 100,000 summer visitors, is particularly alarming. Public awareness and information programs therefore have to cater not only for residents, but also visitors.

The primary access and egress route from a major bush-fire sweeping down from a northerly direction towards the coast is the narrow, winding Great Ocean Road. In an emergency, the Great Ocean Road is also the main, and in some instances the only, access for fire and emergency services vehicles to coastal townships. this route is extremely vulnerable to traffic congestion and road blockages (accidents, rock falls etc.) which could result in significant numbers of people being stranded on the Great Ocean Road or in coastal towns with emergency services vehicles being unable to reach the fire front and affected communities. The lack of egress from and access to coastal townships along the Great Ocean Road during a major bushfire is a serious concern for emergency services.

Despite these concerns, there are a number of positive factors in the Shire's favour in dealing with a major emergency including the close proximity of Geelong and the relative speed with which additional assistance could be deployed by the various combat agencies. In addition, there are also continuing education campaigns, including working with other agencies such as Tourism Victoria, encouraging communities to leave early and the Great Ocean Road Traffic Diversion and Turnaround Point plans.

[11] Department of Sustainability and Environment, *Climate Change in the Corangamite Region,* available at www.climatechange.vic.gov.au

3.4 Population and demographic information

3.4.1 Overview

The Surf Coast Shire has experienced significant growth from the 1980s onwards. Growth has generally been focused in the Torquay-Jan Juc area, a result of the area's increased access to Geelong (particularly after the duplication of the Surf Coast Highway).

Population growth in the Shire has in part been driven by the increase in occupancy over the last twenty years as holiday houses have been converted to permanent occupancy. The Shire continues to accommodate significant numbers of tourists, particularly in summer, when the population generally doubles in size. In addition, the Great Ocean Road is a major tourist icon, drawing over 7.2 million visitors in 2010.[12]

The Shire has attracted young families and retirees alike due to the significant development by Council, the attractiveness of a coastal lifestyle and the close proximity to Geelong and Melbourne. This market is expected to increase significantly as the Shire continues to develop.

The Shire comprises significant diversity in terms of residential and economic role and function. Areas such as Lorne, Aireys Inlet, Fairhaven and Anglesea have large numbers of dwellings that are only occupied part time. These areas are generally outside commuting distance to major employment centres in Geelong and Melbourne. It is assumed that much of their future demand will come from people in the retiree age group. Winchelsea and Moriac are more traditional rural service centres with good access to Geelong and are expected to slowly increase in population as coastal areas become less affordable.

These areas will continue to lose young adults (18-24 year olds) seeking employment, educational and lifestyle opportunities closer to Geelong or Melbourne. Torquay and Jan Juc have more of a 'suburban' role in attracting young families, their access to employment in Geelong a key attribute. This variety of function and role of the small areas in Surf Coast Shire means that population outcomes differ significantly across the municipality.

3.4.2 Population

Population estimates for 2014 show the total Surf Coast Shire population to be 28,481 people, with an estimated population in 2020 of 32,042 people.

In 2011, the Australian Bureau of Statistics determined the Surf Coast Shire population to be 25,874 with 49.6% of the population males and 50.4% females.

The distributions of the population in 2011 were as follows:

Township	Population	Average Household
Aireys Inlet – Fairhaven	1187	2.32
Anglesea	2469	2.22
Deans Marsh and districts	1251	2.65
Jan Juc – Bellbrae – Bells Beach	4500	2.66
Lorne	1136	2.13
Moriac and districts	3100	2.91
Torquay	10157	2.61
Winchelsea	2170	2.37
Total	25970	

[12] Geelong Otway Tourism Industry, *Travel to the Great Ocean Road – Year Ending December 2010*, available at www.geelongotway.org

(Source: id consulting 2010)

The Surf Coast Shire forecast population 2011-2021 and age percentile is as follows:

Age Group	Estimated 2011	Percentage	Estimated 2021	Percentage
0-5	1937	7	2461	6.6
5-9	1979	7.1	2610	7.0
10-14	1851	6.7	2513	6.8
15-19	1592	5.7	2114	5.7
20-24	1391	5.0	1637	4.4
25-29	1411	5.1	1649	4.5
30-34	1833	6.6	2237	6.0
35-39	2205	8.0	2779	7.5
40-44	2129	7.7	2914	7.9
45-49	2121	7.6	2857	7.7
50-54	2121	7.6	2730	7.4
55-59	1943	7.0	2643	7.1
60-64	1701	6.1	2447	6.6
65-69	1144	4.1	1945	5.2
70-74	837	3.0	1480	4.0
75-79	605	2.2	886	2.4
80-84	455	1.6	562	1.5
85 and over	478	1.7	586	1.6

The population fluctuates in a unique manner due to the higher proportion of holiday homes (48%) and visitors which results in an influx of up to approximately 100,000 people during peak periods such as Christmas summer holidays and Easter.

3.4.3 Urban Growth

Surf Coast Shire's high population growth is projected to continue well above the state average, with Torquay-Jan Juc being the major contributor to this strong growth.[13] The resident population of Torquay-Jan Juc is projected to double over the period 2006 to 2021.[14]

Under the Surf Coast Shire Planning Scheme, urban growth in the Shire is to be concentrated predominantly in the towns of Torquay-Jan Juc and Winchelsea,[15] with Torquay-Jan Juc as the main urban growth centre for the Shire.[16] This approach reflects the *Great Ocean Road Region Strategy 2004* and the *Victorian Coastal Strategy 2008* which have identified Torquay as a township that can accommodate significant growth. The *Great Ocean Road Region Strategy* also identifies Winchelsea as a potential growth area.[17]

The *Sustainable Futures Plan Torquay-Jan Juc 2040* estimates Torquay-Jan Juc's sustainable total population level over the next 30 years at 25,000 to 30,000 people, which incorporates about 15,000 to 17,000 new residents and approximately 7,000 new residential lots. [18] The key assumptions underpinning the *Sustainable Futures Plan* forecasts are:

- An average of 2.4 persons per household;

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[13] *Sustainable Futures Plan Torquay-Jan Juc 2040*, Final Draft, available at www.surfcoast.vic.gov.au

[14] Surf Coast Shire Planning Scheme, Clause 21.08-1: Torquay-Jan Juc Strategy, Demographics

[15] Surf Coast Shire Planning Scheme, Clause 21.01-4: Municipal Framework Plan

[16] Surf Coast Shire Planning Scheme, Clause 21.08-1: Torquay-Jan Juc Strategy, Overview

[17] *Context Report Sustainable Futures Plan – Torquay Jan Juc 2040*, Final Draft at p. 8

[18] *Sustainable Futures Plan Torquay- Jan Juc 2040*, Final Draft at p. 18

- Densities ranging between 12 and 15 lots per hectare; and
- Ninety per cent permanent occupancy rate in new growth areas[19]

In addition to providing for new development, the Shire's Planning Scheme also supports greater density through the re-subdivision of key low density residential sites and by encouraging innovative medium density housing solutions. [20]

The likelihood of structural fires will increase proportionately with the increase in residential lots and residential density.

3.5 Fire History within Surf Coast Shire

The Surf Coast Shire has an extensive fire history, with fires recorded from 1850 onwards[21]. Fires in the Shire include:

- December 2008, a tanker overturned and caught on fire on the Great Ocean Road, Big Hill killing the driver causing road closure and major traffic diversions.
- November 1994, a fuel reduction burn adjacent to Moggs escaped which resulted in 200 hectares of bush being burned, with one house destroyed and 25 damaged.
- One of the worst emergencies was the Otways (Ash Wednesday) fire that started at Deans Marsh on 16 February 1983 at approximately 3:00 pm. The fire burnt 41,000 hectares, 729 houses (69 in the Shire of Winchelsea), 53 other buildings, 2,624 sheep, 159 cattle, with three lives lost.
- January 1982, there was a fire at the Anglesea camping ground. Twenty caravans, 13 tents, two prefabs and two annexes were destroyed.
- October 1981, Fairhaven evacuated due to fire. Three houses were lost and others damaged. The fire was started by a controlled burn.
- March 1980, fire within two kilometres of Anglesea township, with about 400 hectares burnt. Source of fire was smouldering peat moss from fire several weeks earlier.
- 18 January 1969, fires burnt over 2,000 hectares at both Bellbrae and Gnarwarre. Multiple fires in southern and central Victoria.
- February 1968, large fire in the Lorne area occupied 27 brigades for four days. Over 5,000 acres burnt and several buildings destroyed.
- 23 November 1966, fire in the Wormbete area, with estimated 32,000 acres burnt.
- March 1966, bushfire destroyed 14 houses at Anglesea, with property damage of $100,000.
- March 1965, over 8,000 acres burnt and one house and several buildings destroyed at Big Hill – Eastern View.
- In 1961, 500 acres and 300 sheep were lost at Modewarre in a deliberately lit fire.
- 5 September 1957, fires at Anglesea and Aireys Inlet with 2,428 hectares burnt.
- January 1947, wide spread fires at Anglesea. Fire leapt the Anglesea River and threatened to destroy the township. The fire raced through the centre of town and destroyed two homes, several buildings and a number of boats. Anglesea Fire Brigade building was set on fire three times. The main street was 'strewn with fallen power and telephone lines'.
- January 1944 saw Geelong ringed by fires in Moriac, Modewarre, Bellbrae and Mount Duneed to the edge of Torquay.

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[19] Ibid.

[20] Surf Coast Shire Planning Scheme, Clause 21.08-2: Torquay-Jan Juc Strategy, Settlement and Housing – Strategies

[21] This history was prepared from various sources including: Cecil, K.L., *The Red Steer: Bushfires Along the Great Ocean Road, Volume 1*, Anglesea and District Historical Society (1993) and Cecil, K.L., *Anglesea Fire Brigade: 50 Years of Service (1940 – 1990),* Anglesea Fire Brigade (1990)

- March 1940, fires in southern parts of the State, including Torquay where one life was lost, 86 houses and various buildings destroyed and heavy loss of stock and grass.
- January 1939, the 'Black Friday' fires affected most areas of the State, including the Otways. Lorne was threatened and sixteen houses were destroyed. Hundreds of people sought the safety of the beach. Also fires between Aireys Inlet and Anglesea and extensive grass fire at Moggs Creek.
- December 1938, fire burning for several days around Eastern View threatened several cottages and the golf course.
- February 1938, bushfire along the west side of Anglesea river threatened the township of Anglesea. Also fires towards Aireys Inlet, at Big Hill, Benwerrin and Pennyroyal.
- November 1937, bushfire threatened settlement at Eastern View and swept towards Fairhaven.
- April 1936, fires in Geelong and neighbouring districts. A fire with a seven mile fire front threatened the township of Anglesea, with neighbouring pine plantations damaged. Also fires in the Otways and other parts of the State.
- February 1932, fires burned steadily for several weeks around Lorne and also threatened Aireys Inlet.
- February 1931, bushfire commenced near the pine plantation at Anglesea and swept through the bush between Anglesea, Bellbrae and Torquay. Extensive fire between Wensleydale and Bambra.
- March 1926, bushfire between the Otway Coal Mine and Bambra. Fires in the Otway Ranges endangered pine plantations at Anglesea.
- February 1926, bushfires at Lorne, Eastern View, Aireys Inlet, near Jan Juc, around Wensleydale, on sections of the Great Ocean Road and in other areas throughout the State. At least 29 people died across Victoria.
- February 1920, bushfires around Anglesea (for several days), between Mount Moriac and Aireys Inlet, between Lorne and Anglesea, at Wensleydale and between Jan Juc and Anglesea.
- February 1919, bushfire at Anglesea, with five houses destroyed. There were also extensive fires in the Otways, with 100 homesteads burnt and about 500 people left homeless. The Lorne saw mill was destroyed.
- January 1912, extensive fire at Aireys Inlet. Two cottages destroyed.
- January 1908, bushfires across the State, including around Jan Juc, Modewarre and Anglesea. The fire caused 'wholesale destruction' at Anglesea, with seven houses destroyed.
- January 1905, extensive fires occurred throughout the Geelong area and between Jan Juc and Anglesea. Record temperatures of 107.8 – 110.5 in the shade.
- February 1901, extensive fires reported at Birregurra and in the Geelong region. Several people lost their lives in the Birregurra fire. Jan Juc was also threatened by fire.
- February, 1898 bushfires from Cape Otway forest extended to Anglesea, which was at one stage 'threatened with complete extinction' by the fires. The Anglesea Hotel was 'swept out of existence by the fiery fiend'. The same fire got within 'dangerous proximity to Torquay'. Lorne was also threatened.
- February 28 1893, bushfires 'raged with great fierceness' between Winchelsea and the Coast. Fire approached the Anglesea River and encroached on township allotments on the west side of the river. The forest in the vicinity of Jan Juc was 'a seething mass of flame'.
- February 14 1891, 'Black Saturday' fires 'raged all over the colony', including Mount Duneed and Coast districts, and Birregurra and Winchelsea districts. The fires skirted the coast line between Jan Juc and Lorne. Jan Juc was just saved by a wind change.
- January 1890, forest between Deans Marsh and Lorne 'ablaze for two to three days'. The fire was reported as about half a mile in width.

- January 1889, bushfires around Lorne for several days. The coach from Birregurra to Lorne ‘passed through fires nearly all the way from Deans Marsh to Erskine House’.
- January 1886, a bushfire that started near Cape Otway threatened Cape Otway, Apollo Bay, the Heytesbury Forest, Lorne, Birregurra and Colac. The whole of the Otway forest south of Colac was ‘one burning mass’ flamed by a northerly gale. Wind change to the south later in the day.
- March 1881, bushfires ‘raged’ between Colac and Gerangamete and near Birregurra and the Otway Ranges.
- February 6 1851, the ‘Black Thursday’ fires covered up to a quarter of the State. The fire affected the neighbourhood of Geelong and extended from Barwon Heads to Apollo Bay, including South Beach (now known as Torquay) and what is now Aireys Inlet. The fires were so hot that brass melted off cooking utensils in Apollo Bay and the tiny settlement was ‘almost wiped out’.

4 Municipal Fire Management Objectives

4.1 Alignment to Regional Objectives

The Barwon South West Regional Strategic Fire Management Planning Committee has endorsed the following regional objectives:

- Demonstrate effective leadership
- Understand the Barwon South West region
- Identify our priority assets and values
- Support our values whilst managing priority risks
- Continue to improve and evolve

4.2 Objectives and Outcomes

4.2.1 Objectives and Legal Requirements

The primary objectives of this Plan are to:

- Protect and preserve human life;
- Protect critical infrastructure;
- Manage and reduce the risk of fire, with due regard to the natural environment;
- Align and integrate fire management planning and practices across agencies and the community; and
- Educate, inform and empower communities to become more self-reliant and resilient.

Under the Country Fire Authority Act 1958 (section 55A), this Plan must contain provisions for:

- Identifying areas, buildings and land use in the Surf Coast Shire that are at particular risk in case of fire;
- Specifying how each identified risk is to be treated and who is responsible for treating those risk; and
- Identifying all designated neighbourhood safer places in the Shire.

The Surf Coast Shire is required under section 43 of the Country Fire Authority Act to take all practicable steps (including burning) to prevent the occurrence of fires on, and minimize the spread of fires on and from:

- Any land vested in the Shire or under its control and management; and
- Any road under its care and management.

To meet these objectives and requirements, this Plan has been developed as an operational and strategic document. The Plan identifies communities and assets at risk through an Environmental Risk Scan and the Victorian Fire Risk Register (VFRR). The VFRR is a tool to identify assets at risk, assess the level of bushfire risk to assets and identify a range or treatments to mitigate the risks. Treatments may include activities such as fuel reduction, community education, property planning and preparedness programs.

The Plan also references treatments for the five regional risk priorities (listed above) identified by the Barwon South West Regional Strategic Fire Management Planning Committee. A copy of the VFRR Municipal Risk Register for the Surf Coast Shire, with risks presented by regional risk priorities, is included in Appendix A.

4.2.2 Outcomes

The desired outcomes of this Plan are:

- Human life and critical infrastructure are protected in the Shire;
- Plans are in place and activities undertaken to minimise the risk of fire and to suppress any fire that may occur within the Shire;
- Members of the Municipal Fire Management Planning Committee actively seek opportunities for agency collaboration to improve outcomes for communities and to reduce duplication;
- All agencies contribute to and are accountable for implementing agreed treatments; and
- Communities within the Surf Coast Shire have an improved understanding of fire in their environment and their shared responsibility for action to reduce the risk of fire.

4.3 Strategic Directions

The strategic direction of this Plan aligns directly with the State Fire Management Strategy 2009. The State's vision for fire management in Victoria involves:

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

In addition, the ongoing development of this Plan will also consider the following broad strategic documents:

- Fire Services Reform Program and Action Plan, (June 2011), Fire Services Commissioner;
- Implementing the Government's Response to the 2009 Victorian Bushfires Royal Commission, (May 2011), State Government of Victoria;
- *Bushfire Safety Policy Framework*, (September 2013), Fire Services Commissioner;
- Living with Fire – Victoria's Bushfire Strategy, (June 2008), State Government of Victoria

4.4 Links to Other Business and Programs

Important linkages to other key agency plans and strategies include:

- Barwon South West Regional Strategic Fire Management Plan
- Municipal Fire Management Plans for neighbouring municipalities Colac Otway Shire, Golden Plains Shire and City of Greater Geelong
- Department of Environment, Land, Water and Planning:
- Fire Operations Plan: Otways District/Region
- Barwon-Otway Bushfire Management Plan
- Great Otway National Park and Otway Forest Park Management Plan
- Country Fire Authority website www.cfa.vic.gov.au
- Country Fire Authority Operational Plans and Brigade plans
    - Country Fire Authority Barwon South West Community Safety Program and Resource Catalogue

- Powercor Bushfire Mitigation Strategy, available at www.powercor.com.au
- SP Ausnet Bushfire Mitigation Plan and Vegetation Management Plans
- Surf Coast Shire Planning Scheme
- Tourism Victoria at www.tourism.vic.gov.au
    - Bushfire Safety Information for travellers
    - Bushfire Safety Resources for Visitor Information Centres and Businesses
- Great Ocean Road Traffic Diversion Plan

5 Fire Management Risk Strategies

5.1 Risk Assessment Methodologies

To determine the bushfire risk within the Surf Coast Shire, two main risk assessment processes were used:

- The Victorian Fire Risk Register; and
- The Department of Environment, Land, Water and Planning's landscape level bushfire management planning process – the 'Otways Bushfire Management Project'[22].

To determine the structural and chemical fire risk within the Shire, incident data and major assets were used to inform identification of key risks.

Each of these processes is described in greater detail below.

5.1.1 Victorian Fire Risk Register

The Victorian Fire Risk Register (VFRR) application is a systematic process that identifies assets at risk of bushfire on a consistent state wide basis using the Australian/New Zealand Risk Management Standard ISO:31000 2009.

The aim of the VFRR is to minimise the risk of adverse impact of bushfires on assets and values in human settlement, cultural heritage, economic and environmental contexts.

The objective of the VFRR is to:

- identify and rate bushfire risks to assets;
- identify current mitigation treatments to manage the risk;
- identify the agencies responsible for implementing mitigation treatments and strategies;
- produce an integrated document and risk register across responsible agencies; and
- support and inform planning at a local level.

The primary outputs of the VFRR process are a series of maps displaying assets at risk, plus a municipal bushfire risk register, listing the risk rating for each asset and current risk mitigation treatments.

A copy of the Surf Coast Shire Risk Register, with risks presented by regional risk priorities, is included in Appendix A.1. A list of the VFRR risk mitigation treatments is included in Appendix A.2

5.1.2 Landscape Level Bushfire Management Planning

The 2009 Victorian Bushfires Royal Commission (VBRC) recommended a substantial increase in planned burning on public land.[23] The State Government, in accepting this recommendation, committed to increasing the amount of planned burning across the public land of Victoria to 390,000 hectare per annum by 2015.

The VBRC stated that the approach must be based on an explicit risk analysis model that also takes into account effects on biodiversity .The challenge is to reduce bushfire risk to life and property while also maintaining a healthy environment.

DELWP developed the "Future Fire Management Project" to deliver these outcomes. This project assists fire managers to work with communities to choose the best mix of treatments to both protect communities and sustain natural biodiversity and ecosystem resources, such as carbon and water. It is based on our best understanding of bushfire risk, provides our best estimate of potential

[22] "Approaches to Future Fire Management – risk based planning and action from the Otway-Surf Coast", Case Study, Bushfires Royal Commission Implementation Monitor, *Progress Report*, (July 2011) at pp. 136 – 139.

[23] Recommendation 56, 2009 Victorian Bushfires Royal Commission, *Final Report – Volume II: Fire Preparation, Response and Recovery*, p. 295. See also related recommendations 57 and 58.

impacts of fire (possible outcomes), focuses on how well we are achieving these goals, and will be continuously reviewed and improved through research and monitoring.

