

# **Year in Review**

2016-17



#### **Acknowledgment of Country**

EMV acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of the land. EMV also acknowledges and pays respect to the Elders, past and present and is committed to working with Aboriginal and Torres Strait Islander communities to achieve a shared vision of safer and more resilient communities.

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# **Contents**

Welfare and Efficiency Survey

<ul><li>Foreword</li><li>Commissioner Craig Lapsley</li><li>Chief Executive Marisa De Cicco</li></ul>	4	<ul> <li>All communities, all emergencies</li> <li>All communities, all emergencies throughout the year</li> <li>2016-17 aircraft capabilities</li> <li>Working as one at the State Control Centre</li> <li>Case study - severe weather impacting communities</li> </ul>	34
About us	6		
Introduction and highlights	7		
Looking to the future	8	Dealing with extreme heat	
Strategy Refresh 2020	9	After the emergency	42
<ul> <li>Putting community at the centre</li> <li>Community Resilience Framework for Emergency Management</li> <li>Increasing diversity and inclusion</li> <li>Victorian Preparedness Framework</li> <li>Fire Management Strategy project</li> </ul>	10	<ul> <li>Flood recovery</li> <li>Partnering with Bendigo Bank to provide local relief</li> <li>Community story - Bourke Street Tragedy</li> <li>Better information, decisions and outcomes mean safer communities</li> </ul>	46
Resilient recovery		Emergency Management Common	
<ul> <li>Working together to achieve change</li> <li>Coal Mine Emergency Management Taskforce</li> <li>Hazelwood Mine Fire Inquiry</li> <li>Marine Search and Rescue working as one</li> <li>Victorian Emergency Management Performance Standards</li> <li>Victorian Critical Infrastructure Resilience Report</li> <li>Emergency Management Planning Guidelines</li> <li>Critical infrastructure</li> <li>All Sectors Resilience Network Forum</li> <li>Central Victorian underground mines</li> <li>Stawell tyre stockpile site</li> </ul>	16	Operating Picture  Community notifications and warnings  VicEmergency app  VicEmergency social media channels  VicEmergency hotline  Emergency broadcasters  Enabling the technology - Emergency Alert  Case study - drones  Public information campaigns  Strategic communications in emergencies  Emergency Management Operational  Communications Program	
Building resilient and connected communities  Partnering for success  Consequence management  State Emergency Risk Assessment Review 2016-17  Increasing accessibility  Resilient Australia Awards  Community-based emergency management  Community-based example: 'Refuge'	24	Victorian Emergency Management Institute     Learning management and EM-Share     Emergency Management Operational Review     Continuous improvement and reviews     Learning from our international colleagues     Scholarships  Thank you	54
Supporting volunteers	30		
<ul> <li>Volunteer Consultative Forum</li> <li>Volunteer Emergency Services Equipment Program</li> <li>Strategic priorities for emergency management volunteering in Victoria</li> <li>The value of Victoria's volunteers, volunteering and volunteerism</li> <li>Valuing Volunteers Program</li> <li>ESVS grants</li> </ul>			

# **Foreword**

# **Commissioner Craig Lapsley**

Victoria's emergency management sector has a lot to be proud of in the way in which we work together. This has grown over the years and is being cemented under current operational arrangements.

As the emergencies we face are changing, so must our preparation, response and recovery. While fire wasn't a focus of 2016-17, many other types of events impacted our communities, emergency management organisations and personnel in different ways.

Community is our focus and is central to everything we do. Building community resilience is a foundation of our future and runs across infrastructure, planning, emergency management and community sector capability. It influences our capacity to prepare for and recover from emergencies.

Community resilience requires all parties to partner, and proactively and meaningfully share responsibility. It requires an integrated approach that puts people at the centre of decision making and supports the emergency management sector to better connect with communities to understand their values, priorities and strengths.

We've seen a lot of changes in how the sector cooperates as we work towards safer and more resilient communities. We work with and support all of our diverse communities, and communicate with and warn them through legislation, lessons, and community expectations, in addition to goodwill and passion.

We've broadened our Command, Control and Coordination arrangements in managing emergencies and incidents to include Consequence, Communication and Community Connection.

These 'six c's' will significantly shift our approach, with the three new additions placing community wellbeing at the fore, as well as being more inclusive.

Understanding the impact of an emergency, its consequences and how to uncover and

acknowledge community connections before, during and after, is vital to building a sustainable emergency management system that recognises community wellbeing, liveability, sustainability and viability.

The commitment of Victorian communities remains crucial, as does the leadership and professionalism of our volunteers and career personnel whose fantastic work keeps Victorians safe.

Victoria's modern emergency management system has come a long way and will continue to learn and improve.

It's important to recognise the commitment of Victorian communities, and the leadership and professional approach of our emergency management volunteers and career people, who do a fantastic job to protect Victoria.



Craig Lapsley

Emergency Management Commissioner

### Chief Executive Marisa De Cicco

Emergency Management Victoria (EMV) has built strong foundations for a sustainable organisation that works towards our vision of "safer and more resilient communities". We should be very proud of how we've brought the sector, people and the work they do closer together.

This year we significantly strengthened Victoria's capacity to plan for, withstand, respond to and recover from emergencies. We added value to the sector and the community, while fulfilling our statutory role of driving sector-wide reform and change, and a sustainable emergency management model.

Our major reform drive has grown Victoria's emergency management operational capabilities, policy and legislation, diversity and inclusion, while supporting volunteers and the community. All of this has been achieved under the significant and diverse pressures of a rapidly changing environment.

Our key milestones include releasing the:

- · Community Resilience Framework
- Diversity and Inclusion Framework
- · Resilient Recovery Discussion Paper
- Victorian Preparedness Framework.