Since 2006, an active partnership between the Department of Environment, Land, Water and Planning (DELWP), Parks Victoria, the Country Fire Authority and local government, particularly Surf Coast Shire and Colac Otway Shire, has developed a coordinated strategic approach to protecting the vulnerable coastal communities in the Otways. Many of these communities were devastated during the 1983 Ash Wednesday fires. A bushfire management planning process, Future Fire in the Otways Pilot Study, (the Pilot) commenced in the Otways in 2010. It is supported by a stakeholder reference group and aims to plan across both public and private land.

Community consultation helped to identify locally important social, economic and environmental values. The planning then set objectives considering these values. Using Phoenix Rapidfire - a computer-based tool that simulates bushfire spread and intensity under a range of conditions - it is possible to show partners and the community what is likely happen in a bushfire under given conditions but most importantly, what beneficial effects arise from treatments like burning on the spread of a bushfire. When linked with knowledge of how our natural forests respond to fire, it also enables us to assess the cost-benefits of many fires spread over a long period of time (fire regimes). This allows more informed and transparent decision making. This tool, and ways of using it to support planning, have been developed by the University of Melbourne, the Bushfire CRC, DELWP and Parks Victoria.

As a part of this process, the following long term fire management options were assessed for the Otways Bushfire Management Pilot:

- Fire regimes that focus mostly on protecting built assets;
- Fire regimes that work tightly within ecological needs; and
- Several combinations of the above.

These fire regimes were then evaluated for their impact on:

- Spread, intensity and damage potential on communities of severe bushfires spreading under extreme fire conditions,
- Forest health (biodiversity and resilience); and
- Water quality and supply.

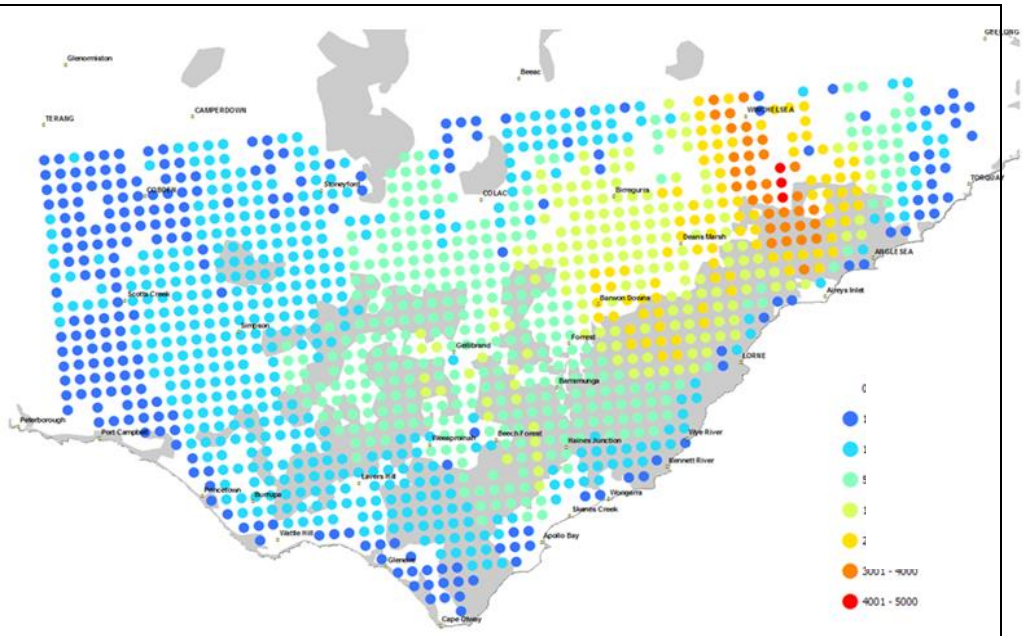
Importantly, the Pilot developed and evaluated fire regimes as they apply across the entire landscape, both public land (parks and forests) and private land. This is absolutely critical to the effectiveness of bushfire management, as bushfires do not respect land boundaries. An integrated approach to managing fuels and fire regimes across both public and private land is essential to better managing bushfire.

The Pilot has produced information that is of great value to Otways' bushfire managers. Numerous fires were run by simulation over the Otways landscape. The protection and ecological and water impacts provided by various combinations of burns were estimated for many fire scenarios. These simulations enable comparative assessment of how planned fire can reduce the chance of fire starting, slow the rate and ferocity of their spread, and reduce their impact on communities and the resources (such as water) and value (such as healthy forests). Fire managers can now measure the level of risk reduction achieved by planned burning and establishment of fuel breaks, including the importance of the relationship between fuel management on both public and private land.

Figure 1. – Modelled impact of fire ignitions:

This image shows how the landscape can be assessed in terms of the most important areas to manage the risk of fire starting, spreading and causing damage – the example here focuses on ignitions.

The orange red areas represent those where fires that start have the highest potential to damage the most residential properties in the Otways under certain fire danger conditions.



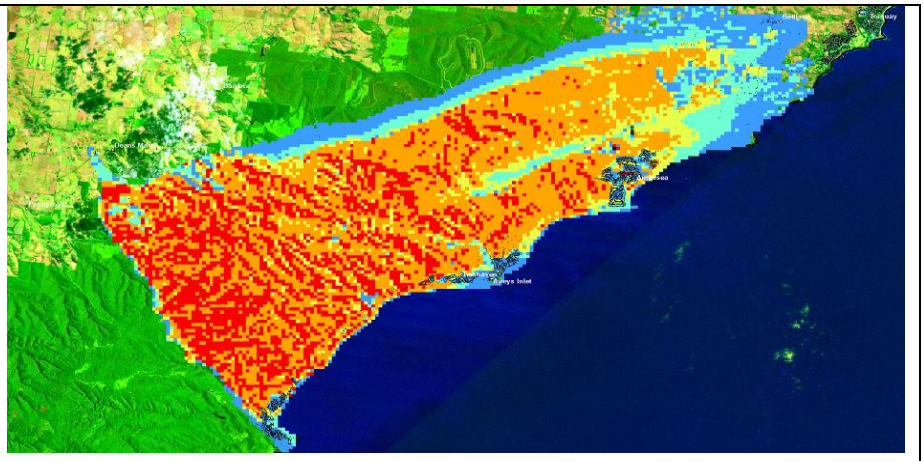
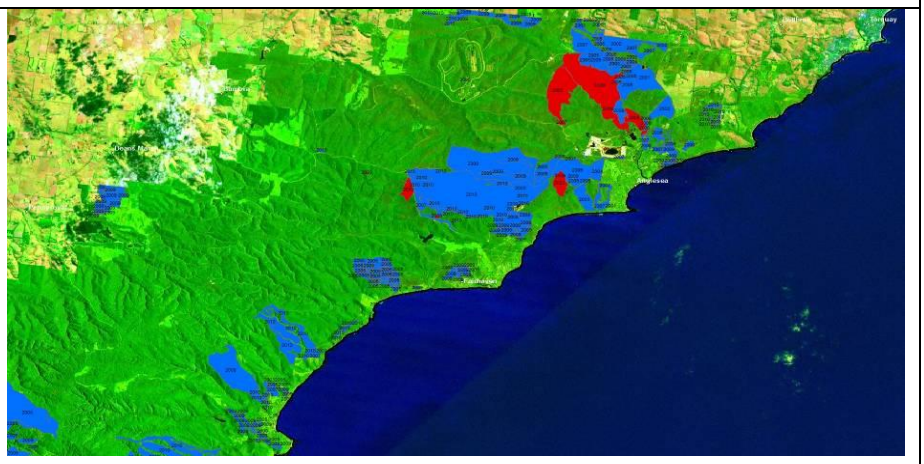
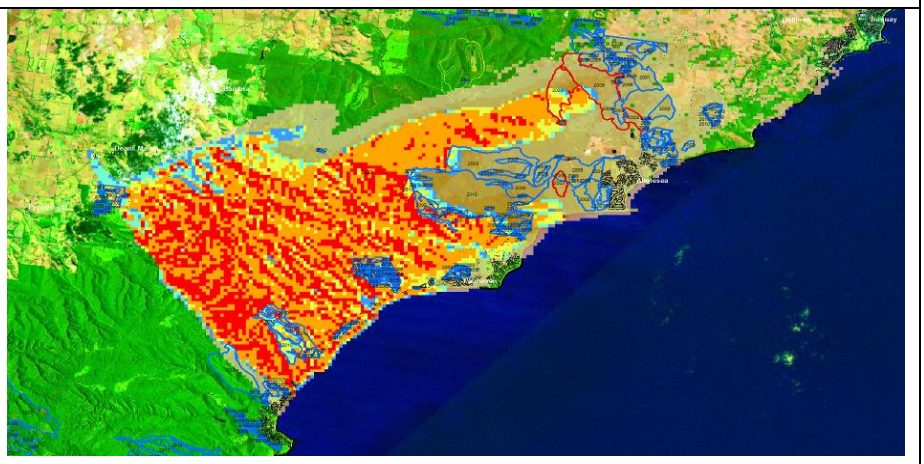
Regardless of how extensively planned burning and building fuel breaks are conducted, bushfire risk can never be totally eliminated from the Victorian landscape.

Modelling and planning using future fire management techniques in the Pilot indicates that, even with burning the maximum area possible, it is not feasible to reduce risk to communities below moderate risk levels. It shows that communities must then apply other mechanisms such as clearing around homes, getting to know neighbours, establishing network groups such as Community Fire Guard and fire strategic conversations,[24] and developing individual and community bushfire plans to further reduce risk. This then becomes a true expression of working together to reduce bushfire risk – an example of the "shared responsibility" discussed in Section 1.2 of this Plan.

Simulations have revealed the parts of the Otways where the most damaging bushfires may start, spread and have significant impacts on communities and water catchments. Although this information is still being refined and evaluated, it already provides critical information for Otway fire managers. Burns and other prevention works can be located with confidence and be shown to substantially reduce risk of bushfire to communities. Review, evaluation, adaptation through the incorporation of new information from research, monitoring and working with communities is fundamental to the ultimate success of fire management planning state wide.

The Pilot has not just focussed on planning future fire regimes. It has practically informed the delivery of the current burn program with approximately 25,000 hectares effectively fuel reduced over the past four years in the Otway District. Modelled risk reduction in the Otways has provided evidence of the need for the escalation of the DELWP and Parks Victoria planned burn program, and has demonstrated how fire managers can work more transparently and cooperatively with communities to improve bushfire management outcomes for reducing bushfire risk to local communities.

[24] These two initiatives, and other community engagement initiatives, are described in further detail in Appendix B – Multi-Agency Work Plan: Surf Coast Shire Municipal Fire Management Plan.

Figure 2. – These three images are simulations of: (i) fire spread under near worst case conditions; and (ii) impacts of planned burning on reduction of fire extent, severity and community impacts. This image shows the projected spread of the a fire spreading under near worst case conditions without any prior planned burning and fuel management.	
This image shows planned burn areas scheduled by the end of 2011	
This image shows how the proposed burning is expected to break up and reduce the severity of this fire run. As of 2011, DELWP and Parks Victoria implemented and improved on strategies evaluated using this approach.	

The process of better understanding bushfire risk, the role of fire in our environment, and then working together to find the best ways to manage fire in the environment we live in and value is ongoing. This critical work will be further refined over the next few years and has the potential to support more explicit and transparent risk based decision making and improve integrated bushfire management planning. This approach gives emphasis to protecting human life by reflecting our shared responsibility for bushfire safety[25]. DELWP has since finalised the Strategic Bushfire Management Plan – Barwon Otway Bushfire Risk Landscape, and while this current Municipal Fire Plan does not draw information from DELWP's new plan, the next Municipal Fire Plan will.

[25] "Approaches to Future Fire Management – risk based planning and action from the Otway-Surf Coast", Case Study, Bushfires Royal Commission Implementation Monitor, *Progress Report*, (July 2011) at pp. 136 – 139.

5.1.3 Structural and Chemical Fire Risk Assessment

This Plan recognises that an Urban Risk Assessment Tool is being developed at State level and, once completed, will be implemented by the MFMPC to complete and incorporate a full Risk Register in respect of structural and chemical fires at Appendix A of this Plan. In the interim, Barwon South West IFMP and CFA staff are developing a risk assessment process for chemical and structural fires using incident statistics, key asset identification, and other available site and incident statistical information.

Risk assessment will give consideration to likelihood factors, such as structural and chemical fire history (number and type) across the municipality and across the relevant industry, and the consequences, or potential consequences of those occurrences (death, injury, economic and property loss statistics). Consideration will also be given to high risk premises and assets. Examples of high risk premises may include (for life risk) nursing homes, aged care facilities and institutional care facilities, (and for property loss risk) commercial and industrial premises. In terms of chemical fires, consideration will be given to high risk premises such as chemical manufacturers, or high chemical use industries, chemical transport industries, fuel suppliers and any other industry identified following a comprehensive risk assessment process.

Maps showing chemical and structural fire incidents for the Shire since 1999 are included in Appendix E of this Plan. These maps currently capture actual incident numbers and geographic locations of recorded incidents. Consequence data has still to be incorporated and criteria finalised for asset classification and development of a risk register. As the risk data does not meet the requirements of ISO 31000 to undertake a full risk analysis, the maps are provided in the plan for information only at this time.

The MFMPC will continue to work with VFRR and Barwon South West region on the development of risk assessment criteria and tools for structure and chemical fires. The Plan will be updated to include additional information as the criteria and tools are finalised.

5.2 Alignment to Regional Objectives

Assets in the Surf Coast Shire's VFRR Risk Register are grouped according to the five regional risk priorities identified by the Barwon South West Regional Strategic Fire Management Planning Committee. These priorities are: high risk townships, critical essential services, tourism and major events, key rural industries and major transport corridors. The table below aligns the regional risk priorities to the asset classes and sub-classes within the VFRR.

Barwon South West Regional Risk Priority	**Asset Class**	**Asset Subclass**
High Risk Townships	Human Settlement	Residential Other
Critical Essential Services	Economic	Drinking Water Catchment Infrastructure
Tourism and Major Events	Economic	Tourist and Recreational Special Fire Protection
Key Rural Industries	Economic	Commercial Commercial Forests
Major Transport Corridors	Economic	Infrastructure
Other assets not included in regional risk priorities	Human Settlement	Special Fire Protection

The Barwon South West Regional Strategic Fire Management Planning Committee has endorsed the following regional objectives for Barwon South West:

1. Demonstrate effective leadership
2. Understand the Barwon South West region
3. Identify our priority assets and values
4. Support our values whilst managing priority risks
5. Continue to improve and evolve

5.3 Treatment of Municipal Fire Risk

The State fire management priorities are underpinned by the primacy of life and the protection of property, the economy and the environment. These priorities inform and are integrated into the primary fire risk management strategies used in this plan (refer to Appendix B of this Plan for details), which are:

- Community education and engagement;
- Hazard reduction;
- Preparedness; and
- Regulatory controls.

Landscape level bushfire management planning process for Otway-Surf Coast has identified the following five key focus areas to develop municipal level strategies to address bushfire risk:

- Prevention strategies aimed at reducing risk of ignition associated with road, rail and electrical infrastructure to the north of the public land
- Review roadside management strategies to the north of the public land to ensure that works support objectives for either:
    1) Managing for safety of road users, or
    2) Provide control lines
- Private land interface areas for planned burning integrated with public land
- Target areas of private land driving residual risk within townships; building on the “Weeds to Mulch” program[26]
- With partner agencies, implement engagement strategies and an integrated approach around community resilience, understanding and awareness of risk.

In addition to these recommended municipal strategies, there are a number of State wide and municipal treatments that have been identified for each fire risk management strategy, which can be used by agencies to reduce the risk and effect of fire on the community. The generic State wide and municipal wide treatments include:

- Community education programs;
- Community education and engagement activities;
- Public awareness – multimedia communications;
- Powerline hazard tree identification, management and reporting;
- Fire hazard inspection program and issue of fire prevention notices;
- Legislative compliance and enforcement;
- Road Bushfire Risk Assessment Guidelines
- Wildfire management overlays;
- Building code of Australia;
- Permits to Burn; and
- Local laws.

To effectively reduce community vulnerability to fire will require more than inter-agency effort alone. It will require more self-reliant and self-aware communities that have the knowledge, motivation and

[26] The Weeds to Mulch Program is described in greater detail in Appendix B – Multi-Agency Work Plan: Surf Coast Shire Municipal Fire Management Plan, under “Community Education and Engagement”.

capacity to manage risks to reduce the threat of fire and that work as active partners with fire management agencies.

5.3.1 Hazard Trees

The Electrical Safety Act 1998 provides that a municipal council must specify, within its Municipal Fire Prevention Plan:

(a) procedures and criteria for the identification of 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 Surf Coast Shire's identification and notification procedures for Hazard Trees are included in Appendix C.1.

5.3.2 Community Information Guides (formerly Township Protection Plans)

A key recommendation from the Victorian Bushfires Royal Commission Interim Report was the development of Township Protection Plans (TPPs), now known as Community Information Guides (CIGs) for high risk communities across Victoria. The priority given for these plans is the protection of life.

The VFRR risk assessment process was also used to inform decisions relating to identified high risks towns and Township Protection Planning, including identification of designated Neighbourhood Safer Places – Places of Last Resort

Community Information Guides have been established for high risk communities and are regularly reviewed. Should the risk in a particular area be modified by land clearing or development, CIG's may be updated, the area covered changed, or the CIG withdrawn.

CIGs for specific locations in the Surf Coast Shire can be found in Appendix C.2 – Community Information Guides.

5.3.3 Bushfire Safety and Shelter Options

5.3.3.1 Overview – Bushfire Safety Options

The State Government's Bushfire Safety Policy Framework recognises that there are a range of ways that people will respond to the threat of bushfires and a range of locations, both personal and communal, where people may find shelter.[27] The Framework includes the following bushfire safety options:

- Leaving options
  - Leaving early
  - Evacuation
- Relocation destinations
  - Leave early destinations
  - Emergency relief centres
- Shelter options
  - Defending a well prepared home
- Contingency shelter options
  - Private bushfire shelters (bunkers)
  - Community fire refuges

[27] Fire Services Commissioner – Victoria, *Bushfire Safety Policy Framework*, December 2010 at p. 17, available at www.firecommissioner.vic.gov.au

- Neighbourhood Safer Places – Places of Last Resort
- Private places of shelter

5.3.3.2 Contingency Shelter Options

The State Bushfire Safety Policy Framework recognises that not all people living or present in high bushfire risk areas will have a well-developed bushfire survival plan. Four temporary shelter options are listed in the Framework – two public options (community fire refuges and Neighbourhood Safer Places – Places of Last Resort) and two private options (bunkers and other private places of shelter).

In terms of the two public options, there are no community fire refuges designated in the Surf Coast Shire. The Shire has, however, designated several Neighbourhood Safer Places – Places of Last Resort (NSPs). Details of the specific locations of NSPs within the Shire can be found in Appendix C.3 – Neighbourhood Safer Places – Places of Last Resort. All designated NSPs are reviewed annually by Council and the Country Fire Authority.

NSPs are an area or premises that may, as a last resort, provide some shelter from the life threatening effects of a bushfire such as direct flame contact or radiant heat.

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 people 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.

The Surf Coast Shire Council has adopted a Municipal Neighbourhood Safer Places Plan. This plan contains a step by step methodology for the Council to follow in identifying, designating, establishing, maintaining and decommissioning NSPs. The NSPs listed in Appendix C.3 have all been designated according to the process outlined in the Shire's Municipal Neighbourhood Safer Places Plan.

A copy of the Shire's Municipal Neighbourhood Safer Places Plan is available at the Shire's website www.surfcoast.vic.gov.au.

5.3.4 Individual Bushfire Risk Treatments

5.3.4.1 Vegetation Management Rights

Native vegetation is important to many Victorians and its removal is carefully regulated by the planning system. Under the Victoria Planning Provisions, there are permit exemptions for vegetation removal around existing buildings used for accommodation and adjacent to fences on property boundaries.

The two main exemptions are the '10/30 rule' and the '10/50 rule' which allow clearance of native vegetation around buildings used for accommodation without obtaining a planning permit. Under the 10/30 rule, landowners can clear without a planning permit:

- Any vegetation, including trees, within 10 metres of a building used for accommodation;
- Any vegetation (except for trees) within 30 metres of a building used for accommodation; and
- Any vegetation to a combined maximum width of 4 metres either side of an existing fence on a boundary between properties in different ownership.

The 10/50 rule mirrors the 10/30 rule but applies to properties within the Bushfire Management Overlay and allows clearance of vegetation (except for trees) up to 50 metres of a building used for accommodation. The exemptions only apply to existing buildings and fences constructed or

approved before 10 September 2009. In the case of the 10/50 exemption, the buildings and fences must be constructed or approved before 10 September 2009 and lawfully erected before 18 November 2011.[28]

5.3.5 Local Laws and Permit to Burn

In the Surf Coast Shire, burning off is permitted outside the Fire Danger period without a permit. Within the township boundaries of the Shire, burning off is limited to specific days. In rural areas, outside of the township boundaries, burning off is permitted any day of the week, subject to meeting the Shire's Burning Controls and Guidelines (available at www.surfcoast.vic.gov.au).

During the declared Fire Danger Period open air burning is prohibited without a written permit from the Municipal Fire Prevention Officer, Limited permits may be obtained by individuals to conduct a fuel reduction or stubble burn within the municipality. These permits are issued by Council under authority of the CFA Act. These permits contain stringent conditions that must be complied with.

Further information about local laws and permits may be obtained from the Surf Coast Shire's website www.surfcoast.vic.gov.au.

5.3.6 Inspection of Private Properties and Issue of Notices

The Surf Coast Shire conducts fire hazard inspections within the municipality, concentrating on high risk areas. Fire prevention notices will be issued on land considered to be a fire risk as soon as practicable upon declaration of Fire Danger Period. Notices will address works required for the protection of life and property, especially in, and around areas of human settlement.

5.3.7 Planning Permits

When applications are lodged with the Surf Coast Shire for permits under the Planning and Environment Act for the subdivision of land or the construction of buildings in areas of high fire risk, the Shire will give consideration to the following documents in determining any such application, and also refer the application to the relevant fire agencies for comment.

- Surf Coast Planning Scheme, including the new Bushfire Management Overlay
- Planning Conditions and Guidelines for Subdivisions (Country Fire Authority, 1991) in bushfire-prone areas;
- Requirements for Water Supplies and Access for Subdivisions in Residential 1 and 2 and Township Zones (Country Fire Authority, 2004)
- Building in a Wildfire Management Overlay – Applicant's Workbook 2010;
- Australian Standard 3959, 2009 – Construction of Buildings in Bushfire Prone Areas.

5.4 Treatment of Structural Fires and Chemical Fires and Incidents

5.4.1 Structural Fire Risk

Incident statistics show a likelihood for structural fires across the municipality, but with the strongest concentration in the major townships. Structural fires may involve a range of structures from a single residential structure through to a large industrial building. The impacts of structural fires can include death or injury, loss of property, or consequential economic loss associated with the aforementioned impacts.

It is recognised that the majority of structural fires occur within townships, however isolated single structures can also be affected by structural fire.

[28] Clause 52.48, *Victoria Planning Provisions*

5.4.2 Structural Fire Risk Treatments

Structural Fire Risk is treated in a number of ways to minimize their occurrence and severity. Treatment actions may include:

- building control and regulation
- public awareness and education
- household fire planning
- occupational health and safety regulation
- dangerous goods and hazardous material regulation
- response procedures of CFA, including resource and training provision, proportional and specific, to the structural risk environment

5.4.3 Structural Risk Action Timelines and Responsibilities

Determination of treatment implementation will be determined once the State Urban Risk Assessment Tool is developed and subsequently implemented. This plan recognises that many of the treatments identified at 5.4.2 are in place already. It is expected that a fully completed risk assessment process will identify any need for targeted, or alternate, treatments associated with assessed risk.

The MFMPC will work with key agencies including CFA, Council's Municipal Building Surveyor and WorkSafe Victoria to set performance criteria (including timelines) for any identified actions and treatments from the risk assessment process.

5.4.4 Chemical Fire and Incident Risk

Incident statistics show a likelihood for fires and incidents involving chemicals across the municipality. Such incidents may involve a range of matters from a minor leak or spill (example – car leaking petrol) to a major leak and/or fire involving chemicals (examples include Coode Island fire, tar leak at Portland Harbour, Longford Gas Plant fire). The impacts of chemical fires and incidents can include death or injury, loss or damage of property and environment, or consequential economic or environmental losses associated with the aforementioned impacts.

It is recognised that the majority of chemical fires and incidents occur within townships, however isolated incidents have been known to occur, including tanker leaks and fires outside of built up areas.

5.4.5 Chemical Fires and Incident Risk Treatments

Chemical fires and incidents risk is treated in a number of ways to minimize their occurrence and severity. Treatment actions may include:

- dangerous goods and hazardous material regulation
- occupational health and safety regulation
- environmental protection regulation
- industry compliance codes, and codes of practice
- building control and regulation
- transport licensing and regulation
- public and industry awareness and education
- emergency management fire planning within industries
- response procedures of CFA, including resource and training provision specific to the structural, chemical and Hazmat risk environments

5.4.6 Chemical Fires and Incident Risk Action Timelines and Responsibilities

Determination of treatment implementation will be determined once the State Urban Risk Assessment Tool is developed and subsequently implemented. This Plan recognises that many of the treatments identified at 5.4.5 are in place already. It is expected that a fully completed risk assessment process will identify any need for targeted, or alternate, treatments associated with assessed risk.

The MFMPC will work with key agencies including CFA, WorkSafe Victoria, VicRoads and the Environment Protection Authority to set performance criteria (including timelines) for identified actions and treatments.

5.5 Major Hazard Facilities

Major Hazard Facilities are industrial sites that store, handle or process specific hazardous materials in quantities above a threshold amount. Examples of such facilities include oil refineries, and gas-processing plants.

Major Hazard Facilities must comply with strict legal requirements. The list of approved Major Hazard Facilities in Victoria is maintained by WorkSafe Victoria and is available at www.worksafe.vic.gov.au. Major Hazard Facilities treatments are identified and managed at state level. Any Major Hazard Facilities listed in this Plan are noted for information and completeness only.

As at the date of this Plan, there are no Major Hazard Facilities in the Surf Coast Shire.

5.6 Cross Boundary Arrangements

This Plan seeks to ensure that risk environments that cross municipal and regional boundaries are treated in a seamless manner with regard to risk assessment and treatments. In part, this is achieved through a collaborative approach and the use of consistent processes and tools.

The Surf Coast Shire shares borders with the City of Greater Geelong, Golden Plains Shire and Colac-Otway Shire. It is the shared responsibility of the Municipal Fire Management Planning Committees for all four municipalities to ensure that risks contiguous across these borders are planned for in a consistent and seamless manner.

Clear linkages to existing organisational cross boundary agreements and Memorandums of Understanding between agencies dealing with Preparedness, Preparation, Response and Recovery activities and resource allocation arrangements are also vital.

The Surf Coast Shire and Colac Otway Shire have agreed to collaborate on development of their Municipal Fire Management Plans. A coordinated strategic approach allows for better agency integration on fire management and planning and reflects the broader landscape level considerations impacting both Shires.

To ensure that shared risk is appropriately addressed, Municipal Fire Management Plans will be considered by the Regional Strategic Fire Management Planning Committees to make certain they address risks shared across municipal and agency boundaries in a consistent and seamless manner.

It is also recognized that agencies and municipalities have existing planning relationships across multiple boundaries and that these planning arrangements need to be considered when developing future plans.

A map of the Surf Coast Shire showing municipal boundaries is provided in Appendix E.

6 Plan Reporting, Review and Improvement

6.1 Legislative Responsibilities

The Surf Coast Shire has a legislative responsibility under the *Emergency Management Act 1986* to develop a Municipal Emergency Management Plan, and under the *Country Fire Authority Act 1958*, to develop and implement a Municipal Fire Prevention Plan. The Municipal Fire Prevention Plan is a sub plan of the Municipal Emergency Management Plan and is prepared by the Municipal Fire Management Planning Committee (MFMPC).

For councils wholly or partly within the country area of Victoria, the Municipal Fire Management Plan as adopted by council will be deemed to meet the requirement for a Municipal Fire Prevention Plan under Section 55A (1) of the *Country Fire Authority Act*, provided that it contains the provisions as set out in Section 55A (2) of the *Country Fire Authority Act*.

6.2 Plan Audit

For councils wholly or partly within the Country Area of Victoria, the Municipal Fire Management Plan will be audited under Section 55B of the *Country Fire Authority Act 1958*.

6.3 Plan Amendment and Review

This Plan has a three year lifespan based on current audit requirements contained within Section 55B of the *Country Fire Authority Act*. The 2105 update extends the life of the plan until March 2017. It is acknowledged that the audit process for the Plan and planning cycles may change as the Integrated Fire Management Planning framework and planning processes evolve in the future.

This Plan will be reviewed and amended:

- Annually in association with the Municipal Emergency Management Plan;
- Following significant incidents if required;
- As directed by the State or Regional Fire Management Planning Committees;
- As required by legislation; and/or
- As further works are completed by the MFMPC.

A new Municipal Fire Management Plan is being prepared during 2015/2016 and once approved the new plan will supersede this plan.

7 Attachments

Appendix A **Surf Coast Shire Risk Management Register**
- A.1 Surf Coast Shire Risk Management Register by Regional Risk Priorities
- A.2 List of Victorian Fire Risk Register Treatments

Appendix B **Multi- Agency Work Plan**

Appendix C **Statutory Audit Obligations**
- C.1 Hazard Trees – Identification and Notification Procedures
- C.2 Community Information Guides (formerly Township Protection Plans)
- C.3 Neighbourhood Safer Places – Places of Last Resort

Appendix D **Community & Organisational Engagement Plan**

Appendix E **Maps**
- E.1 Municipal Boundaries Map
- E.2 Structural Incidents Map – Surf Coast Shire
- E.3 Chemical Incidents Map – Surf Coast Shire
- E.4 Combined Chemical & Structural Incidents Map- Surf Coast Shire

Appendix F **Terminology**

Appendix G **Acronyms**

Appendix H **Bibliography**

Appendix A Surf Coast Shire Risk Management Register

Appendix A1 Surf Coast Shire Risk Management Register by Regional Risk Priorities

Priority 1 High Risk Townships

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Likelihood	Consequence	Risk	Priority	Community Information Guide	NSP identified	Treatments (see Treatment Overview List Appendix A.2)
73098	Human Settlement	Residential	Aireys Inlet	Aireys Inlet	Likely	Major	Very High	2A	Yes		100,106,108,111,113,202,203,217,219,223,224,307,401,402,418,423,700
73012	Human Settlement	Residential	Aireys Inlet Interface	Aireys Inlet	Likely	Catastrophic	Extreme	1B	Yes		101,207,222,303,404,413
73100	Human Settlement	Residential	Anglesea	Anglesea	Likely	Moderate	High	3A	Yes		101,207,303,404,413
73001	Human Settlement	Residential	Anglesea Interface	Anglesea	Likely	Catastrophic	Extreme	1B	Yes		100,106,108,111,113,202,203,217,218,219,223,224,307,401,402,418,423,700,700
73093	Human Settlement	Other	Bambra	Bambra	Likely	Catastrophic	Extreme	1B	Yes		100,106,202,203,214,217,219,223,224,307,401,402,418,423,700
73092	Human Settlement	Other	Bellbrae	Bellbrae	Likely	Moderate	High	3A	Yes		100,106,202,203,217,219,223,224,307,401,402,418,423,700
73103	Human Settlement	Residential	Bells Beach	Bells Beach	Likely	Catastrophic	Extreme	1B			800
73089	Human Settlement	Other	Big Hill	Big Hill	Likely	Catastrophic	Extreme	1B			800
73020	Human Settlement	Residential	Deans Marsh	Deans Marsh	Likely	Moderate	High	3A	Yes		100,106,108,111,113,202,203,214,217,218,219,223,224,307,401,402,418,423,700
73013	Human Settlement	Residential	Fairhaven	Fairhaven	Likely	Catastrophic	Extreme	1B			100,106,111,219,223,418,423
73094	Human Settlement	Other	Freshwater Creek	Freshwater Creek	Likely	Minor	Medium	4			100,106,202,203,217,218,219,223,224,307,402,418,423,700
73523	Human Settlement	Other	Gherang	Gherang	Likely	Catastrophic	Extreme	1B			100,106,111,219,223,418,423
73523	Human Settlement	Other	Gundrys Rd	Bellbrae	Likely	Catastrophic	Extreme	1B			100,106,219,223,418,423,700
73104	Human Settlement	Residential	Jan Juc	Jan Juc	Likely	Moderate	High	3A	Yes		100,106,219,223,418,423
73016	Human Settlement	Residential	Jan Juc Interface	Jan Juc	Likely	Catastrophic	Extreme	1B	Yes		101,207,222,303,413,414,500

73018	Human Settlement	Residential	Lorne	Lorne	Likely	Major	Very High	2A	Yes		100,106,108,111,113,202,203,214,217,219,223,224,307,401,402,418,423,700
73097	Human Settlement	Residential	Lorne Interface	Lorne	Likely	Catastrophic	Extreme	1B	Yes		100,106,108,111,113,202,203,217,218,219,223,224,307,401,402,418,423,700,700
73014	Human Settlement	Residential	Moggs Creek	Aireys Inlet	Likely	Catastrophic	Extreme	1B			100,106,108,111,113,202,203,217,219,223,224,307,401,402,418,423,700
73002	Human Settlement	Residential	Moriac	Moriac	Likely	Minor	Medium	4			800
73090	Human Settlement	Other	Pennyroyal Valley	Deans Marsh	Likely	Major	Very High	2A			100,106,219,223,418,423
73102	Human Settlement	Residential	Torquay	Torquay	Unlikely	Minor	Low	NA			800
73015	Human Settlement	Residential	Torquay Interface	Torquay	Likely	Minor	Medium	4			800
73523	Human Settlement	Other	Wensleydale	Wensleydale	Likely	Catastrophic	Extreme	1B			800
73003	Human Settlement	Residential	Winchelsea	Winchelsea	Likely	Minor	Medium	4			800

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73344	Economic	***Drinking Water Catchment***	Upper Barwon SWSC	Surf Coast	Regional	Moderate	Major	No	Yes	Likely	Very High	**2A**	214;406;439;700
73346	Economic	Drinking Water Catchment	Gosling, Matthews, Pennyroyal Cr SWSW	Surf Coast	Regional	Moderate	Major	No	Yes	Likely	Very High	**2A**	214;406;439
73343	Economic	Drinking Water Catchment	Lorne SWSC	Surf Coast	Local	Moderate	Moderate	No	Yes	Likely	High	**3A**	214;406;439;700
73345	Economic	Drinking Water Catchment	Painkalac SWSC	Surf Coast	Local	Moderate	Moderate	No	Yes	Likely	High	**3A**	214;406439;;709
73226	Economic	Drinking Water Catchment	Wurdi Buloc Inlet Channel	Surf Coast	Local	Moderate	Moderate	Yes	No	Possible	Medium	**4**	214;406;408;439
73223	Economic	***Infrastructure***	Winchelsea Colac 66kv Line	Surf Coast	Regional	Moderate	Major	Yes	Yes	Almost Certain	Extreme	**1C**	108;218;219; 401;402
73224	Economic	Infrastructure	Geelong Winchelsea 66kv Line	Surf Coast	Regional	Moderate	Major	Yes	Yes	Almost Certain	Extreme	**1C**	108;218;219; 401;402
73202	Economic	Infrastructure	APS-PTH Transmission Line	Anglesea	Local	High	Major	No	Yes	Likely	Very High	**2A**	427
73324	Economic	Infrastructure	Wurdi Buloc Reservoir & WTP	Wurdi Buloc	Regional	Moderate	Major	No	Yes	Likely	Very High	**2A**	214;406;439
73201	Economic	Infrastructure	MLTS-TGTS Transmission Line	Surf Coast	National State	Low	Moderate	Yes	Yes	Almost Certain	Very High	**2C**	427
73221	Economic	Infrastructure	Lorne 22kv Line	Surf Coast	Local	Moderate	Moderate	Yes	Yes	Almost Certain	Very High	**2C**	108;219;222; 401;402

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73222	Economic	Infrastructure	Lorne - Anglesea 22kv Line	Surf Coast	Local	Moderate	Moderate	Yes	Yes	Almost Certain	Very High	2C	108;219;222; 401;402
73235	Economic	Infrastructure	Anglesea WRP	Anglesea	Local	Moderate	Moderate	Yes	Yes	Almost Certain	Very High	2C	214;406;408;439
73217	Economic	Infrastructure	Lorne WRP	Surf Coast	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73231	Economic	Infrastructure	Lorne Water Treatment Plant	Surf Coast	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73248	Economic	Infrastructure	Forest Rd tank, disinfection & pre treatment	Anglesea	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73263	Economic	Infrastructure	Aireys Inlet WRP	Aireys Inlet	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73266	Economic	Infrastructure	Painkalac Reservoir	Aireys Inlet	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73267	Economic	Infrastructure	Aireys Inlet WTP	Aireys Inlet	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73281	Economic	Infrastructure	Allen Reservoir	Lorne	Local	Moderate	Moderate	No	Yes	Likely	High	3A	214;406;439
73232	Economic	Infrastructure	Teddy's Lookout WT & WPS	Lorne	Local	Low	Minor	Yes	Yes	Almost Certain	High	3D	214;406;408;439
73218	Economic	Infrastructure	Gas Valve	Winchelsea	Local	Low	Minor	No	Yes	Likely	Medium	4	800

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73225	Economic	Infrastructure	Winchelsea Zone Substation	Surf Coast	Local	Low	Minor	No	Yes	Likely	Medium	4	108
73233	Economic	Infrastructure	Aireys Inlet WPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;408;439
73234	Economic	Infrastructure	Anglesea High Level Tank	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;408;439
73237	Economic	Infrastructure	CFA Communication Repeater	Teddy's Lookout Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	800
73247	Economic	Infrastructure	Anglesea Borefield GW 7	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73249	Economic	Infrastructure	Anglesea Borefield GW 6	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73250	Economic	Infrastructure	Anglesea Borefield GW 4	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73251	Economic	Infrastructure	Anglesea Borefield GW 3	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73257	Economic	Infrastructure	Anglesea Borefield GW 1	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73258	Economic	Infrastructure	Anglesea Borefield GW 5	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73259	Economic	Infrastructure	Anglesea Borefield GW 2	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73264	Economic	Infrastructure	Aireys Inlet No.3 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73265	Economic	Infrastructure	Aireys Inlet No.2 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73268	Economic	Infrastructure	Aireys Inlet No. 1 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73269	Economic	Infrastructure	Aireys Inlet No. 8 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73270	Economic	Infrastructure	Aireys Inlet No.7 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73271	Economic	Infrastructure	Aireys Inlet No.6 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73272	Economic	Infrastructure	Aireys Inlet No.5 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73273	Economic	Infrastructure	Aireys Inlet No.4 SPS	Aireys Inlet	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73274	Economic	Infrastructure	Lorne No.7 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73275	Economic	Infrastructure	Lorne No.8 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73276	Economic	Infrastructure	Lorne No. 4 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73277	Economic	Infrastructure	Lorne No.2 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73278	Economic	Infrastructure	Lorne No.3 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73279	Economic	Infrastructure	Lorne No. 5 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73280	Economic	Infrastructure	Lorne No. 6 SPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73326	Economic	Infrastructure	Jan Juc WPS	Jan Juc	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73331	Economic	Infrastructure	Lorne Basin 1 & WPS	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73332	Economic	Infrastructure	Lorne Basin 2	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73333	Economic	Infrastructure	Lorne Basin 3	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73334	Economic	Infrastructure	Lorne SPS 1	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73335	Economic	Infrastructure	Anglesea SPS 2	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73336	Economic	Infrastructure	Anglesea SPS 7	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439

Priority 2 Critical Essential Services

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73337	Economic	Infrastructure	Anglesea SPS 8	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73338	Economic	Infrastructure	Anglesea SPS 1	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73339	Economic	Infrastructure	Anglesea SPS 6	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73340	Economic	Infrastructure	Anglesea SPS 5	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73341	Economic	Infrastructure	Anglesea SPS 4	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73342	Economic	Infrastructure	Anglesea SPS 3	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	214;406;439
73323	Economic	Infrastructure	Winchelsea WRP	Winchelsea	Local	Moderate	Moderate	No	No	Unlikely	Low	NA	214;406;439
73325	Economic	Infrastructure	Jan Juc WT	Jan Juc	Local	Low	Minor	No	No	Unlikely	Low	NA	214;406;439
73327	Economic	Infrastructure	Torquay WT	Torquay	Local	Low	Minor	No	No	Unlikely	Low	NA	214;406;439
73328	Economic	Infrastructure	Torquay DP	Torquay	Local	Low	Minor	No	No	Unlikely	Low	NA	214;406;439
73329	Economic	Infrastructure	Ocean Acres DP	Bellbrae	Local	Low	Minor	No	No	Unlikely	Low	NA	214;406;439