The strategies and frameworks we produced establish foundations and fundamentals to improve how the sector operates and outlines our plans to achieve future objectives.

The next 12 months will bring new challenges and opportunities for EMV as we continue to work with the sector in policy, legislation

and operational changes to improve Victoria's emergency management arrangements. It is important to remember that within the sector we're all leaders and champions of this change.

While this Year in Review isn't a legislated requirement it is an opportunity to share the stories of our work and the people who've led and supported it and our partnership in both managing emergencies while transforming and improving the sector in Victoria.



Marian Do Since

Marisa De Cicco
Acting Chief Executive

# **About us**

Emergency Management Victoria (EMV) is a statutory entity jointly led by our Chief Executive, who is also the Deputy Secretary, Emergency Management, and the Emergency Management Commissioner, a Governor-in-Council appointment. EMV sits within the Department of Justice and Regulation (DJR).

Our specific statutory responsibilities include supporting the Emergency Management Commissioner in coordinating before, during and after major emergencies.

#### **Shared vision**

Safer and more resilient communities.

#### **Shared goal**

A sustainable and efficient emergency management system that reduces the likelihood, effect and consequences of emergencies.

"We work as one."

#### What we do

Victoria's sector-wide approach to emergency management is building safer, more resilient communities. Having agencies, departments, industry, business, volunteers, all levels of government and community working together is imperative to a sustainable, efficient emergency management system that reduces the likelihood, effect and consequences of emergencies.

### **Our role**

The Emergency Management Commissioner, alongside the Chief Executive, ensures that effective and efficient service delivery and accountability is occurring in an integrated way across the emergency management system.

The Emergency Management Commissioner is responsible for coordinating the emergency management system's readiness, preparedness, response and recovery for when Class 1 and 2 emergencies reach a level of significance where human life and property come under threat (major emergencies), and ensuring control arrangements are in place.

During security (Class 3) emergencies, the Emergency Management Commissioner oversees consequence management and relief and recovery arrangements. The Commissioner is also responsible for managing the State Control Centre, consequence management and coordinating recovery for all emergencies.

Additionally, the Commissioner is responsible for developing and maintaining operational standards and incident procedures for the performance of emergency management functions by response agencies.

The Commissioner is also required, under the *Emergency Management Act 2013*, to have regard to the fundamental importance of the role of volunteers in the performance of emergency management functions in Victoria.

The Chief Executive is responsible for the day-to-day management of EMV and leading large-scale investment projects on behalf of emergency management organisations. This includes major procurement, communications and information systems, and emergency management planning processes which can achieve greater efficiency and effectiveness in service delivery.

EMV supports the Commissioner and Chief Executive in fulfilling these functions and the broader emergency management sector as it continues to learn lessons and strengthen its own resilience and capability.

#### **Our performance**

The EMV Year in Review 2016-17 outlines our activities in our third year. Performance measures and financials are fully reported in the 2016-17 Department of Justice and Regulation Annual Report.

#### Our people

EMV's 144 dedicated staff\* are collaborative with the sector. By putting the community firmly at the centre they're strengthening resilience, response and recovery plans, policy and operations before, during and after emergencies. Their collaborative approach ensures all agencies and departments with clear emergency management accountabilities retain their identities, core purpose and community relationships as we all work towards growing resilience.

<sup>\*</sup> Approved FTE as at 30 June 2017

# **Introduction and highlights**

This year, significant change and challenges have tested the sector, including how we collaborate with business, non-government organisations, not-for-profits and the community, to plan, prepare, respond and recover from emergencies.

EMV's work this year in leading reforms to improve Victoria's emergency management arrangements and capability include:

- launching a foundation Community Resilience Framework for Emergency Management, from which all Victorian emergency management programs, projects and actions can be created, developed and sustained.
- launching the Emergency Management
   Diversity and Inclusion Framework: Respect
   and Inclusion for All towards a more diverse,
   inclusive sector that better reflects and
   connects with Victorian communities.
- launching the Victorian Preparedness
  Framework to help the sector understand
  its current and required capability to respond
  to major emergencies.
- launching the new VicEmergency app in November to replace the FireReady app, together with the new VicEmergency website and hotline.
- transitioning to the Emergency Management Common Operating Picture (EM-COP) platform for better sharing of pertinent emergency information. EM-COP was used to issue public information and warnings, and in deploying Victorian personnel to South Australia's flood/ storm emergency.
- achieving key implementation milestones of the Victorian Critical Infrastructure Strategy.
- acquisition, refurbishment and strategic positioning of the Victorian Emergency Management Institute at Mt Macedon.
- a strategy refresh to build EMV's ability to build safer, more resilient communities. This involves a new three-year EMV strategic plan and a series of organisation plans.

- development of the Victorian Fire Management Strategy, which provides a consolidated, cohesive approach to fire management.
- significant progress on legislative reforms towards a new framework for integrated and coordinated emergency management planning. New guidelines will also give practical planning guidance under the new framework.
- commencement of a project to create

   a broader and more comprehensive
   understanding of the value of volunteers,
   volunteering and volunteerism to the
   community, agencies, business and government.
- a focus on resilient relief and recovery coordination arrangements in Victoria and consultation over a relief and recovery strategy.
- EMV significantly contributed to emergency management reviews and reports and progressed recommendations directly and through agencies. This included:
  - coordinating the government's response to the Fiskville Parliamentary Inquiry
  - continuing to implement the Hazelwood Coal Mine Fire Inquiry, and
  - Fire Services Review recommendations and actions.

Much of the above is captured in our *Emergency Management Strategic Action Plan (SAP) 2016/19*.

Other priorities continue to emerge as the sector and EMV respond to operational requirements and strategic opportunities for change and improvement.