Priority 3 Tourism and Major Events

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73207	***Economic***	***Tourist and Recreational***	Great Ocean Road	Surf Coast	National /State	High	Catastrophic	Yes	Yes	Almost Certain	Extreme	**1A**	223;418;700
73220	Economic	Tourist and Recreational	Deans Marsh Road	Lorne	Regional	Moderate	Major	Yes	Yes	Almost Certain	Extreme	**1C**	223;418
73203	Economic	Tourist and Recreational	Falls Festival	Lorne	Regional	Low	Moderate	No	Yes	Likely	High	**3A**	100;222;301;413;700
73206	Economic	Tourist and Recreational	Rip Curl Pro	Bells Beach	Regional	Low	Moderate	No	Yes	Likely	High	**3A**	100;222;413
73204	Economic	Tourist and Recreational	Pier to Pub Mountain to Surf	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	**4**	100;202;203;224;307
73205	Economic	Tourist and Recreational	Anaconda Adventure Race	Lorne	Local	Low	Minor	No	Yes	Likely	Medium	**4**	100;202;203;222;224;307
73070	***Human Settlement***	***Special Fire Protection***	Lorne Foreshore Caravan Parks	Lorne			Catastrophic	No	Yes	Likely	Extreme	**1B**	101;222;303;700
73077	Human Settlement	Special Fire Protection	Herbert's Camping Ground	Wymbooliel			Catastrophic	No	Yes	Likely	Extreme	**1B**	202;224;307;700
73079	Human Settlement	Special Fire Protection	Big Hill Camping Ground	Benwerin			Catastrophic	No	Yes	Likely	Extreme	**1B**	202;203;224;307;700

Priority 3 Tourism and Major Events

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73084	***Human Settlement***	***Special Fire Protection***	Hammonds Road Camping Ground	Wensleydale			Catastrophic	No	Yes	Likely	Extreme	**1B**	202;203;224;307;700
73069	Human Settlement	Special Fire Protection	Queens Park Caravan Park	Lorne			Major	No	Yes	Likely	Very High	**2A**	101;202;203;217;222;303 307;700
73071	Human Settlement	Special Fire Protection	Cumberland River Caravan Park	Lorne			Major	No	Yes	Likely	Very High	**2A**	101;222;303
73074	Human Settlement	Special Fire Protection	Jan Juc Caravan Park	Jan Juc			Major	No	Yes	Likely	Very High	**2A**	800
73078	Human Settlement	Special Fire Protection	Erskine Falls	Lorne			Major	No	Yes	Likely	Very High	**2A**	202;203;224;307;700
73080	Human Settlement	Special Fire Protection	Blanket Leaf Picnic Area	Lorne			Major	No	Yes	Likely	Very High	**2A**	202;224;307;700
73081	Human Settlement	Special Fire Protection	Sharps Camping Ground	Lorne			Major	No	Yes	Likely	Very High	**2A**	202;203;224;307;700
73082	Human Settlement	Special Fire Protection	Sheoak Picnic Area	Lorne			Major	No	Yes	Likely	Very High	**2A**	202;203;224;307;700
73083	Human Settlement	Special Fire Protection	Allenvale Mill Site Camping Ground	Lorne			Major	No	Yes	Likely	Very High	**2A**	202;203;224;307;700
73072	Human Settlement	Special Fire Protection	Aireys Inlet Caravan Park	Aireys Inlet			Moderate	No	Yes	Likely	High	**3A**	101;222;303;404
73073	Human Settlement	Special Fire Protection	Anglesea Beach Front Caravan Park	Anglesea			Moderate	No	Yes	Likely	High	**3A**	101;222;303;404

Priority 4 Key Rural Industries

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73214	Economic	Commercial	Alcoa Coal Mine	Anglesea	Regional	Low	Moderate	No	Yes	Likely	High	3A	202;203;224;307
73215	Economic	Commercial	Linfox Australian Automotive Research Centre	Anglesea	Local	Low	Minor	No	Yes	Likely	Medium	4	101;202;203;222 224
73239	Economic	Commercial Forest	Hardwood Plantations	Surf Coast	Regional	Moderate	Major	Yes	Yes	Almost Certain	Extreme	1C	202;203;205;224 300
73240	Economic	Commercial Forest	Softwood Plantations	Surf Coast	Regional	High	Major	Yes	Yes	Almost Certain	Extreme	1C	202;203;205;224 300

Priority 5 Major Transport Corridors

Map Ref No.	Asset Type	Asset Sub type	Asset Name	Asset Location	Level of Impact	Cost of recovery	Consequence	Do fires occur frequently	Expected to spread & reach assets	Likelihood	Risk Rating	Priority	Treatments (see Treatment Overview List Appendix A.2)
73211	Economic	Infrastructure	Princes Hwy	Surf Coast	Regional	Low	Moderate	No	Yes	Likely	High	3A	222;413
73212	Economic	Infrastructure	Deans Marsh Lorne Road	Lorne	Regional	Low	Moderate	No	Yes	Likely	High	3A	202;203;700
73213	Economic	Infrastructure	Warrnambool Rail Line	Surf Coast	Regional	Low	Moderate	No	Yes	Likely	High	3A	223
73238	Economic	Infrastructure	Great Ocean Road	Surf Coast	National State	Low	Moderate	No	Yes	Likely	High	3A	223;418;700
73208	Economic	Infrastructure	Anglesea Road	Freshwater Creek	Local	Low	Minor	No	Yes	Likely	Medium	4	222;413
73209	Economic	Infrastructure	Winchelsea Deans Marsh Road	Surf Coast	Local	Low	Minor	No	Yes	Likely	Medium	4	222;413
73210	Economic	Infrastructure	Cape Otway Road	Surf Coast	Local	Low	Minor	No	Yes	Likely	Medium	4	222;413
73219	Economic	Infrastructure	Surf Coast Hwy	Torquay	Local	Low	Minor	No	Yes	Likely	Medium	4	222;413

Other Assets not included in the 5 Priority List

Map Ref No	Asset type	Asset sub type	Asset name	Asset Location	Likelihood	Consequence	Risk	Priority	Treatment number (see Treatment Overview List Appendix A.2)
73000	Human Settlement	Special Fire Protection	Great Ocean Road	Surf Coast	Likely	Catastrophic	Extreme	1B	223;417;418;700
73000	Human Settlement	Special Fire Protection	Deans Marsh Lorne Road	Surf Coast	Likely	Catastrophic	Extreme	1B	223;417;418;700
73006	Human Settlement	Special Fire Protection	Falls Festival	Lorne	Likely	Catastrophic	Extreme	1B	100;101;222;413;432;500;700
73059	Human Settlement	Special Fire Protection	Eumeralla Scout Camp	Anglesea	Likely	Catastrophic	Extreme	1B	202;203;224;307
73062	Human Settlement	Special Fire Protection	Anglesea Recreation Camp	Anglesea	Likely	Catastrophic	Extreme	1B	101;222;303;700
73065	Human Settlement	Special Fire Protection	Moggs Creek Girl Guide Camp	Moggs Creek	Likely	Catastrophic	Extreme	1B	101;202;203;224
73066	Human Settlement	Special Fire Protection	Sokil camp	Wensleydale	Likely	Catastrophic	Extreme	1B	100;101;222;224;303;500
73101	Human Settlement	Special Fire Protection	Former Mortimer & Oberon High School Camp	Bambra	Likely	Catastrophic	Extreme	1B	800
73056	Human Settlement	Special Fire Protection	Blue Cross Nursing Home	Anglesea	Likely	Major	Very High	2A	101;207;222;404
73060	Human Settlement	Special Fire Protection	Burnside Camp	Anglesea	Likely	Major	Very High	2A	101;202;203;222;303;500;700
73061	Human Settlement	Special Fire Protection	Araluen Lutheran Camp	Anglesea	Likely	Major	Very High	2A	101;222;303;404;500
73068	Human Settlement	Special Fire Protection	Coastal Forest Lodge	Anglesea	Likely	Moderate	High	3A	101;222;224;303;413;500
73086	Human Settlement	Special Fire Protection	Santa Monica School Camp	Eastern View	Likely	Major	Very High	2A	101;500
73046	Human Settlement	Special Fire Protection	Deans Marsh Primary School	Deans Marsh	Likely	Moderate	High	3A	101;222;303;421
73048	Human Settlement	Special Fire Protection	Aireys Inlet Primary School	Aireys Inlet	Likely	Moderate	High	3A	101;222;303;404;421
73049	Human Settlement	Special Fire Protection	Anglesea Primary School	Anglesea	Likely	Moderate	High	3A	101;222;303;404;421
73051	Human Settlement	Special Fire Protection	Bellbrae Primary School	Bellbrae	Likely	Moderate	High	3A	101;222;303;404;421
73052	Human Settlement	Special Fire Protection		Torquay	Likely	Moderate	High	3A	101;218;222;303;404;421

Map Ref No	Asset type	Asset sub type	Asset name	Asset Location	Likelihood	Consequence	Risk	Priority	Treatment number (see Treatment Overview List Appendix A.2)
			Surf Coast Secondary College	Torquay					
73053	Human Settlement	Special Fire Protection	St Therese Primary School	Torquay	Likely	Moderate	High	3A	101;222;303;404;421
73054	Human Settlement	Special Fire Protection	Moriac Primary School	Moriac	Unlikely	Moderate	High	3A	101;222;303;404;421
73055	Human Settlement	Special Fire Protection	Steiner School	Freshwater Creek	Likely	Moderate	High	3A	101;222;303
73064	Human Settlement	Special Fire Protection	Angahook Camp	Aireys Inlet	Likely	Moderate	High	3A	303;413;500
73067	Human Settlement	Special Fire Protection	Geelong College School Camp	Wensleydale	Likely	Moderate	High	3A	101;222;224;303;413;500
73088	Human Settlement	Special Fire Protection	Lorne Community Hospital	Lorne	Likely	Moderate	High	3A	800
73096	Human Settlement	Special Fire Protection	Lorne-Aireys Inlet P12 college	Lorne	Likely	Moderate	High	3A	800
73063	Human Settlement	Special Fire Protection	Camp Wilkin Baptist Camp	Anglesea	Likely	Minor	Medium	4	101;222;303;404
73047	Human Settlement	Special Fire Protection	Winchelsea Primary School	Winchelsea	Unlikely	Moderate	Low	NA	101;222;303;404;421
73058	Human Settlement	Special Fire Protection	Winchelsea Hospital	Winchelsea	Unlikely	Moderate	Low	NA	101;222;303;404

The link below will take you to the VFRR supporting documentation which includes:

- Vegetation guide
- Context update
- State-wide Treatment list; and
- VFRR Reference Guide

Appendix A.2 List of Victorian Fire Risk Register Treatments

TREATMENT NAME	TREATMENT DEFINITION	RESPONSIBLE AGENCY	TREATMENT NUMBER
COMMUNITY EDUCATION (100 SERIES)			
Community Education/ Engagement	Bushfire education, engagement and training programs targeted at numerous community groups including school children, elderly, employees, and businesses.		
		CFA	100
		LGA	101
		DEECD	102
		Utility	103
Agricultural Management	Agriculture bushfire management and safety issues for landowners/managers to assist in the preparation of property fire management plans.		
		CFA	104
		CFA; DPI	105
Community Fire Guard	A CFA key engagement strategy, community development program to help reduce the loss of lives and homes in bushfires.		
		CFA	106
Fire Ready Victoria	Assists in perception and understanding bushfire risk.		
		CFA	107
Public Awareness	Fire information through notice boards, brochures, signage etc to raise awareness of fire risk.		
		POWERCOR	108
		CFA	109
		LGA	110
		PV	118
		Other	120
Tourism Fire Awareness	Community education and information for tourists about Bushfire risk in the area.		
		CFA	111
		DELWP; PV	112
		LGA	113
		PV	114
		Tourism Victoria	117
Multicultural/ Special Needs Engagement	Translations of campaigns to suit all multicultural and special needs persons.		
		LGA	115
		CFA	116
HAZARD REDUCTION (200 SERIES)			
Burn Program	Removal of selected vegetation in large patches to protect townships.		
		LGA	201
		CFA; DELWP; PV	202
Crown Land Fuel Reduction	Reducing fuel loads on crown land.		
		DELWP	203
		PV	204
Fuel Hazard Management	Reduction and removal of fuel to decrease the risk of Bushfire in preparation for the Fire Danger Period.		
		Other	205
		Utility	206
		LGA	207
		CFA	208
Routine Maintenance of Rail Line	Removal of vegetation on and around rail lines to ensure protection of assets, minimise ignition potential, and ensure adequate access and egress.		
		Utility	209
		DOT	210
		CFA	211
Routine Asset	Ongoing mowing/ slashing/ spraying of sites to reduce fuel loads for		

TREATMENT NAME	TREATMENT DEFINITION	RESPONSIBLE AGENCY	TREATMENT NUMBER
Site Maintenance	protection of assets or adjoining properties.		
		Other	212
		DEECD	213
		Utility	214
		DELWP; PV	215
		LGA	216
Asset Protection Zones	Buffer zone between bushfire hazard and the asset.		
		DELWP	227
Fire Management Zones	To provide areas of sufficient width to reduce the spread of Bushfire.		
		DELWP	217
		Other	228
Powerline Clearance	Vegetation management around powerlines.		
		LGA	218
		POWERCOR	219
		SPAusnet	220
		TELSTRA	221
Roadside Vegetation Management	Removal of vegetation along roadsides.		
		LGA	222
		VicRoads	223
		DELWP; PV	224
		Other	225
		Private	226
IGNITION MANAGEMENT (300 SERIES)			
Operations Restrictions	On high fire weather days, operations of machinery in plantations is ceased.		
		HVP PLANTATIONS	300
Patrol/ Inspection	Inspections of assets to ensure compliance with regulations and safety requirements and to assess for fire hazards.		
		LGA	303
		CFA	304
		DELWP	305
		MFB	306
		PV	307
Pre Summer Inspections	Inspections of land holders according to Bushfire risk over the summer season including exit routes, locks, gates etc.		
		Water Authority	308
PREPAREDNESS (400 SERIES)			
Hazard Identification	Preparedness including risk ratings, inspections, maintenance and response arrangements.		
		Utility	401
		Water Authority	439
Fire Protection Plan	Fire Protection Plans are prepared to ensure that proper and sufficient works for Bushfire prevention and suppression activities are taking place.		
		Other	400
		CFA	402
		PV	403
		DHHS	426
		SPAusnet	427
		GOULBURN MURRAY WATER	428
		DEPARTMENT OF DEFENCE	429
		MELBOURNE WATER	431
		HVP PLANTATIONS	437
Fire Plug and	Works carried out to ensure that the system will operate correctly when		

TREATMENT NAME	TREATMENT DEFINITION	RESPONSIBLE AGENCY	TREATMENT NUMBER
Hydrant Installation and Maintenance	required to do so.		
		LGA	404
Emergency Water Supply	Emergency water supply and maintenance for fire fighting purposes, including water catchments and policy		
		Government Agencies	405
		DELWP	411
		LGA	412
		MELBOURNE WATER	430
		Other	440
Emergency Management Plan (Site)	Established framework for the effective handling of emergencies and/ or disaster.		
		Utility	406
		DEECD	407
		CFA	408
		Other	409
		LGA	410
Fire Access Roads and Tracks	Establishment of constructed and maintained roads, bridges and tracks to allow safe passage for fire fighting vehicles.		
		LGA	413
		CFA	414
		PV	415
		DELWP	416
Traffic Diversion Plans	Establishment of an appropriate traffic flow, through traffic management in the community and appropriate access and egress for property and business owners.		
		VIC POL	417
		VIC ROADS	418
		LGA	419
Township Protection Plans	Planned response (for both emergency services and the community) to a bushfire within close proximity to a township, which has the potential to impact on the local community.		
		CFA	420
Fire Operations Plan	Proposed fire prevention activities.		
		DELWP	423
Public Land Management Plans	Each year a statewide program of activities is planned, completed and evaluated to continue progress towards achieving natural values objectives.		
		DELWP; PV	424
Community Activities/Planning	Local based planning/community groups who repair and manage natural resources for the event of a bushfire		
		DEECD	421
		LGA	422
		Community Groups	425
		CFA	433
Event Management Plan	Emergency management planning of events that occur in the Fire Danger Period (FDP)		
		LGA	432
Fire Refuge	A declared fire refuge for the use as a last resort under direct fire attack		
		Other	435
		LGA	436
Bushfire and Emergency Self Assessment	Develop a more detailed understanding of the bushfire risk to your school.		
		DEECD	438

TREATMENT NAME	TREATMENT DEFINITION	RESPONSIBLE AGENCY	TREATMENT NUMBER
PROPERTY PLANNING (500 SERIES)			
Wildfire Management Overlay	Planning referral for new subdivisions, buildings and works that increase population. Applies conditions for access, Water Supply, Buildings/ Works and Vegetation Management		
		LGA	500
Agreements	Acts and agreements for Rural Residential Areas		
		LGA	501
OTHER (700 SERIES)			
Asset Specific Treatments	Municipal Specific plan (details can be found in the VFRR Document)		
		All Agencies	700
TO BE IDENTIFIED (800 SERIES)			
To be identified	Treatments to be identified		
			800

This treatment list has been created from the input of mitigation works identified through the 'Implementation Stage'. The list has been modified to capture all works the VFRR Support Team are currently aware of. Due to agency identification the allocation of treatment numbers it set as per agency request and therefore if your agency has not been identified against a current mitigation treatment please contact the VFRR Support Team for input.

Appendix B Multi–Agency Work Plan

The primary fire risk management strategies used in the Surf Coast Shire Fire Management Plan are:

- Community education and engagement;
- Hazard reduction;
- Preparedness; and
- Regulatory controls

This work plan outlines the key actions that will be undertaken annually in the Shire for each of these strategies and the agencies responsible for those actions. This list highlights the main actions being undertaken – it is not intended to be an exhaustive list.

In addition to these agency specific actions, this plan also lists key overarching work priorities to address significant residual risk in the Shire, especially regarding grassfire risk and human settlement. These overarching key work priorities involve various agencies and are listed at the start of this work plan

The main agencies involved in fire risk management strategies in the Shire are:

- Country Fire Authority (CFA)
- Department of Sustainability & Environment (DELWP)
- Parks Victoria (PV)
- Surf Coast Shire (Council)
- VicRoads

Other definitions used in this work plan include:

- Municipal Fire Management Planning Committee (MFMPC)
- Great Ocean Road Coast Committee (GORCC)
- Colac Otway Shire (COS)

Overarching Work Priorities 2011 – 2017				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Grassfire Strategy				
Develop a Grassfire Strategy for the Surf Coast Shire. The Strategy is to be reviewed annually by the key agencies and the MFMPC prior to each fire season and should include consideration of: • Ignition risk associated with road, rail and electrical infrastructure to the north of public land; and • Roadside management strategies	SCS, CFA and COS, in partnership with DELWP and surrounding municipalities.	Across the Shire	Completed prior to the 2012/13 fire season Reviewed annually	The Strategy will be developed jointly with Colac Otway Shire, enabling broader landscape level consideration of grassfire risk, as well as Shire specific grassfire risk.
Develop an agreed list of Strategic and Secondary Fire Roads for SCS.	CFA, in consultation with SCS	Across the Shire	Completed prior to 2012/13 fire season	CFA Brigades and SCS have previously provided recommendations to CFA District 7 regarding Strategic and Secondary Fire Roads. This feedback should be reviewed and incorporated into the final list. The road review will be informed by the Grassfire Strategy.
Human Settlement				
Conduct a local fire management planning pilot with a high risk township in SCS and COS (and possibly also Corangamite Shire) to learn how to better engage local communities in bushfire planning and enhance community resilience. The townships selected should reflect a range of terrain and vegetation (eg coastal, ridge and grass plains)	SCS and COS with support from CFA, DELWP and other agencies as required.	To be confirmed by MFMPC. Anglesea and Aireys Inlet proposed as potential towns for SCS.	During 2012/13 or 2013/14, depending on resourcing and capacity.	While there is agreement about the need to engage in local planning and the importance of building community resilience, there is uncertainty about how best to do so. The pilot will help inform how best to undertake bushfire management planning at the local level and what works best to enhance community resilience.

Overarching Work Priorities 2011 – 2017				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Human Settlement cont'd				
Enhance community fire safety in the highest risk townships by identifying and planning for: • Vegetation management on the interface areas and within the township; • Protection of key community assets; • Informal Shelter options; and • DELWP planned burns across multiple land tenures.	SCS, CFA, DELWP with support from other agencies as required.	Anglesea Aireys Inlet Lorne Moggs Creek Fairhaven	Initial planning completed prior to 2012/13 fire season. Recommended vegetation management and other works undertaken over the next two to three years, funding and resources permitting.	This initial planning will be undertaken by Council and relevant agencies to inform and coordinate their preparedness, response and recovery activities. While community engagement will be undertaken for this initial work, it will not be done as extensively as engagement for the pilot on local bushfire management planning.
Structural and Chemical Fires				
Develop a structural and chemical strategy or strategies for the SCS municipal area, once the tools and methodology have been finalised and agreed at regional and/or State level.	SCS, in partnership with CFA and IFMP.		Next 12 – 24 months, once tools and methodology finalised.	

Community Education and Engagement				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Community education and engagement	CFA, DELWP, PV, Council	Across the Shire	Nov	**MFMPC engagement on draft Municipal Fire Management Plan –** undertaken by Municipal Fire Management Planning Committee agencies.
	DELWP/PV	Across the Shire	May – August	**DELWP/PV engagement on Fire Operations Plan** – involves initial call for burn nominations, followed by meetings with key stakeholders to present draft plan and maps.
	CFA	Across the Shire	Year round, but with specific focus during Oct – April	**CFA Fire Ready Victoria Meetings-** the meetings are designed to provide people with information to raise their understanding and interest in bushfire and inspire them to seek further information. A range of meetings are provided, tailored to specific circumstances, and include community meetings, street meetings, special interest group meetings and meetings delivered during an incident.
		Across the Shire	Year round, but with specific focus during Oct – April	**CFA Bushfire Planning Workshops** -The workshops are designed to allow residents who have some knowledge of bushfire safety to consider that knowledge in relation to their household circumstances and commence developing a bushfire survival plan. The Workshops provide more than just information and advice; they involve the audience in the decision-making process. They are designed to help residents assess their local risk factors and make informed plans based on that knowledge.
		Aireys Inlet, Anglesea, Bambra, Bellbrae, Bells Beach, Benwerrin, Big Hill, Deans Marsh, Eastern View, Fairhaven, Gherang, Jan Juc, Lorne, Moggs Creek, Pennyroyal, Sokel, Wensleydale & Winchelsea	Year round, but with specific focus during Oct – April	**CFA Community Fireguard (CFG)** -CFG is a community developed program designed to reduce the loss of lives in bushfires. CFG is based on the principles of adult education, participation and empowerment. CFA does not tell participants what to do, instead it provides facilitators who are equipped with expertise and resources, to help the groups become established and work together in a positive and productive way. With facilitator support, groups can learn and work together to develop simple and effective strategies to increase the safety of the participants. Upon completion of the CFG meeting program, groups may elect to continue meeting and undertaking activities. Groups may also choose to operate independently of the CFA. There are currently 75 CFG groups in the Shire.

Community Education and Engagement				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Community education and engagement	CFA	Across the Shire	Year round, but with specific focus during Oct – April	**CFA Home Bushfire Advice Service –** under this free program, CFA officers assess the defendability of individual properties and provide specific advice to property owners to help them understand and mitigate their bushfire risk and enable them to develop their bushfire survival plan. The property inspection includes assessment of: • Defendable space • Vegetation management • Water supply • Access • Buildings/structures • Maintenance activities/housekeeping; and • Personal Preparedness / Bushfire Survival Plan On completion of the assessment, property owners receive a comprehensive report on their property, together with additional information that will help them to prepare their property and develop their Bushfire Survival plan.
				Other CFA programs – CFA also offers a number of other community engagement programs in the Shire which are outlined in CFA's Barwon South West Community Safety Program and Resource Catalogue. Other programs include Juvenile Fire Awareness Intervention Program, Fire Safe Kids and the Community Safety Display Trailer for CFA Districts 6 & 7.
	Powercor	Across the Shire	Year round, but with specific focus during Oct – April	**Powercor regional media** – the campaigns highlight various bushfire management activities using regional media. Further information is available at www.powercor.com.au
	GORCC	For GORCC managed lands		**GORCC public information inquiries** – as a land manager around Torquay, Jan Juc, Anglesea, Aireys Inlet and Lorne, GORCC receives various requests from local residents for information and advice. These requests are addressed by GORCC or referred to the appropriate agency as required.
Strategic Conversations initiative	DELWP & CFA		Frequency determined by participating communities	**'Strategic conversations'** is a new DELWP initiative, in partnership with CFA, for developing and sharing knowledge about fire. Strategic conversations occur through community invitation and involve members of the community and staff from DELWP and CFA. A strategic conversation is a facilitated dialogue within a group of people for the purpose of pooling knowledge and experience about a topic or theme – in this case, fire. As people share their different perspectives, a broader and deeper understanding of the land and fire management can be achieved.

Community Education and Engagement				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Coordinated agency community engagement activities	CFA, DELWP, Council, PV	Across the Shire	Ongoing	**Community Engagement Community of Practice –** established in connection with the Strategic Conversations initiative. Brings together key agencies engaged in community engagement to share information and coordinate engagement activities.
Community Information Guides, formerly known as Township Protection Plans	CFA, Council	Aireys Inlet, Anglesea, Bambra, Jan Juc & Bellbrae, Lorne & Bill Hill, Deans Marsh & Pennyroyal	Ongoing	**CFA Community Information Guides (CIGs) –** CIGs have been developed for a number of high bushfire risk communities across the State. CIGs provide important information and direction for communities to assist with planning before, during and after a fire. Information provided includes key locations and facilities, such as Neighbourhood Safer Places, and directions on where to find the latest emergency and bushfire information. Copies of CIGs for the Shire's high risk townships are available at www.cfa.vic.gov.au.
Tourism fire safety campaigns	Tourism Vic	Material available at Visitor Information Centres, SurfWorld etc		
Weeds to Mulch	SCS, with support from CFA	Aireys Inlet Fairhaven Moggs Creek	Ongoing, outside fire season	Although primarily a fuel reduction initiative, this program involves educating and engaging residents living in designated Asset Protection Zones about fuel reduction on private land. CFA identifies Community Fireguard groups within the asset protection zones and helps promotes the Weeds to Mulch program.

Hazard Reduction				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Fire prevention and preparedness works (planned burns, strategic fuel breaks, mechanical fuel management, fire infrastructure management)	DELWP	Identified in DELWP's Fire Operations Plan Otway District/Region	Ongoing	**DELWP's Fire Operations Plan** - Otways District/Region contains DELWP's proposed fire prevention and preparedness works within the Otway District. Copies of the plan and related maps are available at www.delwp.vic.gov.au.
Roadside and railway management	Council, VicRoads, DELWP, PV, CFA	Across the Shire	Ongoing	DELWP's Fire Operations Plan - Otways District/Region contains DELWP and PV's proposed road management works.
		Across the Shire	Nov – Dec	**Council** conducts an annual cut on Council roadsides in rural areas. A second cut may be undertaken if required to maintain strategic and secondary roads.
		Across the Shire	By Dec 1 if possible	**VicRoads 3 metre maintenance cut –** undertaken annually on roadsides for all VicRoads' roads in the Shire.
		Princess Highway	Prior to fire restriction period	**VicRoads strategic fuel/fuse breaks –** annual fence line to fence line vegetation maintenance work on roadside. Conducted along Princess Highway from 86km to 131.42 km (Just prior to Drapers Road to Grassy Creek)
		Great Ocean Road – (focus for 2011 was Bellbrae to Apollo Bay)		**VicRoads Great Ocean Road woody weed control –** program to remove non-indigenous woody weeds along the Great Ocean Road that have regenerated beyond routine maintenance and created high fuel loads in the road reserve. Vegetation removal is prioritized in accordance with Community Information Guides, Integrated Fire Management Planning and consideration of the risks and liabilities of fuel loads in various locations. Removal of the vegetation enhances the cover and condition of existing native vegetation and creates positive biodiversity outcomes in addition to fire management benefits.
	CFA, Council	Across the Shire	Ongoing	**CFA** conducts fire prevention and preparedness works on roadsides and rail reserves
				Review of Strategic and Secondary Fire Roads – strategic and secondary fire roads in the Shire have been mapped by Council, based on information provided by CFA brigades and Groups, and the maps are being reviewed by District 7 CFA.
	V/Line	Warrnambool Rail line & related railway assets in the Shire		**Railway asset management – V/Line:** V/Line undertakes a variety of annual fire prevention works for its lease areas (where applicable), including slashing, grading, herbicide treatments and track spraying.

Hazard Reduction				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
	VicTrack	Non-operational railway land outside of leased areas	Generally October each year, with completion by end of November	**Railway asset management – VicTrack:** VicTrack is the owner of Victoria's transport related land, infrastructure and assets, but the majority of these assets are leased to rail network managers, such as V/Line. VicTrack does have responsibility for a limited number of small assets within the Shire. For these assets, fuel reduction treatments include track spraying, slashing of reserves and vacant blocks and brush cutting around road crossings. Following the first round of treatments, assets are monitored and additional works undertaken as regrowth and curing dictates.
Vegetation Control	Council	Across the Shire	Ongoing	**Vegetation control** is undertaken in various strategic areas throughout the Shire, such as Asset Protection Zones (bush/town interface areas).
		Aireys Inlet, Fairhaven, Moggs Creek	Ongoing, outside fire season	The **Weeds to Mulch Program** is one of Council's vegetation control initiatives and supports vegetation removal on private property in bush/town interface areas.
		Various nature reserves across the Shire	Annually	**Vegetation control in Nature Reserves –** Council has developed Fire Management Plan for high conservation nature reserves in the Shire. The Plans outline the annual vegetation management work that will be undertaken by Council for each reserve.
	GORCC, with Council, CFA or DELWP support as required	On GORCC managed land	Generally every Spring	**GORCC vegetation control in interface areas** – GORCC undertakes fuel reduction work in public/private property interface areas, primarily through environmental weed control.
Fire hazard inspections	Council	Across the Shire	Prior to and during Fire Danger Period	Property inspections are conducted by the Municipal Fire Prevention Officer throughout the Shire to identify existing or potential fire hazards, especially in Asset Protection Zone areas (bush/town interface). Officers also respond to fire hazard reports from the community.
Fire prevention notices	Council	Across the Shire	Ongoing throughout the year	Fire Prevention Notices (FPNs) may be issued by the Municipal Fire Prevention Officer or the CFA under CFA Act to an owner or occupier of land in the municipality for anything on that land (other than a building) that constitutes a danger to life or property from the threat of fire. FPNs are often directed to removing overgrown vegetation.
Powerlines – assets and easements	PowerCor	Sub-transmission lines and distribution lines operating at 66,000 volts, 22,000 volts &	Ongoing	**Powercor Vegetation Management in Declared Areas** – vegetation clearance around powerlines in Declared Areas is undertaken in accordance with the Electricity Safety (Electric Line Clearance) Regulations 2010.

Hazard Reduction				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
		low voltage	Ongoing	**Powercor Vegetation Management around Powerlines** – vegetation clearance around powerlines is undertaken in accordance with the Electricity Safety (Electric Line Clearance) Regulations 2010.
			Ongoing	**Powercor Private Overhead Electric Lines (POELS) –** Inspection of POELs and associated defect process management. Annual letter to customers with POELs detailing responsibilities in maintaining POELs, including vegetation clearance.
	SP Ausnet	All transmission lines (on towers) within the Shire, except the 220 KV transmission line privately owned by Alcoa	Every 3 mths	**SP Ausnet asset and easement inspections –** inspections conducted every 3 months on transmission towers and in powerline easements, with additional inspections as required. Required vegetation management work is identified through the inspection cycle and also through various proactive vegetation management programs. Regular inspections also cover hazard trees identification.
	Council	Torquay (Spring Creek to Deep Creek)	Annually	**Council work in Declared Area** – annual audit conducted of roads in the Declared Area (Torquay) for trees encroaching into hazard zone for powerlines.
Fire permits	Council, CFA		During Fire Danger Period	Lighting fires during the Fire Danger Period is restricted. Permits must be obtained from the Municipal Fire Prevention Officer or the CFA.
Private property hazard reduction	Property owners	Across the Shire	Ongoing	Private property owners can do various things to control vegetation on their property, including cleaning out gutters, removing dry undergrowth and leaf litter, and mowing & slashing. Information about how to reduce fire risk on private property is available at www.surfcoast.vic.gov.au, together with a list of vegetation clearing contractors in the Shire.
Fire Access Road Subsidy Scheme	CFA, Council	Across the Shire	Annual program	The Fire Access Road Subsidy Scheme (FARSS) is administered by CFA and is a State Government funded subsidy scheme. Subsidies are available for municipalities for the construction and maintenance of fire access roads or construction of static water supplies. Funding is provided annually. Applications are submitted by CFA brigades and reviewed by Council and the Municipal Fire Management Planning Committee.

Preparedness				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Victorian Fire Risk Register Process	CFA	Assets at risk identified across the Shire	Completed	The Victorian Fire Risk Register (VFRR) is a systematic process to identify assets at risk, assess the level of bushfire risk for those assets and record a range of treatments/measures to mitigate those risks. Treatments may include activities such as fuel reduction, community education and the creation of strategic fuel breaks. The Shire's VFRR municipal risk register, divided by regional risk priorities, is included in Appendix A.1 of this Plan. A list of VFRR treatments is included in Appendix A.2.
DELWP landscape level planning and fire modelling	DELWP	Work initially undertaken for Otways & Surf Coast Shire		DELWP's landscape level bushfire modelling is being undertaken to assess bushfire risk across the Otways landscape and Surf Coast. DELWP's work has evaluated fire regimes across the entire landscape and identified opportunities to manage fuels and fire regimes across both public and private land.
Township planning factors	CFA, Council	Aireys Inlet Anglesea Bambra Jan Juc & Bellbrae Lorne & Bill Hill Deans Marsh & Pennyroyal		Township Planning Factors enhance the initial operational response to a bushfire impacting high risk townships. The information is prepared for high risk towns which have a Township Protection Plan. The Planning Factors include an overview of the township and a map of the key operational planning factors (such as Traffic Management Points, Neighbourhood Safer Places, essential infrastructure etc). The planning factors are developed by CFA with other emergency services, the local municipality and other relevant parties. Township planning factors information is for emergency services and is not available to the general public.
Neighbourhood Safer Places – Places of Last Resort	CFA, Council	NSPs have been designated at: ▪ Aireys Inlet Bottom Shops ▪ Anglesea Shopping Strip ▪ Anglesea River Bank ▪ Deans Marsh - Martians Café ▪ Jan Juc – Bob Pettitt Reserve ▪ Lorne foreshore ▪ Point Grey Picnic Area & Carpark	Council to review and CFA to assess each designated NSP by Aug 31 each year Council to provide updated list of designated NSPs to CFA by 30 Sep each year	▪ Neighbourhood Safer Places – Places of Last Resort (NSPs) are an area or premises that may, as a last resort, provide some sanctuary from bushfire, ▪ Councils located wholly or partly in the country area of Victoria are required under the CFA Act to identify and designate NSPs in their municipal district. ▪ After identifying a potential NSP, Council must ask the CFA to assess the site in accordance with CFA's Assessment Guidelines. Councils can only designate a site as an NSP if it has been certified by the CFA as meeting these Guidelines. Council also reviews potential NSP sites against its Municipal Neighbourhood Safer Places Plan, available at www.surfcoast.vic.gov.au. ▪ Designated NSPs are assessed annually by both Council and the CFA to ensure the sites are still suitable. NSPs designated in the Shire are listed on Council's website at www.surfcoast.vic.gov.au and at www.cfa.vic.gov.au

Preparedness				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
		(Lorne) ▪ Mt Moriac Reserve ▪ Winchelsea Shopping Centre Car Park		
Powerline Bushfire Mitigation Strategy Plan	Powercor	Across the Shire	Ongoing	Powercor's Bushfire Mitigation Strategy Plan is prepared in accordance with the Electrical Safety (Bushfire Mitigation) Regulations 2003. The Strategy/plan details Powercor's policies, procedures and programs for the inspection, maintenance and operation of the electricity network.
Powerline Vegetation Management Strategy	Powercor	Across the Shire	Ongoing	Powercor's Vegetation Management Plan is prepared in accordance with the Electricity Safety (Electric Line Clearance) Regulations 2010. The Plan details Powercor's policies, procedures and programs to manage vegetation around powerlines.
Powerline Easement Management	Powercor, Council, CFA and/or DELWP	Across the Shire	Ongoing	Review easements, in conjunction with Municipal Fire Prevention Officers, CFA and/or DELWP (as appropriate), to determine treatment works for powerline easements that form agreed Strategic Fire Breaks, Breaks for Controlled Burns or are required for Asset Access and Protection.
Fire Hazard Mapping Work (Powerlines)	CFA, Powercor		Four yearly cycle	The Fire Hazard Mapping project reviews low bushfire risk areas to determine if any changes are required to the risk level. The project is managed and undertaken over a four year cycle by CFA in rural Victoria, in consultation with powerline companies.
Powerline Faults and Emergency Events Response	Powercor		Ongoing	Powercor maintains a 24 hour fault and emergency response including call centre, faults dispatch and system control centres. Powercor invokes escalation to manage and respond to major events, including Powercor's Emergency Management Liaison Officer attending Incident Control Centres, Municipal Emergency Coordination Centres and Community/CFA Brigade meetings when invited.
Municipal Fire Management Plan	MFMPC (includes Council, CFA, DELWP, PV)		Draft plan endorsed by MFMPC and Council by Oct 31	The Surf Coast Shire Municipal Fire Management Plan has been prepared by the Municipal Fire Management Planning Committee (MFMPC). The Plan has been produced by and with the authority of Council pursuant to Section 20 of the Emergency Management Act 1986 and is deemed to fulfil Section 55A (Municipal Fire Prevention Plans) of the CFA Act 1958. The Plan has been prepared in accordance with the Integrated Fire Management Planning Guide and Part 6A of the Emergency Management Manual Victoria. The Plan reflects the State Government's direction to increase integration on fire management

Preparedness				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
				planning between agencies and the community.
Evacuation Planning	Victoria Police	State wide		Torquay Police Station representatives are participating in a State wide multi agency initiative to develop guidelines for evacuation planning.
Great Ocean Road Traffic Management Plan	Victoria Police			

Regulatory Controls				
Action	**Responsible Agency**	**Location/s**	**Timing/ Completion Date**	**Comments**
Fire hazard inspections (CFA Act)	Council			See 'Fire hazard inspections' section under 'Hazard Reduction'
Fire prevention notices (s. 41, CFA Act)	Council & CFA			See 'Fire prevention notices' section under 'Hazard Reduction
Fire permits (s.39E, s. 40 (4E) & (5) CFA Act)	Council			See ' Fire permits' section under 'Hazard Reduction'
Total fire bans (s. 40, CFA Act)	CFA			A Total Fire Ban is declared by the CFA on days when fires are likely to spread rapidly and could be difficult to control. If a Total Fire Ban has not been declared for a district, fire restrictions may still apply for each municipality in that district.
Fire danger period	CFA			Fire Restrictions can be applied across most areas of Victoria by CFA, when fire danger is high. Typically this is over the summer period of November through to April. Restrictions are applied in small areas at a time.
Planning schemes and building codes	State Government, Council, CFA	Bushfire Prone Areas; areas covered by Bushfire Management Overlay	Ongoing	When applications are lodged with Council for permits under the Planning and Environment Act for the subdivision of land or the construction of buildings in areas of high fire risk, the Shire may give consideration to the following documents in determining such application and also refer the application to the relevant fire agencies for comment : ▪ Surf Coast Planning Scheme, including the Bushfire Management Overlay ▪ Planning Conditions and Guidelines for Subdivisions (Country Fire Authority, 1991) in bushfire prone areas; ▪ Requirements for Water Supplies and Access for Subdivisions in Residential 1 and 2 and Township Zones (Country Fire Authority, 2004) ▪ Building in a Wildfire Management Overlay – Applicant's Workbook; and ▪ Australian Standard 3959, 2009 – Construction of Buildings in Bushfire Prone Areas. Several of these documents are being amended or changed as part of State Government improvements to the planning scheme and building framework to address bushfire risk.

Appendix C Statutory Audit Requirements

Appendix C.1 Hazard Trees Identification & Notification Procedure

The Electricity Safety Act 1998 (Vic) (Electrical Safety 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.

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

The procedures outlined in this section of the Surf Coast Shire Municipal Fire Management Plan seek to address these requirements.

Each responsible person 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 Electrical Safety Act, a hazard tree is a tree which 'is likely to fall onto, or come into contact with, an electric line'.

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

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

Who is responsible for a hazard tree?

Under the Electrical Safety 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 Electrical Safety 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 Electrical Safety Act. Primary responsibility for vegetation clearance and management within the municipality, for areas which are not within a Declared Area, will usually fall to the relevant electricity distribution company.

Responsible Persons within Surf Coast Shire

There are a number of organisations that have responsibility for line clearance in the Surf Coast Shire, including:

- Powercor for:
    - trees affecting all sub transmission and distribution powerlines operating at 66,000 volts, 22,000 volts and low voltage with the exception of trees covered by Other Responsible Authorities. This includes key assets listed in the Victorian Fire Risk Register, such as:
        - the Winchelsea Zone Substation

- the Winchelsea to Colac 66KV Sub-transmission Line;
- the Geelong to Winchelsea 66KV Sub-transmission Line;
- the Colac to Lorne 22KV Distribution Feeder Line;
- the Waurn Ponds to Lorne 22 KV Distribution Feeder Line;

- Alcoa Pty Ltd: for the 220KV line running between Anglesea to Alcoa, Point Henry;

- SP Ausnet: for all transmission lines (on towers) within the Shire, except the 220KV transmission line owned by Alcoa, mentioned above;

- SP Ausnet, for the MLTS-TGTS Transmission Line (Winchelsea – Moriac);

- The Surf Coast Shire, for trees on public lands which are managed by the Shire and where road reserves are located within the Declared Area (for the purposes of the Electrical Safey Act);

- VicRoads, for trees on centre medians located on the Declared Main Road Network and trees on road reserves on the Declared Main Road Network that are located outside the Declared Area (for the purposes of the Electrical Safety Act);

- Parks Vic: for trees affecting powerlines on land managed by Parks Vic; and

- Foreshore Committees of Management: for trees affecting powerlines on land managed by the committee.