# Looking to the future

Victoria, as with the rest of the world, will be vastly different thirty years from now. But no matter how it changes, we will still need emergency management services to support and keep us safe - before, during and after emergencies.

Recent fires, floods and drought in Victoria have forged a strong commitment to reform how we manage emergencies. A series of inquiries and reviews have informed how EMV has strengthened the emergency management sector, and today, it cooperates better than ever. This is underpinned by a sector-wide commitment to call on history to improve how things are done.

At the core of the sector's strategies, programs and actions is building safer and more resilient communities. This is the foundation under which Victoria operates.

Emergency management is becoming more complex. The global shift in emergency events, scales and trends will have a big impact on the future of Victorian communities. We must ensure our operating model is prepared for non-traditional emergencies like marine, pandemic and urban smoke events. Meanwhile, community needs will be shaped by:

- population, demographic and generational change
- · climate change
- urbanisation
- · global economic drivers
- · community expectations and capability, and
- technological disruption.

Victoria has come a long way in managing the changing faces of emergencies and must continue this if we are to keep up. In planning for the future, community safety must always be number one.

In representing and protecting the Victorian community, EMV must understand its own capabilities, the gaps and what innovative solutions will help build resilience. People, resources, government, systems and processes are required to maintain community safety and future proof Victoria.

The sector needs to reflect Victoria's diversity while accommodating all types of emergencies. Our future operating model goes beyond Command, Control and Coordination, to include Consequence, Community Connection and Communication — the 'six c's'.

The sector needs to shift its structures, operating models, and how it thinks about emergencies. It must look beyond traditional approaches, resources and methods to build resilience and add public value with agile and innovative services. It needs to change its own culture for the greater good. This is a big change, but it must happen.

The sector's ability to create positive change is much greater than what is realised and much greater than the "before, during and after" which takes up much of our traditional focus. The hardship and loss following emergencies over the last decade has allowed major strides. By putting community at the heart of the system, we can build a brighter future for Victorian communities, while strengthening their resilience.

# **Strategy Refresh 2020**

Since its establishment in 2014, EMV has laid the foundations for a sustainable organisation that makes Victorian communities safer and more resilient. As our role evolves and we mature, it is appropriate to review our operations to further strengthen capability.

During 2016-17, EMV initiated the Strategy Refresh 2020 project as recognition we were approaching our third year of operation in an evolving environment. This followed an examination of the business, including aspects such as organisational culture and defining EMV's business and operating models.

The refresh will build EMV's capacity and capability to create "safer and more resilient communities" by delivering:

- a new, three-year EMV strategy
- · a series of organisational plans (e.g. people and culture, financial management, stakeholder engagement), and
- · better EMV strategic planning capability.

#### **EMV'S STRATEGIC THEMES**



Leading change



Stewardship



**System** delivery



**High performing** organisation





# **Community Resilience Framework** for Emergency Management

The Community Resilience Framework for Emergency Management received contributions from over 50 organisations, government, local councils, universities, and community groups. It lets us see how all aspects of emergency management connect with modern practice, aiming for a safer, more resilient Victoria.

The Framework provides an implementation tool to encourage the alignment of policy and activity across the emergency management system, in line with broader government policy.

It incorporates guiding principles for shared responsibility and self-reliance in prevention, planning, response, relief and recovery, and embeds these in planning and activity.

The Framework defines resilience as "the capacity of individuals, communities, institutions, businesses and systems to survive, adapt and grow no matter what chronic stresses and acute shocks they experience".

Key principles are:

- further connecting the system to the community
- improving emergency managers connection with communities and understanding their shocks and stresses, and
- acting before, during and after emergencies.
   It underpins changes in the relief and recovery arrangements and in capability building.

Several agencies are testing the application of the Framework. The VICSES Community Resilience Strategy 2016-19 provided an opportunity to both align and test its principles. Both CFA and MFB have also adopted its resilience principles.

### Increasing diversity and inclusion

Throughout 2016-17, EMV began implementing Victoria's first emergency management diversity and inclusion framework.

The Emergency Management Diversity and Inclusion Framework: Respect and Inclusion for All aims to create a more diverse and inclusive sector, better reflecting and connecting Victoria's diverse communities.

EMV supports the sector-wide approach towards cultural and organisational change to:

- prepare the sector for the future
- help it make better decisions
- · provide better services, and
- enable everyone to contribute to their safety.

Launched by the Minister for Emergency Services in October 2016, the Framework describes diversity as all the ways we differ and highlights the importance of an environment in which people feel valued and respected, can access opportunities and resources, and can contribute their perspectives and talents to improve community safety and resilience.



The Framework's four themes are:

- leadership
- · listening and learning
- · acting to create opportunity, and
- · accountability.

Although still in the early stages of implementation, sector leaders are firmly behind it, having strengthened their messaging on diversity and inclusion, and have begun examining systems, processes and behaviours that might act as barriers.

The Framework complements the broader efforts being taken under the *Emergency Management Strategic Action Plan 2015-18* to build and empower community leadership and develop sector leadership that instils a positive workforce culture and promotes respect, inclusion, cooperation, innovation and diversity.

It also supports the *Community Resilience Framework for Emergency Management*,
as understanding diversity and different
community perspectives and needs is essential
for providing optimum services and better
helping the community to contribute to its own
safety and resilience.

### **Victorian Preparedness Framework**

The Victorian Preparedness Framework is helping the sector understand its current and required capability to respond to major emergencies.

This will help to build resilience across Victorian communities, and will work towards the objectives of better integration and connection between business, government and communities.

The Framework builds on work within the sector since 2015, and uses findings from the Department of Justice and Regulation report, *Emergency Risks in Victoria*, to identify the major risks facing the State and determine our preparedness.