Other relevant information

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

The Surf Coast Shire has a Line Clearance Vegetation Management Plan 2014-2015 that outlines vegetation management under powerlines

Procedures and criteria for identifying hazard trees

In the course of everyday duties, potentially hazardous trees may come to the attention of staff or volunteer members of the entities with representation on the Municipal Fire Management Planning Committee (MFMPC), 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 of the tree suggests that it is likely to come into contact with the electric line, for example because it appears to be encroaching or growing into the line clearance space.

- There is an excessive lean on the tree, or branches hanging off the tree and the tree is in proximity to an electric (power) line.

- The size or appearance of the tree suggests it could come into contact with the line including under foreseeable local conditions.

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

Procedures and criteria for notifying hazard trees

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

- The person with responsibility for the highest percentage of lines within the municipality ('**the primary responsible person')** is the person to whom potentially hazardous trees should be reported.

- The primary responsible person (or their representative) is referred to in these Procedures as the primary responsible person representative (**PRPR**).

- Where any person becomes aware of, or receives a report of, a potentially hazardous tree within the municipality, this should be referred to the PRPR. Where the MFMPC becomes aware of, or receives a report of, a potentially hazardous tree within the municipality, this must be referred to the PRPR.

- Reports of potentially hazardous trees must be provided to the PRPR for action as soon as practicable. Reports must include, at a minimum:

    - The name and contact details and any relevant qualifications where known of the person making the report

    - As much detail as possible about the location of the tree (including, where known, GPS coordinates, details of numerical/name plate on nearest pole, name of nearest road or crossroads, closest landmark, whether tree is on private land or road reserve etc.)

    - A description of the tree (including, if known, the genus and species of tree)

    - 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.

Contact details for the PRPR, are as follows:

Agency name	**Powercor (via vegetation management contractor, VEMCO)**
Position title of contact person	Administration Assistant, VEMCO
Telephone Number	VEMCO 5338 3300 (Business Hours) After Hours contact: Powercor on 13 24 12
Email address	bavemco@vemco.com.au

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 Energy Safe Victoria 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 by no later than the close of the next business day after the notification is received.
		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 Electrical Safety Act) and the potentially hazardous tree is reported during the fire danger period declared under the Country Fire Authority Act 1958 (Vic); or
- the report indicates that there is an imminent danger that the tree will contact or fall onto lines as a result of minor environmental changes;

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

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

Register

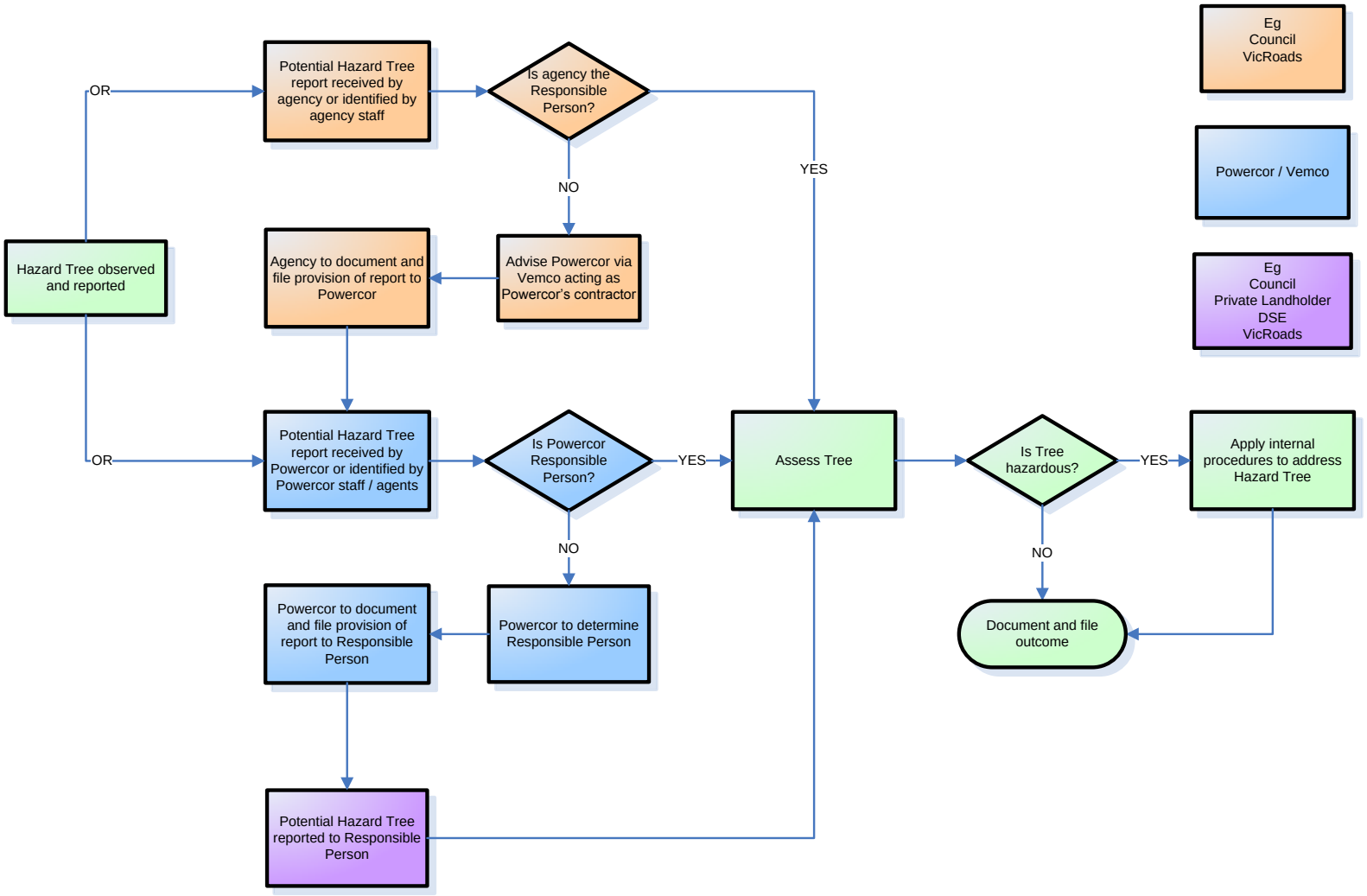
It is recommended that the PRPR maintain a register in which all notifications are recorded together with the date of receipt of the notification and the date the notification was reported to the responsible person.

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

PRPR Consultation

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

Appendix C.1 continued – Statutory Audit Obligations – Hazard Trees



Appendix C.2 Community Information Guides

The following Community Information Guides (formerly known as Township Protection Plans) were developed by the Country Fire Authority and the Surf Coast Shire Council

- Aireys Inlet
- Anglesea
- Bambra
- Jan Juc and Bellbrae
- Lorne, including Big Hill
- Deans Marsh/Pennyroyal Valley

Copies of each of these Community Information Guides are available for download from the Country Fire Authority's website at www.cfa.vic.gov.au

Appendix C.3 Neighbourhood Safer Places – Places of Last Resort

The Surf Coast Shire has designated the following places as Neighbourhood Safer Places – Places of Last Resort:

TOWNSHIP	LOCATION	ADDRESS
Aireys Inlet	Bottom shops Car parking area in front	Great Ocean Rd (opposite Inlet Crescent) Aireys Inlet 3231
Anglesea	Shopping Strip Car parking area in front	Great Ocean Rd (between Camp Rd and McDougall Rd) Anglesea 3230
Anglesea	River Bank	Great Ocean Rd (opposite Minifie Ave) Anglesea 3230
Deans Marsh	Martians Cafe site Car Park	Cnr Birregurra-Deans Marsh Rd and Deans Marsh-Lorne Rd Deans Marsh 3235
Jan Juc	Bob Pettit Reserve Soccer pitch	Sunset Strip (between Wattle Court and Domain Rd) Jan Juc 3228
Lorne	Lorne Foreshore	Mountjoy Parade (opposite Williams St) Lorne 3232
Lorne	Point Grey Picnic Area and Carpark	Great Ocean Rd (between Mountjoy Pde and Hird St) Lorne 3232
Moriac	Newling Reserve/ Moriac Community Centre. Grassed area at rear of building	Hendy Main Rd (between Deppeler Ave and Cooks Lane). Entry also available from Daniel Drive Moriac 3240
Mount Moriac	Mt Moriac Recreation Reserve, Western half of No 1 oval (main)	755 Reservoir Rd (between Ervins Rd and Drewry Lane) Mount Moriac 3240
Winchelsea	Shopping Complex Car Park	Cnr Willis Street and Princess Highway Winchelsea 3241

Map of Neighbourhood Safer Places – Places of Last Resort in Surf Coast Shire

Appendix D Community and Organisational Engagement Plan

Note that this engagement plan was prepared and implemented as part of the process of developing the first version of the 2011-2015 Surf Coast Fire Management Plan

Local Engagement and Participation Strategy for the development of Municipal Fire Management Plan – September 2011

CFA

Department of Environment, Land, Water & Planning

State Government Victoria

Surf COAST SHIRE

Foreword

The Surf Coast Shire Municipal Fire Management Plan 2011-2015, updated to March 2017 (MFMP) outlines how the Council, fire agencies and other relevant authorities and organisations will work together to prepare for, respond to and recover from major bushfires.

The MFMP is a sub-plan of the Shire's Municipal Emergency Management Plan and reflects the State Government's direction to increase integration on fire management planning between agencies and the community. The MFMP was produced collaboratively by members of the Surf Coast Shire Municipal Fire Management Planning Committee. The Committee is made up of representatives from the Surf Coast Shire, the Country Fire Authority, the Department of Environment, Land, Water and Planning, Parks Victoria, the Department of Health & Human Services, Victoria Police and the Great Ocean Road Coast Committee.

The initial MFMP has been produced as an interim plan to enable and inform agency and organisational planning. The strategies and deliverables outlined in the MFMP will develop further over the next 12 months.

The initial MFMP focuses on bushfires (including grassfires) and environmental burns. Future versions of the MFMP will incorporate structural and chemical fires.

This Local Engagement and Participation Strategy outlines the processes to be undertaken by fire agencies and other relevant authorities and organisations to seek local knowledge and input into the development of the MFMP.

It is recognised that a suite of broader fire awareness, education and engagement activities are already being undertaken by emergency management agencies with the public, in addition to the processes proposed by this Strategy. The Strategy aims to work in harmony with existing programs, however the engagement outlined in the Strategy specifically focuses on gaining input into the MFMP, not on broader capacity building.

Questions and comments about this strategy can be directed to:

Surf Coast Shire
PO Box 350
Torquay VIC 3228

Or via email: info@surfcoast.vic.gov.au

Version Control Table

Version	Release Date	Author	Changes
1	15/09/2011	Kerry Petty	
2	16/09/2011	Changes from Kate Smallwood	
3	16/09/2011	Kerry Petty	
4	August 2015	Kerrie Williams	Machinery of government changes

1. Introduction

1.1 Overview

This Local Engagement and Participation Strategy outlines the range of engagement and participation processes that the Surf Coast Shire Municipal Fire Management Planning Committee implemented to develop the first version Surf Coast Shire Municipal Fire Management Plan 2011-2015 (MFMP).

This Strategy is intended to guide public input into the establishment of the MFMP.

The Strategy is not intended to replace or replicate the ongoing development and delivery of education, awareness, engagement and participation around fire management that is already delivered by management agencies. However the Strategy will work in harmony with these activities.

1.2 Importance of Local Engagement and Participation

A key tenet of the 2009 Victorian Bushfires Royal Commission was the concept of shared responsibility in planning for, responding to and recovering from bushfires.

The Commission noted that:

- **Individuals** should be encouraged, to the extent of their capabilities, to make their own preparations to protect themselves and their communities from bushfire;
- **Agencies** should educate, prepare and help protect individuals by ensuring that they have access to the information needed to make sound decisions; and
- **Governments** should create the legislative foundation, fund fire services, facilitate community education and support, and provide essential infrastructure and local support to help communities stay safe.

Deliberative engagement and participation through shared decision making is fundamental in enabling people to understand the complexities of fire management. This approach is one of the most powerful ways to build human capacity and equip people to act on their shared responsibility or change behaviours.

Agencies therefore need to support the public in understanding the complexities of fire management as well as demonstrating that they are listening by acting on the advice, local knowledge and aspirations provided through community participation.

Seeking local engagement and participation will build a better MFMP through incorporating knowledge and aspirations and fostering local ownership of the plan. The process of engagement also has the added benefit of extending local knowledge and relationships between the community and fire management agencies which supports overall fire preparedness and community resilience.

1.3 About the Municipal Fire Management Plan

The MFMP outlines how Council, fire agencies and other relevant authorities and organisations will work together to prepare for, respond to and recover from major bushfires.

The MFMP is currently in draft form. It has been endorsed by the Surf Coast Shire Municipal Fire Management Planning Committee and the Surf Coast Shire Municipal Emergency Management Planning Committee and adopted by Surf Coast Shire Council as a draft plan. The draft MFMP will undergo a period of public consultation to capture local knowledge, as well as extending local participation in fire prevention and preparedness activities.

Public consultation on the First Draft of the MFMP was undertaken by the Municipal Fire Management Planning Committee over the 2011/12 summer period.

1.4 Authority for Municipal Fire Management Plan

The MFMP is produced by and with the authority of the Surf Coast Shire Council pursuant to Section 20 of the Emergency Management Act 1986 and will be deemed to fulfil Section 55A (Municipal Fire Prevention Plans) of the Country Fire Authority Act 1958.

The Plan is a sub-plan of the Surf Coast Shire Council Municipal Emergency Management Plan.

1.5 Integrated Fire Management Planning

Integrated Fire Management Planning (IFMP) is a central component of Victoria's Fire Management Planning Strategy 2009. IFMP involves bringing communities, fire agencies and State and local government departments together to deliver fire management planning.

Under IFMP, collaborative agency fire management planning will occur through Municipal Fire Management Planning Committees. Agency plans will be aggregated to form the basis of Municipal Fire Management Plans. Fire management planning will be aligned with each organisation's planning and business processes through:

- the implementation of common planning models and methodologies;
- allocation of resources and accountabilities;
- participation in common decision making through the committee process;
- collaborative delivery of fire management activities; and
- cooperative engagement.

2. Engagement and Participation Framework

2.1 Defining Engagement and Participation

Engagement refers to the processes involved in public information and education activities, customer service, involvement of the public in decision making, partnerships, consultation programs, behaviour change programs, as well as education and awareness raising activities.

Engagement is not only about sharing views and ideas, we engage with a view to people taking action in their own lives, thereby increasing participation in civic life.

The Integrated Fire Management Planning (IFMP) process has adopted the International Association of Public Participation (IAP2) Framework to guide its engagement activities.

The IAP2 framework defines a range of engagement activity to support public input into shared decisions.

IAP2 Public Participation Spectrum

Developed by the International Association for Public Participation

INCREASING LEVEL OF PUBLIC IMPACT

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Public Participation Goal:	Public Participation Goal:	Public Participation Goal:	Public Participation Goal:	Public Participation Goal:
To provide the public with balanced and objective information to assist them in understanding the problems, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Promise to the Public:	Promise to the Public:	Promise to the Public:	Promise to the Public:	Promise to the Public:
We will keep You informed.	We will keep you informed, listen to and acknowledge concerns and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
Example Techniques to Consider:	Example Techniques to Consider:	Example Techniques to Consider:	Example Techniques to Consider:	Example Techniques to Consider:
• Fact sheets • Web Sites • Open houses	• Public comment • Focus groups • Surveys • Public meetings	• Workshops • Deliberate polling	• Citizen Advisory Committees • Consensus building • Participatory decision-making	• Citizen juries • Ballots • Delegated decisions

© 2004 International Association for Public Participation

3. Harmonising with existing engagement

Across the municipality and beyond a range of awareness raising, behaviour change, engagement and participatory decision making activities are undertaken with communities around fire management.

A challenge for the development of the MFMP is in capturing vital community input whilst not adding to consultation fatigue within the emergency management field. It is also important to recognise that while any engagement with the community around emergency management will ultimately have a capacity building outcome, the primary intention of the engagement around the MFMP is not capacity building, as there are already a suite of programs being delivered for this primary outcome.

It is also recognised that as a new concept, there is much education and awareness raising within emergency management agencies themselves as to the role and purpose of the MFMP.

The major local engagement programs which will be concurrently occurring during the development of the MFMP are listed below. More information about community education and engagement activities relating to bushfire preparedness is available in Appendix B to the MFMP, which contains a multi-agency work plan detailing fire risk management activities being undertaken in the Shire.

3.1 Community Information Guides – CFA

Community Information Guides (formerly called Township Protection Plans) contain local information for high risk communities to help identify and manage the risk of bushfire. The concept evolved from a recommendation of the 2009 Victorian Bushfires Royal Commission.

The Community Information Guides consider a town's bushfire history, terrain, vegetation and access routes and contain practical information including:

- Community based maps with key landmarks, routes and Neighbourhood Safer Places – Places of Last Resort (where applicable);
- Bushfire survival options including shelter options;
- Identification of local bushfire risks;
- Information regarding warnings, evacuation and Fire Danger Ratings;
- A relocation checklist; and
- Key contacts and information sources.

Community Information Guides are currently in place for the Surf Coast Shire:

- Aireys Inlet (includes townships of Fairhaven, Moggs Creek and Eastern View);
- Anglesea;
- Bambra;
- Deans Marsh and Pennyroyal Valley;
- Jan Juc and Bellbrae; and
- Lorne, including Big Hill.

Public input into the development of Community Information Guides is coordinated by the Country Fire Authority (CFA), with Surf Coast Shire, the Department of Environment, Land, Water and Planning (DELWP) and Parks Victoria also participating in the engagement process.

3.2 DELWP Fire Operations Plans (FOPs)

The Department of Environment, Land, Water and Planning undertakes public input into the development of fire operations planning for the prevention of fire on public land. Fire prevention and preparedness works consulted upon include planned burns, strategic fuel breaks, mechanical fuel management and fire infrastructure management.

3.3 Country Fire Authority education, awareness and support programs

The majority of community education and engagement activities related to bushfire preparedness are conducted by the Country Fire Authority and include programs such as Community Fireguard, the Home Bushfire Advice Service, Bushfire Planning Workshops and Fire Ready Victoria meetings. These occur in a range of home and community settings, using a wide variety of engagement processes and extend before and throughout the fire danger season.

3.4 Weeds to Mulch Program

This program has a dual purpose of bushfire fuel reduction and woody weed removal. The program involves engaging and educating residents living in identified Bushfire Engagement and Mitigation zones[29] about risk management and fuel reduction on private land. CFA identifies Community Fireguard groups within these zones and helps promotes the Weeds to Mulch program.

Over recent years, this program has evolved to become primarily a fire fuel reduction program.

3.5 Strategic Conversations Program – DELWP and CFA

'Strategic conversations' is a new DELWP initiative, in partnership with CFA, for developing and sharing knowledge about fire. Strategic conversations occur through community invitation and involve members of the community and staff from DELWP and CFA.

A strategic conversation is a facilitated dialogue within a group of people for the purpose of pooling knowledge and experience about a topic or theme – in this case, fire. As people share their different perspectives, a broader and deeper understanding of the land and fire management can be achieved.

[29] Surf Coast Shire Strategic Fuel Management Program (draft) 2014

4. Local Engagement and Participation Plan

4.1 Scope

This Strategy is intended to guide the process for public input into the establishment of the MFMP.

It is not intended to build general community fire preparedness, however it is recognised that any engagement in the field will make a contribution to community capacity building in this area.

For 2011/12, the Surf Coast Shire Municipal Fire Management Planning Committee recommended that engagement on the draft MFMP be undertaken in conjunction with engagement on Community Information Guides for high risk townships in the Shire. The Community Information Guides engagement process was led and developed by the Country Fire Authority, in conjunction with the Surf Coast Shire and the Department of Sustainability and the Environment.

4.2 Engagement Purpose/Objectives

Local engagement on the draft MFMP is being undertaken to:

- Enrich the quality of the MFMP through local intelligence (ideas, opinions and knowledge of the local community);
- Strengthen relationships and operational effectiveness between fire management agencies through the co-delivery of engagement;
- Improve understanding of the roles and responsibilities of individuals, agencies and government in preparing for fire and improving people's safety; and
- Increase citizen knowledge of fire management planning, thereby increasing citizen capacity to contribute to local fire management and to undertake personal fire prevention and preparedness measures.