At its core, the Framework is a planning tool to help understand the capabilities needed through all stages of a major emergency. It provides a methodology to develop capability targets, using the 21 core capabilities and critical tasks, which set the foundation for how the sector prepares, responds and recovers.

Capabilities come in many shapes and forms, like the number of fire trucks in a region, the ability to transport or house displaced people, whether community members can look after themselves for 72 hours without external assistance, or whether a local business can re-open quickly after an emergency. The capability targets identify gaps which will drive many of the sector's future priorities.

To build capability and encourage community resilience, we need to partner with communities, government, agencies and business, and share the responsibility of emergency management into the future.

The Victorian Preparedness Framework and Community Resilience Framework for Emergency Management help build resilience to significant emergency events, and partnerships with other sector reform work, including the Resilient Recovery Reform Strategy and the Emergency Management Planning Guidelines.



### **Fire Management Strategy project**

In September 2016, a Project Control Board with membership from emergency management organisations, government departments, local government and private industry was formed to oversee the Victorian Fire Management Strategy project. The objective of the project is to develop the Victorian Fire Management Strategy, which aims to provide the pathway to reduce the number and consequences of harmful fires across Victoria for all types of fire, and for all communities, through to 2030.

The process of developing the Strategy will challenge the current approach taken before, during and after fires, and question if it will meet the challenges of the future that have the potential to put significant pressure on the sustainability of the current system.

During 2016-17, the Project Control Board worked through the predicted challenges in the bush and built environments, focusing on the need for holistic and sustainable fire management in the future. It arrived at eight overarching principles contributing to a sustainable fire management system. These thoughts are being put forward in a discussion paper, to be released broadly across Victoria.

A key aspect of this project is the recognition that fire management affects everyone. When the discussion paper is released, we will seek feedback from individuals, community groups, business, industry, government, not for profit groups, academia and emergency management organisations. Feedback will contribute to the development of the draft strategy, to be completed during the first half of 2017-18.

### **Resilient recovery**

Resilient recovery connects community systems and networks to plan for and support wellbeing, liveability and sustainability outcomes for a safer and more resilient future.

The current relief and recovery arrangements have served Victoria for many years and through goodwill and collaboration the emergency management sector has responded to several protracted recovery events. However, various reviews, reports and inquiries have identified system improvements yet to be embedded into Victoria's arrangements.

To achieve safer and more resilient communities in Victoria, our relief and recovery system must empower individuals, communities, government, agencies and businesses to plan for and achieve recovery outcomes.

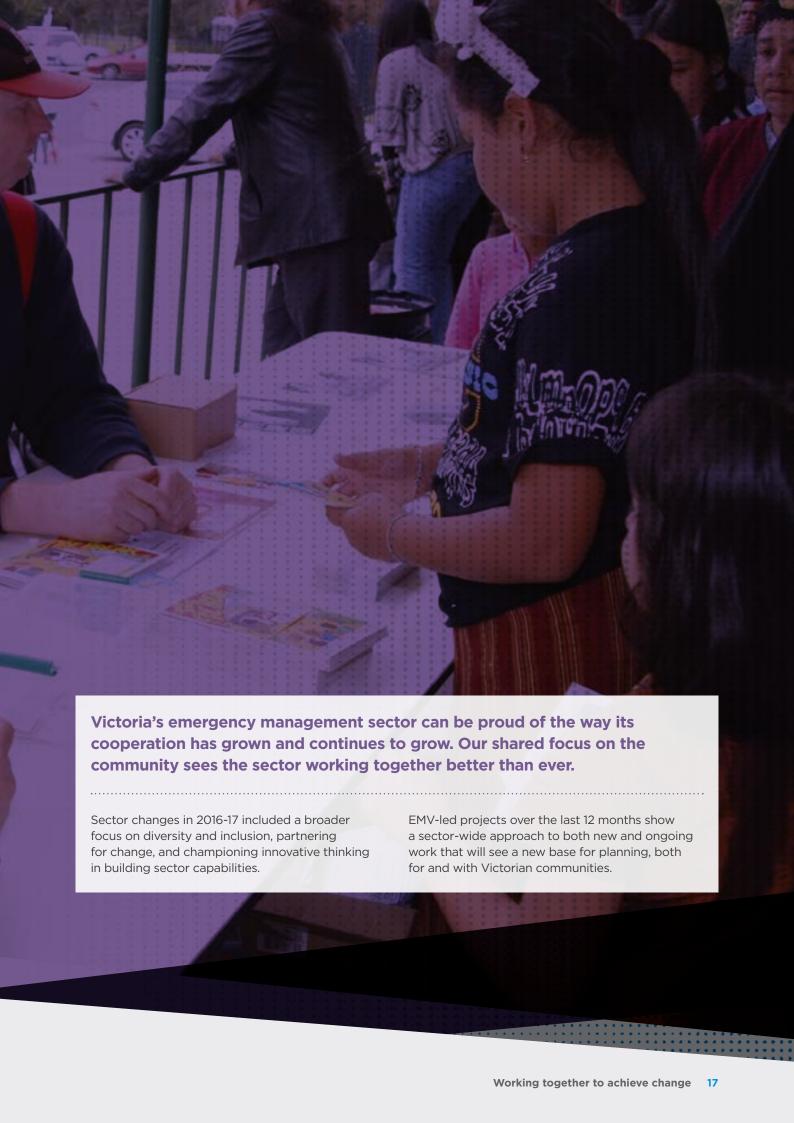
In early 2017, EMV released the Discussion Paper: Resilient Recovery to the sector and for public consultation. A total of 57 submissions were received, with common agreement that a community based, integrated and sustainable model will better position us for future challenges.