4.3 Engagement and Participation Principles

The Surf Coast Shire recognises the value of local knowledge and the unique contribution that the community can make to local fire management planning. Engagement in fire management planning will be delivered in a manner designed to:

- Promote acceptance, understanding and joint problem solving;
- Raise knowledge and skills of fire management through participation;
- Produce plans that support community and organisational expectations; and
- Incorporate community and organisational needs into the development of fire management plans.

4.4 Scope for Community Input

The table below outlines the degree to which public input can be acted upon by the Municipal Fire Management Planning Committee (MFMPC) in relation to the draft MFMP:

What aspects are not open to the community to make decisions on (not negotiable with the public)	What aspects the community can make decisions on /influence (negotiables)
• Roles of fire management agencies • Timing of the establishment of the MFMP • MFMP's alignment to policy and legislation • Council and agency compliance with legislation • Risk assessment standards & processes	• Process of engagement and who we engage with • Additions to the local asset risk register • Confirmation of local information within the MFMP • Fire protection measures/treatments

4.5 Organisation and Public Stakeholders

There are a range of stakeholders to this plan broadly grouped around three areas:

a) Permanent MFMPC members;
b) Agencies that attend MFMPC by request; and
c) Other agencies, organisations and interested groups that could support the MFMP.

This Strategy recognises that consultation with the agencies should be separated from the consultation with public stakeholders, particularly since the community engagement undertaken for this strategy will be combined with the consultation process for Township Protection Planning. This approach has created the following two key stakeholder groupings:

4.5.1 Agency and organisation stakeholders

The Surf Coast Shire MFMPC is made up of representatives from the Surf Coast Shire, the Country Fire Authority, the Department of Environment, Land, Water and Planning, Parks Victoria, the Department of Health & Human Services, Victoria Police, VicRoads and the Great Ocean Road Coast Committee.

The MFMPC is a sub-committee of the Shire's Municipal Emergency Management Planning Committee (MEMPC). The MEMPC has broader agency representation that includes the Victorian State Emergency Service, the Department of Education and Early Childhood Development, the Department of Health & Human Services, the Department of Health, VicRoads, Barwon Water, the Australian Red Cross and the Lorne Community Hospital. Agencies represented on the MFMPC are also represented on the MEMPC.

4.5.2 Public stakeholders

The capacity and motivation to engage around fire management is extremely diverse in local communities. Peter Sandman, a risk communication expert uses four categories of public:

Highly involved	You know their telephone numbers by heart, and they know yours. They want input into everything you decide. Your issue is their main preoccupation in life, second only to job and family (and sometimes not that).
Attentives	They monitor the media coverage of your issue carefully. Sometimes they go to a meeting, answer a survey, check out a web site, subscribe to a newsletter, contribute to a campaign. Your issue isn't distorting their lives the way it is for the fanatics, but it's in their Top 20.
Browsers	They check you out in the media from time to time, but they don't want to be bothered providing input. Your issue is on their "worry list," but nowhere near the

	top.
Inattentives	They don't know and they don't want to know

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The engagement process for the MFMP is not capable of effecting large scale behaviour change or awareness raising. The time limitations for the consultation, the newness of the concept and the complexity of fire management planning preclude the engagement process from effectively targeting beyond the *Highly involved* and *Attentive* categories.

Community members in this category would include residents of high risk townships and residents who are active in Department of Environment, Land, Water and Planning or Country Fire Authority engagement processes.

4.6 Key messages

4.6.1 About the MFMP

- The MFMP outlines how Council, fire agencies and other relevant authorities and organisations will work together to prepare for, respond to and recover from major bushfires in the Surf Coast Shire.
- The MFMP has been produced collaboratively by members of the Surf Coast Shire MFMPC. It is a multi-agency plan for the Surf Coast Shire municipal area.
- This is the first year we have developed this plan, and we intend to keep improving it each year.

4.6.2 About the consultation program

- A consultation process has been developed to enrich the MFMP with local knowledge about what your community needs for fire protection.
- Your involvement is a great way for you to find out more about what fire management agencies are doing, and what you need to do to protect yourself, your family and your property from bushfires.
- Even if you do not know a lot about fire, we still value your ideas about how best to help protect your community from bushfires.
- Issues about risk assessment standards and processes, government policy, legislation and fire safety initiatives are not within the scope of the consultation.

4.6.3 About the risk of fire

The Country Fire Authority's approved key messages for the 2014/15 fire season are attached as Appendix A to this Community and Organisational Engagement Plan Country Fire Authority.

5. Key Stakeholders & Communities

The following table lists the key stakeholders and communities who will be targeted through the engagement process for the MFMP and the type of engagement that will be undertaken. The list is intended to be a general guide, not an exhaustive list. The range of engagement is based on the International Association of Public Participation spectrum (outlined in Section 2.1 above).

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Who	General community in Surf Coast Shire	Residents, property owners, businesses and special interest groups in high risk towns, for which a Community Information Guides has been prepared: ▪ Aireys Inlet ▪ Anglesea ▪ Bambra ▪ Deans Marsh & Pennyroyal Valley ▪ Jan Juc & Bellbrae ▪ Lorne & Big Hill	Stakeholders with a special interest in the MFMP and ability to engage a broader audience ▪ CFA Brigades & volunteers	Organisations who have informed development of the MFMP but are not involved through MFMPC* or MEMPC** ▪ Colac Otway Shire ▪ SP Ausnet ▪ VicTrack	Organisations who are responsible for the MFMP: **MFMPC*** ▪ Surf Coast Shire ▪ Dept of Sustainability & Environment ▪ Country Fire Authority (Group & Brigades) ▪ Parks Victoria ▪ Great Ocean Road Coast Committee ▪ Victoria Police ▪ Dept of Health and Human Services **MEMPC**** Agencies listed above and: ▪ Powercor ▪ VicRoads ▪ Barwon Water ▪ Victoria State Emergency Service ▪ Dept of Education & Early Childhood Development ▪ Dept of Health ▪ Australian Red Cross ▪ Lorne Community Hospital ▪ V/Line ▪ Ambulance Victoria ▪ Dept of Primary Industries ▪ Salvation Army ▪ Other MEMPC members Other relevant stakeholders with operations in the municipal district.

* MFMPC = Municipal Fire Management Planning Committee

** MEMPC = Municipal Emergency Management Planning Committee

6. Engagement Program – summary

<table>
<tr><td rowspan="3">Plan</td><td colspan="3">Stage 1 – Align agency engagement and Strategy adoption
By end October 2011</td></tr>
<tr><td>Who</td><td>How</td><td>Tools</td></tr>
<tr><td>CFA
DSE
Parks Victoria
SCS</td><td>Workshops/meetings to:
▪ Seek agreement on the engagement and participation strategy
▪ Align engagement on other initiatives eg: Township Protection Plans with MFMP
▪ Develop engagement schedule</td><td>▪ Develop promotional poster, advertising
▪ Develop fact sheets and consultation information
▪ Develop consultation schedule and process</td></tr>
<tr><td rowspan="7">Engage</td><td colspan="3">Stage 2 – Agency/organisation engagement
By end of October 2011</td></tr>
<tr><td>Who</td><td>How</td><td>Tools</td></tr>
<tr><td>Agency/organisation stakeholders involved in MFMPC and MEMPC</td><td>▪ Drafts of MFMP circulated for review and comment
▪ Detailed input sought on activities for multi-agency work plan
▪ Briefing to Committees and Council on draft MFMP</td><td>▪ Draft MFMP
▪ Draft multi-agency work plan
▪ DSE bushfire landscape modelling presentation</td></tr>
<tr><td colspan="3">Stage 3 – Public workshops
Summer 2011/2012</td></tr>
<tr><td>Who</td><td>How</td><td>Tools</td></tr>
<tr><td>Aireys Inlet
Anglesea
Bambra
Jan Juc and Bellbrae
Lorne, including Big Hill
Deans Marsh/Pennyroyal Valley</td><td>Combine CFA Township Protection Plan and MFMP engagement processes Feedback sought on:
▪ Township Protection Plan
▪ Local hazard reduction
▪ Regional risk priorities
▪ Neighbourhood Safer Places (inform)
▪ General information</td><td>▪ CFA community engagement sessions
▪ Draft MFMP & related materials</td></tr>
<tr><td>Online engagement</td><td>▪ Online forum through Bang The Table
▪ MFMP posted on Council website</td><td>Draft MFMP</td></tr>
<tr><td>Media campaign</td><td>General awareness campaign</td><td>Local media</td></tr>
<tr><td rowspan="3">Sort</td><td colspan="3">Stage 4 – Compile and incorporate feedback
By March 2013</td></tr>
<tr><td>Who</td><td>How</td><td>Tools</td></tr>
<tr><td>MFMP Committee</td><td>▪ Presentation to MFMP Committee meeting on community feedback
▪ Workshop what feedback can be incorporated
▪ Revise MFMP based on feedback from engagement process</td><td>▪ Engagement Feedback Summary</td></tr>
</table>

APPROVE	**Stage 5 – Approval of final MFMP** Date July – August 2012		
	Who	**How**	**Tools**
	MFMP Committee MEMP Committee Barwon South West Regional Strategic Fire Management Planning Committee Council	▪ Formal endorsement ▪ Formal endorsement ▪ Review and recommendation to Council Adoption	Final MFMP
RELEASE	**Stage 6 – Release Plan** Date August 2012		
	Who	**How**	**Tools**
	MFMP Committee	▪ Formal feedback to participating stakeholders ▪ Information sessions ▪ Council website	Local media Send to mailing list Post on Council website

7. Glossary

CFA	Country Fire Authority
DEECD	Department of Education and Early Childhood Development
DELWP	Department of Environment, Land, Water and Planning
IFMP	Integrated Fire Management Planning
MEMP	Municipal Emergency Management Plan
MEMPC	Municipal Emergency Management Planning Committee
MFMP	Municipal Fire Management Plan
MFMPC	Municipal Fire Management Planning Committee
MFPP	Municipal Fire Prevention Plan
NSP	Neighbourhood Safer Place – Place of Last Resort
PPRR	Prevention, Preparedness, Response and Recovery
RSFMPC	Regional Strategic Fire Management Planning Committee
TPP	Township Protection Plan
VBRC	Victoria Bushfire Royal Commission
VFRR	Victoria Fire Risk Register

Appendix A to Community and Organisational Engagement Plan

Country Fire Authority Key Messages – 2014/15 Fire Season

KEY MESSAGES – 2014/15 FIRE SEASON

These fire safety messages are broad and cover a range of topics. They can be used in different communication channels and situations including (but not limited to):

- Talking to local communities
- Talking to the media
- Advertising
- Publications
- Media Releases
- Flyers and promotional materials

Overarching key messages

- Areas in Victoria this summer we are expecting above average temperatures which will result in more hot, dry, windy days than usual. Bush and grass will be very dry and fires will start more easily and burn faster and with more intensity.
- You're at risk of fire this summer if you live near bush, grassland or coastal scrub. You need to understand your fire risk and know what to do.
- Talk to your family and friends about the fire risk where you live and make plans for what you'll do on a hot, dry, windy day.
- Leaving early is the safest option to protect yourself and your family.
- If the Fire Danger Rating is Code Red, Extreme or Severe, you're risking your life if you wait and see what happens. Leaving early is the safest option to protect yourself and your family.
- It's up to you to stay informed. Check the Fire Danger Rating for your area every day and act to protect yourself and your family by leaving early on hot, dry, windy days.
- Don't wait and see. Leaving late is risky, it means that a drive that normally takes a few minutes could take hours and you may not be able to get out at all.
- Don't rely on an official warning to leave. Bushfires can start quickly and threaten homes and lives within minutes.

Bushfire Survival Plan

- You need a well thought out Bushfire Survival Plan if you live or holiday in high risk bushfire areas in Victoria
- Research shows 75% of people living in high risk areas do not have a detailed bushfire survival plan
- Don’t have a plan? CFA can help. Visit www.cfa.vic.gov.au or call the Victorian Bushfire Information Line on 1800 240 667 for more information.
- You are not alone, advice and support is available. Talk to your local CFA brigade about how to plan for bushfire
- When preparing your plan consider the needs of children, the elderly, people with special needs or disability, pets and livestock
- Bushfires don’t arrive at convenient times – think about what you will do if fire threatens on a work day/during school holidays/when you are away from home
- Attending a CFA FireReady meeting or joining a Community Fireguard group will help you plan for fire. You can also book a free property assessment to assess your fire risk. For more information visit www.cfa.vic.gov.au or call the Victorian Bushfire Information Line 1800 240 667
- Review your plan every year

Grassfire

- Grassfires can spread quickly and are extremely dangerous, burning at 15- 20km/h or more
- As grass is a fine fuel, fire burns through it faster than through forest
- The taller and drier the grass, the more intensely a grassfire will burn
- Grassfires can start earlier in the day than forest fires as grass dries out more quickly than forest when temperatures are high
- Grassfires spread rapidly and can quickly threaten lives and property. If you live in an area with grassland you need a Bushfire Survival Plan
- Grassfires are very hot and can produce large amounts of radiant heat that can kill anyone caught out in the open
- Grassfires can be started accidentally when using machinery such as chainsaws, lawnmowers, tractors and welders over summer
- Most losses, including loss of life, occurs after a wind change in a grass fire

Community Information Guides

- Community Information Guides are for local residents and visitors to the area
- Community Information Guides contain local information for communities to help identify and manage the risk of bushfire
- Community Information Guides are based on your town's bushfire history, terrain, vegetation and access routes. They also contain information such as:
    - Community based maps with key landmarks, routes and neighbourhood safer places (where applicable)
    - Bushfire survival options including shelter options
    - Identification of local bushfire risks
    - Information regarding warnings, evacuation and Fire Danger Ratings
    - A relocation checklist; and
    - Key contacts and information sources
- Know your Community Information Guides and link it with your personal bushfire survival plan
- Managing bushfire risk is everyone's responsibility – know your Township Protection Plan
- Find your local Community Information Guides online at www.cfa.vic.gov.au

Fire Danger Ratings

- Fire Danger Ratings are forecast by the Bureau of Meteorology up to four days in advance
- FDRs predict fire behaviour should a fire start, and how hard it will be to put out
- The higher the FDR, the higher the risk
- Victoria is divided into nine FDR districts.
- To stay safe you need to be aware of the FDR in your district each day over the fire season – it is your trigger to act
- For every Fire Danger Rating there is clear advice on what you should do
- You need to find out the daily FDR in the district where you live or travel – for more information visit www.cfa.vic.gov.au
- Fire agencies provide clear advice on what to do for each FDR – see www.cfa.vic.gov.au for more information

Code Red

- **Code Red** is the highest Fire Danger Rating – these are the worst conditions for a bush or grass fire
- Houses are not designed or constructed to withstand fires in **Code Red** conditions
- On a **Code Red** day, leaving high risk bushfire areas the night before or early in the morning is the safest option
- Code Red days are rare – when they are forecast they are **very** serious

High-risk bushfire areas

- If you live near or visit areas that are heavily forested, have thick bush or long, dry grass, or coastal areas with lots of scrub you are at risk of fire
- Fires can occur where suburbs meet the bush or in urban areas where houses have grassland, bush or parkland around them

Leaving early

- Leaving early is the safest way to survive a bushfire
- People die during bushfires trying to leave their homes at the last minute
- In high risk areas, leaving early is your only safe option on **Code Red** days – make a decision about 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
- Only consider staying with your property on **Extreme** or **Severe** days if you are fully prepared and can actively defend your home. Visit www.cfa.vic.gov.au for more information
- Do you know family or friends who may need help leaving early? Don't wait, find out
- As a parent or carer please ensure your children, the elderly, people with special needs or disability are helped to leave early on Code Red, Extreme or Severe fire danger days
- Find a place away from high risk bushfire areas to relocate to – for example a shopping complex, large shopping strip, central business district of a regional centre or the home of friends and family away from high risk bushfire areas
- You will need to know what route to take and have an alternative if that route is blocked or congested. Your normal route may take much longer than expected

Don’t wait and see

- Do not wait and see – it is extremely dangerous to leave after there are signs of fire in your area
- Once a fire is in your area, it may become difficult to leave because road conditions will be dangerous. There may be road closures, smoke, fallen trees and embers
- A drive that will normally take five minutes may take up to two hours in the event of a fire
- You should not wait to receive a warning to leave. Bushfires can start quickly and threaten lives and homes within minutes

Defending your home

- If you live in a high risk bushfire area, your home will not be defendable on a Code Red day
- If you live in a high risk bushfire area, your home may not be defendable on Extreme or Severe fire risk days. Preparation and planning is essential.
- Most homes in high risk bushfire areas are not built to withstand bushfire
- Many homes close to or surrounded by heavily forested land are extremely difficult to defend
- Defending your home is very risky – you could die or be seriously injured
- Survival must be your main priority
- Defending a house requires at least two able bodied, fit and determined adults who are physically and mentally prepared to work long and hard in arduous and difficult conditions
- Only consider staying with your property on **Extreme** or **Severe** days if you are fully prepared and can actively defend your home. Visit www.cfa.vic.gov.au for more information and advice on Fire Danger Ratings
- Even people who are extremely well prepared can die fighting fires at home
- Discuss your plan with all family members. Everyone should be aware that staying to defend may involve trauma, injury or possibly death
- Children, the elderly, people with special needs or disability should be well away from the threat

Radiant heat

- Radiant heat is the heat that you feel from a fire
- Radiant heat is the biggest killer in a fire
- The best protection from radiant heat is distance
- A solid object such as a brick wall and suitable clothing can offer some protection from radiant heat but it may not save your life
- If you are in an open space put at least 300 metres between you and the fire

Warnings

- Don’t rely on an official warning to leave. Bushfires can start quickly and threaten lives and homes within minutes
- If a fire starts nearby, there may be no time for official warnings
- For alerts and warnings, visit www.cfa.vic.gov.au, tune in to your emergency broadcasters: ABC Local Radio, commercial radio and designated community radio stations or SKY NEWS Television or call the Victorian Bushfire Information Line on 1800 240 667. You can also receive warnings via the CFA Updates Twitter account.
- Look for warnings issued for surrounding towns as your suburb or town may not be mentioned

- The three alert levels in Victoria each increase in importance – they are Advice, Watch and Act, and Emergency Warning. This information will be available on the CFA and DELWP websites or via the Victorian Bushfire Information Line on 1800 240 667

- The three level alerts refer to the following:
  - Advice: provides general information to keep you up to date with developments
  - Watch and Act: means a fire is approaching, conditions are changing you must act
  - Emergency Warning: You are in danger, you will be impacted by fire, act now

- Emergency Alert telephone warnings may also be sent to your mobile and landline phone based on your billing address. This means if you live in the city and you're travelling in the country when a bushfire happens you will not receive a telephone warning by mobile phone.
- Once a fire is in your area, it may become difficult to leave because road conditions will be dangerous. There may be road closures, smoke, fallen trees and embers.

Back up plan – if you are caught in a fire

- Fires are unpredictable and plans can fail. Having a back up plan can save your life if you are caught in a fire.
- If you cannot leave the area consider shelter options close by. This may include a well-prepared home (yours or your neighbours) that you can actively defend, a private bunker (that meets current regulations) or a designated community shelter or refuge.
- Whilst these survival options carry a high a risk of trauma, injury or death they may provide you with some protection from radiant heat.
- Last resort options include a Neighbourhood Safer Place (place of last resort), a stationary car in a cleared area, a ploughed paddock or reserve or a body of water like a swimming pool or dam.