The draft strategy will be circulated in 2017 for further targeted consultation, then finalised in 2018.

EMV has continued to engage stakeholders on the Resilient Recovery Strategy supporting individuals and communities to be healthy and safe, engage in and lead their own recovery, to be able to live, work and connect within their community and to identify opportunities for growth, renewal and innovation.







### **Coal Mine Emergency Management Taskforce**

The Coal Mine Emergency Management Taskforce is a prime example of a united and community-focussed approach to community safety. It has been pivotal in ensuring continual improvement and best practice prevention, preparedness, monitoring, response, capability, recovery and communication practices for reducing mine fire risk.

The role of the Taskforce was to examine fire preparedness across Victoria's four brown coal mines in the Latrobe Valley and Surf Coast. While the closure of the Alcoa mine in Anglesea saw the Surf Coast taskforce disbanded, the Latrobe Valley's was extended past the original terms to September 2016.

Working together, government, agencies, industry and the community undertook over 232 safety initiatives in the Latrobe Valley. These ensured plans were in place to prevent, prepare for and respond to any threat of fire in or around Victoria's coal mines.

After two years, the Taskforce held its 26th and final meeting on 27 September 2016. Its final report outlines the improvements and changes it oversaw such as:

- · CFA's new District 27, encompassing the Latrobe City boundaries
- DEDJTR's implementation of the Mines Emergency Unit, within Earth, Resources and Regulation
- two significant exercises in 2015 and 2016 that practiced integrating the broader industry into the emergency services incident management structure and community warnings and messaging
- improved efficiencies and relationships of a joined-up approach adopted by agencies and industry
- significant risk reduction and fire suppression improvements in the mines, and
- rehabilitation works in the area of exposed coal.

The exercise tested strengths and identified opportunities for improvement, knowledge sharing and understanding. A similar approach began in 2016-17 between the sector and the mine operators in central Victoria under the banner of the Minerals Council of Victoria.

The aim has been to strengthen the understanding of capability to improve emergency management arrangements for these types of events. More about the group's 2016-17 achievements are detailed further in this section.

### **Hazelwood Mine Fire Inquiry**

The Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan (2016) was released to provide further direction toward supporting the community. It is the Government's formal response to the 2014 and 2015-16 Inquiry Reports and sets out 246 actions needed to implement all recommendations and affirmations.

From October 2014 until January 2016, monitoring of the State's implementation of the 2014 Inquiry Report recommendations and affirmations was jointly undertaken by the Inspector General of Emergency Management (IGEM) and the former Hazelwood Mine Fire Inquiry Implementation Monitor. The IGEM took over this responsibility on 1 February 2016.

At the start of 2016-17, EMV was responsible for 18 of the remaining actions relating to communications and community engagement, emergency management planning, response and recovery. A total of 14 were completed this year and the rest will be completed over 2017-18, noting that one of these relies on the enactment of legislation.

# Marine Search and Rescue working as one

The Marine Search and Rescue (MSAR)
Office has continued to grow and its
considerable success over 2016-17 included:

#### **VMIA** insurance scheme

MSAR service providers have a streamlined insurance scheme managed by the Victorian Managed Insurance Agency (VMIA) for 2016-17.

Approved by Finance Minister Robin Scott, the scheme commenced on 30 November 2016, and is funded by the Emergency Services Volunteer Sustainability (ESVS) grants program for 2016-17. All MSAR providers will have now received their insurance policy schedules/certificates for 2017-18.

#### **MSAR** arrangements

These arrangements describe how the sector operates and were a collaboration with volunteer MSAR providers, Victoria Police, and Transport Safety Victoria.

#### **Building operational capability**

A state-wide risk and capability assessment identified gaps in our response capability and will help in the development of plans to overcome this. These plans include:

- a vessel replacement program with 'fit for purpose' vessels to meet the need of given locations, and
- a review of operational performance standards and operational protocols to determine the most efficient process for allocating and despatching MSAR resources.

#### Training and assessment strategy

This will train volunteers in a way that suits their individual needs, while ensuring there are consistent and relevant training outcomes supporting rescue activities.

#### **Regional forums**

In a series of forums in May 2017 across Melbourne, Colac and Gippsland, the sector reflected on recent changes, achievements and progress over the year and the next reforms.

Forum topics included:

- a review of progress, including updates on all reform projects
- the year ahead
- a review of the recent boating season in terms of incidents and MSAR responses, and
- the identification and discussion of any current or emerging issues.

The MSAR has proven time and again the value of "working as one", facilitated through EMV's coordinated management structure.

### **Victorian Emergency Management Performance Standards**

The Victorian Emergency Management Performance Standards gives responder agencies objectives and minimum requirements for their emergency management functions and clarifies how these contribute to 'safer and more resilient communities'.

#### The Standards:

- ensure the community gets minimum requirements for products and services
- establish clear, consistent expectations that focus on achieving key outcomes to drive improvement
- support agencies and the sector to regularly monitor performance and demonstrate progress towards 'safer and more resilient communities'.

This year responder agencies completed two cycles of reporting against the Standards. This was provided to the **Emergency Management** Commissioner and the Capability and Response subcommittee of the State Crisis Resilience Council.

The Victorian Emergency Management Performance Standards 2.0 — released in December 2016 — defines the minimum requirements for the following functions and has a more comprehensive end-to-end understanding of sector performance:

#### Risk and resilience

- community connection
- understanding and reducing risk
- · emergency management planning
- · critical infrastructure resilience
- · consequence management.

#### **Capability and response**

- · capability development
- · readiness and response
- public information.

#### Relief and recovery

- relief
- · context and complexity
- · community capacity building
- · sector coordination and capacity
- · communication.

Responder agencies began reporting against the full suite on 1 July 2016 and work is continuing with non-responder agencies and departments about adopting the Standards.

# Victorian Critical Infrastructure Resilience Report

The inaugural *Critical Infrastructure All Sectors Resilience Report*, released by the Minister for Emergency Services in December 2016, overviews the resilience of Victoria's critical infrastructure sector. It highlights the collaboration between industry and government through Victoria's eight Sector Resilience Networks:

- water
- energy
- health
- transport
- · food and grocery supply logistics
- communications
- · banking and finance, and
- · government services.

These comprise critical infrastructure owners and operators, and together with government provide an overview of their sector, its resilience and how we can grow it.

In 2016, these activities focussed on:

- better understanding consequence and emergency management awareness
- cross-sector dependencies and testing preparedness
- strengthening and establishing new collaborative relationships, and
- knowledge sharing.

The report shows how committed the owners and operators of our critical infrastructure are to best practice management.

Victoria is the only state to complete a Resilience Report. It will help all of us understand how the strong collaboration between industry, government and emergency services continues to build the resilience of our critical infrastructure.

# **Emergency Management Planning Guidelines**

EMV has partnered with the sector to develop new *Emergency Management Planning Guidelines* for state, regional and municipal levels. This important reform locks in effective planning and clear, practical guidelines for consistent emergency management.

The process of planning clarifies roles, responsibilities, standards and capabilities before, during and after emergencies. The Guidelines provide a significant opportunity to place a greater focus on the planning process. This is a fundamental change.

The Guidelines are being developed in consultation with experts and stakeholders to ensure they are comprehensive and consider the needs of all communities and users. Over 40 emergency management experts from a broad range of organisations, agencies, councils and departments, have been shaping development. This is in addition to various workshops.

As always, sector input and feedback is essential.

#### **Critical infrastructure**

Critical infrastructure services underpin Victorian's social and economic wellbeing. These services include:

- · safe drinking water
- food
- reliable transport
- accessible public health services
- energy for homes and industry, and
- access to banking, finance and government services and global communications networks.

In 2015, new arrangements for critical infrastructure were introduced to help build resilience. These provide the foundation for shared responsibility and strong partnerships between industry, government and emergency services. Building resilience together helps to limit the impact of emergencies on these critical services.

### All Sectors Resilience Network Forum

At the annual All Sectors Resilience Network Forum in June 2017, over 120 industry and government participants — including the eight critical infrastructure sectors — explored a resilience approach to critical infrastructure.

As recent national events have shown, our critical infrastructure systems are interdependent, thus highlighting the importance of their resilience to hazards and emergencies. Themed *Towards Resilience in an Interconnected World*, the forum strengthened our understanding of critical infrastructure resilience.

It touched on the latest international standards on organisational resilience, an interstate panel discussion on the impact on industry of South Australia's blackout event of 2016, it explored Victoria's Thunderstorm Asthma event 2016 and one of Victoria's significant intermodal hubs, Southern Cross Station. An exercise to strengthen participant awareness of upstream and downstream industry and community consequences during a protracted energy outage was also held.

The forum is yet another example of industry and government collaboration in building the resilience of Victoria's critical infrastructure.

### **Central Victorian underground mines**

In November, the Integrated Emergency
Management Planning for Central Victorian
Underground Mines Working Group was
formed following a roundtable jointly hosted
by EMV and the Victorian Division of the
Minerals Council of Australia.

The group met monthly for six months at various mine sites and emergency services locations, working through identified issues, gaining collective understanding of each organisation's work and how everyone can contribute to staff and community safety.

Site tours like the underground tour of Fosterville mine increased everyone's understanding of mining, what the industry's emergency plans are, and for responders, what the environment would be like.

A subsequent guideline for responding to local underground mines grew the understanding of agencies and mine operators of the State's specialist resources and clarified control structures, activities and accountabilities if there was a major underground emergency in central Victoria.

Valuable connections now exist between industry and agencies who will continue to discuss their shared risks, roles and responsibilities.



### Stawell tyre stockpile site

Located on the western outskirts of Stawell in Victoria's Grampians region, the Stawell tyre stockpile site — which contains up to one million tyres — has posed a significant community fire risk for over 20 years.

Increased awareness of it and the growing challenges of tyre disposal and dumping in Victoria saw the Regional Emergency Management Executive Committee identify Stawell as a potential risk to the community and the region. The Regional Stawell Tyre Stockpile Risk and Consequence Project was established in March 2017 to identify and manage the response and consequences of a fire there.

State and regional EMV staff were represented on the steering committee and working group and helped with outcomes including:

- increased awareness by relevant emergency services and support agencies, and the community, of the risks and consequences of a fire
- development and / or updating of relevant emergency management plans with current practices/procedures, and
- increased community knowledge and capability to make decisions and respond to the risks and consequences of a fire.

EMV staff worked to develop a consequence assessment of a fire at the site. This provided an opportunity to test consequence assessment tools that had been used and developed over the 2016-17 summer. The assessment sought to identify the cascading and compounding effects that could influence response and limit the impact on affected communities. The initial assessment identified significant consequences for the town, region and the State.

Initial planning documents were subjected to alternative analysis techniques and a discussion exercise to stress test how well positioned the Regional Emergency Management Committee was to manage fire. This provided a strong evidence base to update and socialise the plan and to minimise risk and legal proceedings.

The project was a great success and — supported by EMV — integrated the processes of all relevant agencies and organisations across the three levels of government.







### **Partnering for success**

Success needs connections within communities and across the service providers supporting them. These connections grow and improve with collaborations and partnerships.