Neighbourhood Safer Places (places of last resort)

- NSPs are places of last resort when all other plans have failed.
- They can provide some protection from direct flame and radiant heat during a fire.
- NSPs may still be subject to ember attack and they do not guarantee safety.
- NSPs are not relief centres – there are limited facilities and no support or services are provided. They are not places to relocate to when leaving early.
- Not every town has a NSP – identify other shelter options in your area.
- NSPs are listed on CFA website www.cfa.vic.gov.au

Total Fire Bans (TFB)

- A Total Fire Ban is a day where certain activities that may cause fire are banned.
- Total Fire Bans are declared by CFA on days when fires are more likely to start, spread rapidly and be difficult to control. A Total Fire Ban day legally bans the following activities:
    - lighting or maintaining camp fires, incinerators, fires to burn off grass, weeds or other vegetation
    - welding, grinding, soldering, gas cutting (unless a permit has been issued by CFA / MFB)
    - use of solid/ liquid fuel barbeques or ovens
    - driving a vehicle where it will be in contact with crops, grass, stubble, weeds, undergrowth, or other vegetation (and only if vehicle is fitted with an efficient silencing device or spark arrestor takes all exhaust from the engine)

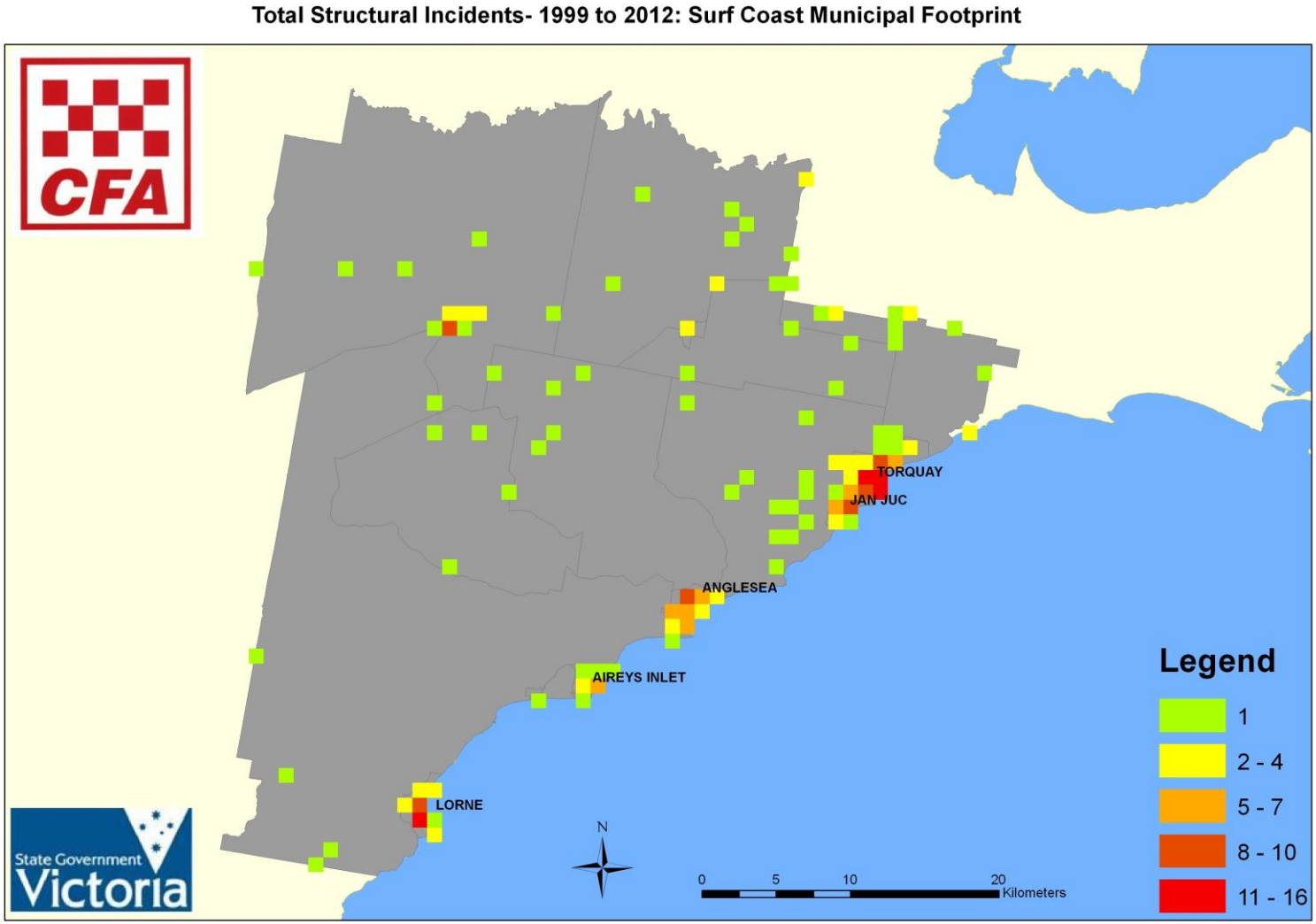
- Days of Total Fire Ban still allow the use of:
    - Barbecues that are fixed appliances, fired by gas or electricity, and built into permanent structures of brick, stone or concrete ARE allowed provided that:
        - The area 3 metres around the barbecue is cleared of flammable material
        - You have either a hose connected to water supply or a vessel with at least 10 litres of water
        - An adult is there at all times when the fire is alight.
    - Gas or electric fired portable barbecues ARE allowed provided that:
        - It is located within 20 metres of your dwelling (portable places of residence such as mobile homes, caravans or tents are not dwellings in accordance with the CFA Act)
        - The area 3 metres around the barbecue is cleared of flammable material
        - You have either a hose connected to a water supply or a vessel with at least 10 litres of water
        - An adult is there at all times when the fire is alight.

- People should avoid using machinery with an internal combustion or heat engine – such as tractors, slashers, excavating or road making equipment – within 9 metres of any crops, grass, stubble, weeds, undergrowth or other vegetation. Using a chainsaw, plant or grass trimmer or lawn mower.
- Caterers can set up and light a fire to operate a barbecue or a spit at outdoor functions if they have a written permit issued by CFA or MFB and comply with it.
- For more information on Total Fire Bans and fire restrictions visit www.cfa.vic.gov.au or contact the Victorian Bushfires Information Line on 1800 240 667

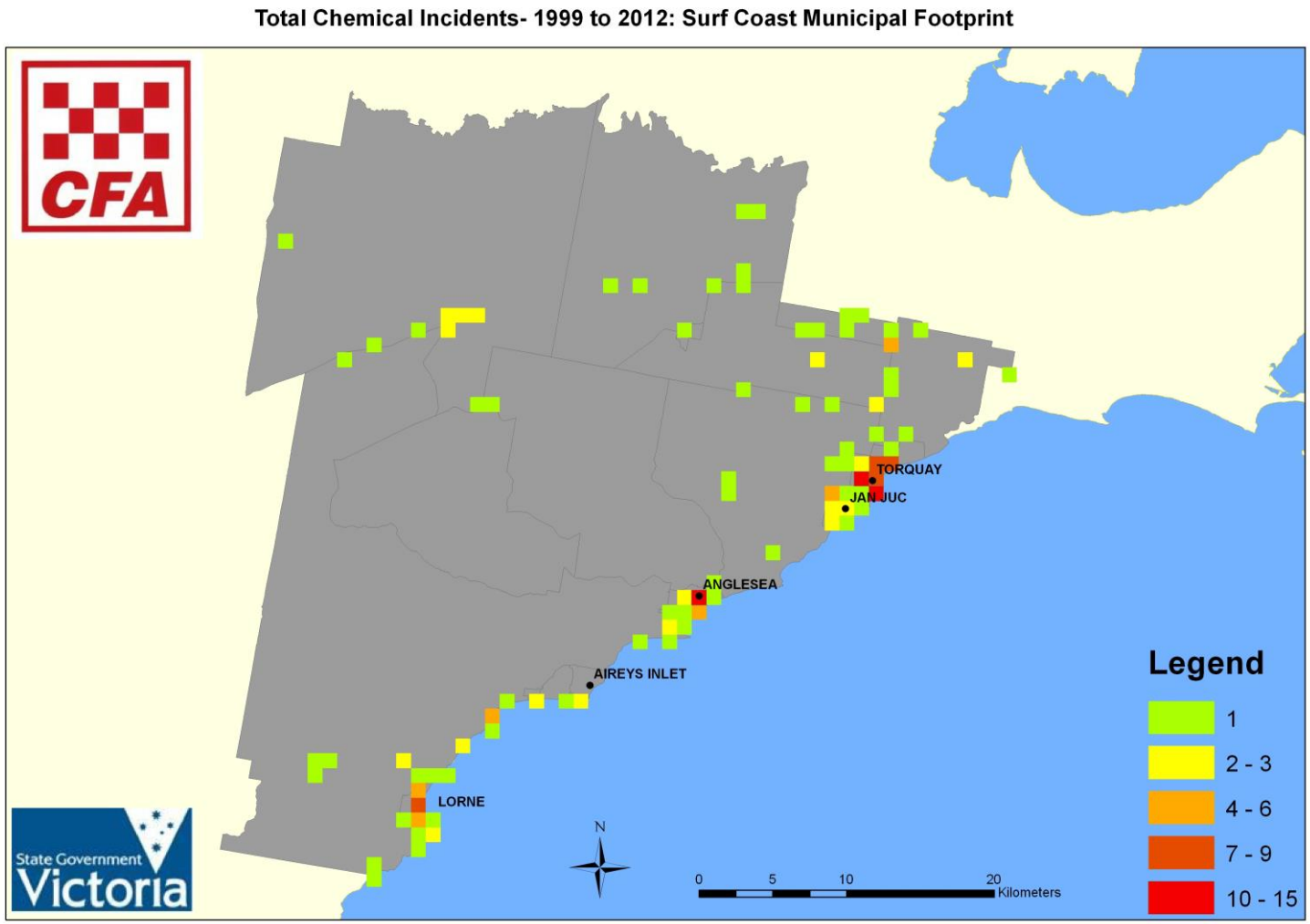
Appendix E Maps

Appendix E1 Municipal Boundaries Map

Appendix E.2 Structural Incidents Map – Surf Coast Shire

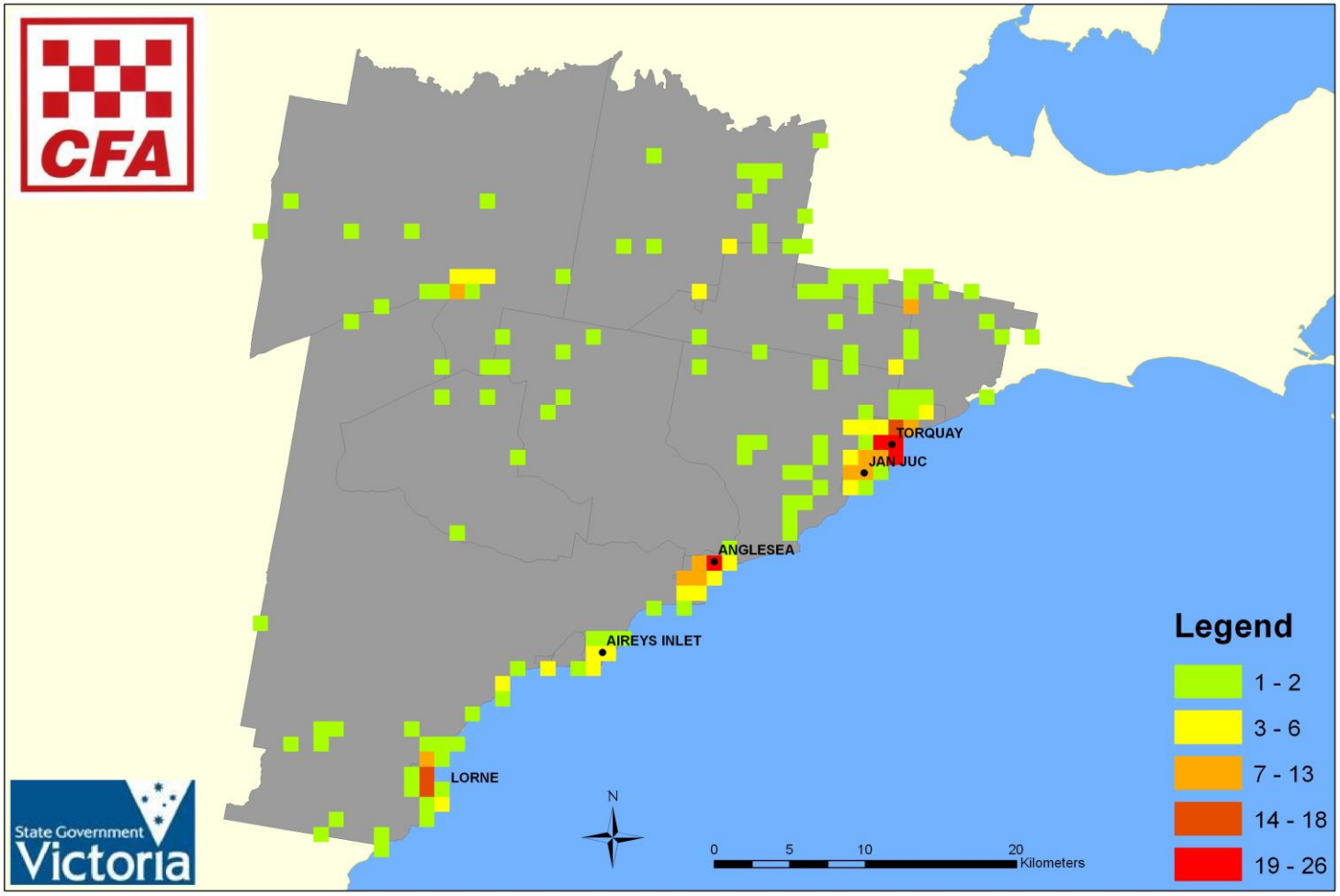


Appendix E.3 Chemical Incidents Map – Surf Coast Shire



Appendix E.4 Combined Chemical and Structural Incidents – Surf Coast Shire

Total Structural & Chemical Incidents- 1999 to 2012: Surf Coast Municipal Footprint



Appendix F Terminology

Acceptable risk	The level of potential losses that a society or community considers acceptable, given existing social, economic, political, cultural, technical and environmental conditions.
Agencies	Refers to the agencies of the Municipal Fire Management Planning Committee. These include key agencies and organizations such as the Municipality, Department of Environment, Land, Water and Planning, Parks Victoria, the Country Fire Authority and Victoria Police.
Agency Treatments	Refer to Appendix A.1 Municipal Risk Management Register and Appendix A.2 List of Victorian Fire Risk Register Treatments.
Assets and values[30]	Recognised features of the built, natural and cultural environments. Built assets may include buildings, roads and bridges; structures managed by utility and service providers; or recognised features of private land, such as houses, property, stock and crops and associated buildings and equipment. Natural assets may include forest produce, forest regeneration, conservation values including vegetation types, fauna, air and water catchments*. Cultural values may include recreational, Indigenous, historical, archaeological and landscape values.
Assumption	A conclusion that is reached based on the information available at the time.
Bushfire	A general term used to describe fire in vegetation, including grass fire.
Bushfire Risk	The chance of a bushfire igniting, spreading and causing damage to the community or the assets they value.
Community	A group of people with a commonality of association and generally defined by location, shared experience or function.
Community based disaster risk management	A process that seeks to develop and implement strategies and activities for disaster preparedness (and often risk reduction) that is locally appropriate and locally 'owned'.
Consequence	Outcome or impact of an event.
Critical infrastructure	Critical infrastructure includes those services, physical facilities, supply chains, information technologies and communication networks that, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the social or economic well-being of the community. Includes: • telecommunications • electrical power systems • gas and oil storage and transportation • banking and finance • transportation • water supply systems (and sewerage). Adapted from Critical Infrastructure Advisory Council (CIAC).
Elements at risk	The population, buildings and civil engineering works, economic activities, public services, infrastructure and so on, exposed to sources of risk.
Emergency	An event, actual, or imminent that endangers or threatens to endanger life,

[30] Department of Sustainability and Environment (2006), Code of Practice for Fire Management on Public Land – Revision No. 1, DELWP, Victoria.

	property or the environment, and that requires a significant and coordinated response.
Essential Service[31]	The level of potential losses that a society or community considers acceptable, given existing social, economic, political, cultural, technical and environmental conditions
Event	Occurrence of a particular set of circumstances. An incident or situation that occurs in a particular place during a particular interval of time.
Frequency	A measure of the number of occurrences per unit of time.
Hazard	A source of potential harm or situation with a potential to cause loss. A potentially damaging physical event that may cause loss of life or injury, property damage, social and economic disruption or environmental degradation.[32]
Impact	See consequence.
Integrated Fire Management Planning *(IFMP)*	Integrated Fire Management Planning is a holistic and integrated risk based planning framework for fire management, across all land tenures and boundaries including Prevention, Preparedness, Response and Recovery activities.
Leadership group	A subgroup for the broader committee comprising the risk category, technical knowledge and experience
Likelihood	Used as a general description of probability or frequency – can be expressed qualitatively or quantitatively
Loss	Any negative consequence or adverse effect – financial or otherwise.
Mitigation	Measures taken in advance of a disaster, aimed at decreasing or eliminating its impact on society and the environment.
Monitor	To check, supervise, critically observe or measure the progress of an activity, action or system on a regular basis in order to identify change from the performance level required or expected.
Organisation	Group of people and facilities with an arrangement of responsibilities, authorities and relationships.
Practicable[33]	What is realistic to achieve in the context of: ▪ the severity of the hazard or risk in question ▪ the state of knowledge about that hazard or risk and any ways of ▪ removing or mitigating that hazard or risk ▪ the availability and suitability of ways to remove or mitigate that ▪ hazard or risk the cost of removing or mitigating that hazard or risk.
Preparedness	Arrangements to ensure that in the event of an emergency, all those resources and services that are needed to cope with the effects can be efficiently mobilised and deployed.
Prevention	Regulatory and physical measures to ensure that emergencies are prevented,

[31] Essential Services Commission Act 2001
[32] United Nations International Strategy for Disaster Reduction (2008), Climate Resilient Cities 2008 primer: reducing your vulnerabilities to climate change impacts and strengthening disaster management in East Asian cities, United Nations and the World Bank, Geneva
[33] Dangerous Goods (Storage and Handling) Regulations 2000 S.R. No. 127/2000.

	or their effects mitigated.
Probability	A measure of the chance of occurrence expressed as a number between 0 and 1. 'Frequency' or 'likelihood' rather than 'probability' may be used in describing risk. The likelihood of a specific outcome, as measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between zero and unity – zero indicating an impossible outcome and unity indicating an outcome that is certain. Probabilities are commonly expressed in terms of percentage e.g. the probability of throwing a six on a single roll of a die is 1 in 6, or 0.167, or 16.7 per cent.
Recovery	The coordinated process of supporting emergency affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.
Residual risk	Risk remaining after implementation of risk treatment.
Resilience	The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures[34]
Response	Actions taken in anticipation of, during and immediately after an incident to ensure that its effects are minimised, and that people affected are given immediate relief and support.
Risk	The chance of something happening that will have an impact on objectives. The probability of harmful consequences resulting from interaction between natural or human-induced hazards and vulnerable conditions[35].
Risk Analysis	Systematic process to understand the nature of, and deduce, the level of risk.
Risk Assessment	The overall process of risk identification, risk analysis and risk evaluation.
Risk criteria	Terms of reference by which the significance of risk is assessed.
Risk Environments	There are four types of risk environments used in the **Victorian Fire Risk Register** tool – Human Settlement, Economic, Environmental and Cultural Heritage.
Risk Evaluation	Process of comparing the level of risk against risk criteria.
Risk Identification	The process of determining what, where, when, why and how something could happen.
Risk Management	The culture, process and structures that are directed towards realising potential opportunities while managing adverse effects.
Risk Management Process	The systematic application of management of policies, procedures and practices to the tasks of communicating, establishing context, identifying, analysing, evaluating, treating, monitoring and reviewing risk.
Risk Reduction	Actions taken to lessen the likelihood, negative consequences, or both, associated with a risk.
Risk Register	A listing of risk statements describing sources of risk and elements of risk, with assigned consequences, likelihoods and levels of risk.
Risk Treatment	Process of selection and implementation of measures to modify risk. The term 'risk treatment' is sometimes used for the measures themselves.
Source of Risk	Source of potential harm.
Susceptibility	The potential to be affected by loss.

[34] United Nations International Strategy for Disaster Reduction (UNISDR) (2009), UNISDR terminology on disaster risk reduction, United Nations, Geneva

[35] Ibid.

Tolerable Risk	A risk within a range that society can live with so as to secure certain net benefits. It is the range of risk regarded as non-negligible and needing to be kept under review and reduced further if possible.
Treatment	An existing process, policy, device, practice or other action that acts to minimise negative risk or enhance positive opportunities. The word control may also be applied to a process designed to provide reasonable assurance regarding the achievement of objectives.
Treatment (adequacy) assessment	Systematic review of processes to ensure that controls are still effective and appropriate.
Victorian Fire Risk Register *(VFRR)*	The Victorian Fire Risk Register is a systematic map based process that identifies assets, assesses assets and provides a range of treatments which contribute to the wellbeing of communities and the environment, which suffer the adverse effects of bushfire.
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impacts of hazards[36]

[36] Ibid

Appendix G Acronyms

CFA	Country Fire Authority
DEECD	Department of Education and Early Childhood Development
DELWP	Department of Environment, Land, Water and Planning
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
IFMP	Integrated Fire Management Planning
MEMP	Municipal Emergency Management Plan
MEMPC	Municipal Emergency Management Planning Committee
MFMP	Municipal Fire Management Plan
MFMPC	Municipal Fire Management Planning Committee
MFPP	Municipal Fire Prevention Plan
NSP	Neighbourhood Safer Places – Places of Last Resort
PPRR	Prevention, Preparedness, Response and Recovery
RSFMP	Regional Strategic Fire Management Plan
RSFMPC	Regional Strategic Fire Management Planning Committee
SES	State Emergency Services
TPP	Township Protection Plan
VBRC	Victoria Bushfire Royal Commission
VFRR	Victoria Fire Risk Register
WMO	Wildfire Management Overlay

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