The State Capability Principles and the Victorian Preparedness Framework guide emergency management partnerships by shaping partners' contribution to enhance community-wide capability and capacity. We collaborate with Victoria's network of business, industry and associations — from preparedness to recovery — and work hard at growing this.

During 2016-17, EMV commenced planning work regarding the development of an *Emergency Management Partnership Framework*.

Partnerships between people, businesses, community organisations and government foster safer and more resilient communities.

This Framework will provide a process for collaboration with stakeholders and emergency management organisations through all stages of an emergency. It will help the sector understand how we can all benefit and strengthen community resilience. The Framework will outline:

- the importance and value of partnerships
- the foundations for successful partnerships
- how to enter into partnerships that support emergency management core capabilities
- the different types of partnerships and the varying levels of formality.

During 2017-18, EMV will work with stakeholders to co-design the Framework.

### **Consequence management**

Consequence management aims to deliver the best possible community outcomes.

It requires the identification and management of consequences as part of an integrated approach. The larger the event the more coordination required and the more complicated the consequence management process and plans.

During 2016-17, we reviewed existing thinking and application of consequence management in emergencies and revised our approach. A new consequence management process can be replicated at regional and local levels and integrated with existing processes.

EMV has a legislated responsibility to lead consequence management and will test the revised approach over the 2017-18 summer.

### State Emergency Risk Assessment Review 2016-17

The State Emergency Risk Assessment Review assessed Victoria to determine what critical and credible emergency events can lead to 'major' or 'catastrophic' state-level consequences. Assessments are based on the international standard for risk management, contextualised for emergency risk management.

Previous assessments have identified our highest priority risks are bushfire, flood and pandemic influenza. Other risks that require considerable resources to manage include biological risks, like plant and animal diseases, and essential infrastructure and systems like electricity generation and transmission, and liquid fuel supply.

All states and territories are undertaking this review in partnership with the Commonwealth Government.

The 2016-17 State Emergency Risk Assessment Review included reviewing 17 emergency risks, the 15 in the Department of Justice and Regulation's *Emergency Risks in Victoria* report and two further risks identified by departments and agencies with key emergency management responsibilities.

A risk review workshop was held for each risk with relevant subject matter experts. Each assessment reviews risk level using criteria from the national guidelines, and the strategies and actions employed to manage the risk.

The State Emergency Risk Assessment Review 2016-17 will:

- provide information needed to revise and republish emergency risks in Victoria
- guide state-level decisions for emergency management policy and strategy
- help in preparation of state-level emergency management plans, including sub-plans, and
- inform regional and municipal emergency risk management studies.

### **Increasing accessibility**

This year we grew our partnership with the Victorian Deaf Society (Vicdeaf). EMV remains committed to getting information and updates to the deaf or hard of hearing during emergencies. Working with Auslan interpreters, this year we:

- produced over 30 videos on weather, fires, floods and other emergencies
- released 15 weekly video updates with Auslan interpreters about fire and weather conditions and public safety, and
- featured Auslan interpreters at our eight media conferences and streamed each one live on Facebook to be shared across Vicdeaf's online community.

EMV regularly encouraged emergency management organisations to make key safety information accessible for the deaf and those hard of hearing, including the Bourke Street Tragedy, where information was provided about people's wellbeing in Auslan. EMV also helped Vicdeaf's Emergency Services Interpreting Team with the terminology and skills they needed for interpreting emergency information.

#### **Resilient Australia Awards**

Community connection and resilience building was on show at the 2016 Resilient Australia Awards. The awards recognise initiatives from community, government, business and agencies making Victorian communities safer, more resilient and better prepared for disasters.

Our communities continue to show their resilience in the face of events like bushfires and floods, and with their innovation in preparing for them. The five award categories saw a strong field.

- Anglesea Primary School won the Resilient
   Australia School Award for its partnership with
   the local fire brigade to create generational
   change through the Survive and Thrive program
   and the Anglesea Junior Fire Brigade.
- Yarra City Council won the Resilient Australia
  Government Award for its work in increasing
  awareness of heatwave risks in the local
  culturally and linguistically diverse communities
  living in public and social housing.
- Australian Red Cross in the Grampians won the Resilient Australia Community Award.
- ARC Ventures won the Resilient Australia Business Award for their project Leading from Within - Building Resilient Communities.
- Glenn Daniels from the Bendigo Advertiser received the Resilient Australia Photography Award for his photograph of the moment the wind changed and the Blackhill Road fire near Kyneton started encroaching on a fire truck.

The following entrants won Highly Commended awards:

# Highly commended Resilient Australia Community Award:

Emerald Community House for the Centre of Resilience

Echo Youth and Family Services for the Ready2Go program

# Highly commended Resilient Australia Business Award:

Wildfire Safety Bunkers for their safety shelter product

# Highly commended Resilient Australia School Award:

Maryborough Education Centre for Emergency Services Journey Program.

# Community-based emergency management

A range of different communities and organisations are adopting and using the Community Based Emergency Management (CBEM) approach to better connect and work together before, during and after emergencies.

This includes bush-surrounded Blackwood in central Victoria, Morwell in the Latrobe Valley which has nearly 14,000 residents, and the ArtsHouse community in North Melbourne where many people are working together to develop and deliver the 'Refuge' project.

These and other communities are working together to identify and build on their strengths, with appropriate organisational support. Having communities lead, while inviting relevant organisations to join them is key to the CBEM approach. Working together like this to identify priorities and develop solutions strengthens connections and builds relationships. This may be achieved by connecting and working with existing community groups, networks and processes, or by developing new ones.

The following key focus areas provide a guide for conversation and to build on combined strengths:

- connect people and networks
- · use local knowledge
- identify stresses and shocks, including emergencies
- · develop goals and solutions, and
- · continue to learn, share and improve.

As part of Victoria's ongoing emergency management reform, EMV is working with key stakeholders to consider how online technologies can help communities and organisations better connect and share ideas, information and plans. It is expected these will eventually include community-based planning, response, and relief and recovery activities.

### Community-based example: 'Refuge'

Every year until 2020, 'Refuge' will bring artists together with communities and supporting organisations to explore the impacts, opportunities and responses of climate change.

In 2016, the Melbourne ArtsHouse community worked with a range of people including volunteers and staff from the emergency management sector, to develop and deliver the first of a series of annual 'Refuge' projects.

On a cold weekend in July 2016, people of all ages and abilities were invited to Melbourne ArtsHouse. The initial scenario focussed on the impacts of floods in the city and the old North Melbourne Town Hall (also home for ArtsHouse) became an "emergency relief centre".

There were many meetings and successful funding applications to the Australian Government as part of this, and artists and key stakeholders explored different roles, responsibilities and perspectives. An intensive three-day workshop 'Lab' and tour of the State Control Centre provided key insights and contacts.

Community members and emergency volunteers and staff adapted and performed their roles, while interacting

with the artists, and their impressions and activities shaped an alternative approach to managing a relief centre. In true emergency fashion, people were challenged to learn, adapt and participate.

Feedback indicated 'Refuge 2016' built new relationships among different parts of the community. It also provided a place to discuss difficult and complex issues, while allowing people to generate ideas and use artistic flair to drive alternative thinking.

A formal evaluation by University of Melbourne and key information and learnings will support a heatwave scenario for 'Refuge 2017'. Artists and key stakeholders in North Melbourne and the partner community of Natimuk are already preparing their contributions. Supporting organisations and the community will continue to be involved and challenged in many ways.

For more information, visit <u>www.</u> artshouse.com.au/in-production/refuge





#### **Volunteer Consultative Forum**

The Volunteer Consultative Forum (VCF) gives volunteers a direct voice to the Minister for Emergency Services and government. It assists the government's commitment to consult and engage with emergency management volunteers about strategy, policy, investment and broader sector reform.

Throughout 2016–17, the VCF met quarterly to discuss issues, needs and projects related to understanding and respect for volunteers and strengthening the emergency volunteering and community service culture.

Quarterly VCF updates are published on the EMV website.

# **Volunteer Emergency Services Equipment Program**

The Volunteer Emergency Services Equipment Program (VESEP) gives grants to Victoria's emergency management volunteers to support, enhance and improve their community service. It is open to volunteers from CFA, VICSES, Life Saving Victoria and a range of emergency service organisations, brigades, units and clubs.

During 2016-17, the program gave \$15 million towards a range of purposes including:

- generators, hoses, chainsaws, thermal imaging cameras, rescue and safety equipment and trailers
- · facility improvements and maintenance
- training and development
- · community engagement and education, and
- to sustain brigades, clubs or units and enhance their services to the community.

# Strategic priorities for emergency management volunteering in Victoria

Supported by EMV and published in October 2016, the Volunteer Consultative Forum (VCF) developed the *Strategic Priorities for Emergency Management Volunteering in Victoria*. The priorities highlight the need for a more strategic and targeted focus toward 13 specific volunteer needs and the value of addressing these.

The 13 priorities underpin all the work EMV does with volunteers across the sector.

# The value of Victoria's volunteers, volunteering and volunteerism

In collaboration with the Volunteer Consultative Forum (VCF), EMV has been leading a project to capture, quantify, validate and communicate the value of Victoria's emergency management volunteers (the people), volunteering (the activities) and volunteerism (the culture) — the 3Vs. This is a significant step in our ability to calculate, understand and communicate the 3Vs' social, economic, environmental and cultural value.

An interim report outlining preliminary findings is being produced to identify strategic and innovative approaches and a conceptual framework to better understand the 3Vs value to Victorian communities.



### **Valuing Volunteers Program**

This year EMV managed the Valuing Volunteers Program (VVP), a recurrent grants program that focuses on volunteer capability, retention, recognition and recruitment.

VVP provided almost \$1.4 million to innovative volunteer initiatives and pilot programs in 2016-17.

#### **ESVS** grants

The new Emergency Services Volunteer Sustainability Grants Program was launched in 2016-17, with \$15 million in grants available to volunteers.

The grants program was open to volunteer brigades and units across the State, including the CFA, VICSES, Life Saving Victoria, marine search and rescue teams and other organisations that fall under the *Emergency Management Manual Victoria*.

The grants could be used for a range of purposes, including:

- new trailers, hoses, rescue and safety equipment, generators and other operational equipment
- facility upgrades and maintenance
- · training and development, and
- other needs that volunteers believe will assist their brigade or unit and improve services to the community.

# **Emergency Management Volunteer Welfare and Efficiency Survey**

The first sector-wide Emergency Management Volunteer Welfare and Efficiency Survey was conducted in August and September 2016. It involved 4,185 volunteers, making it Victoria's largest and most comprehensive sector-wide survey. Its frontline perspective allowed direct volunteer feedback.

The survey aims to create a better understanding of the issues as volunteers see them and has been an important part of government and agencies better understanding the views of the sector's volunteers.

A report of findings, available on the EMV website, provides decision makers with valuable data and insights and critical sector information. Individual agency-specific reports were also created and given out to agencies. The overall results were positive, highlighting volunteer satisfaction with their roles and the view that their local expectations were being met.

Volunteers are strongly connected to their local team, brigade, club or unit, and were positive about their effectiveness and performance. They also value and recognise the importance of diversity and inclusion. Better organisational support and more accessible training and leadership opportunities were key areas for improvement.

The survey will run again in 2017-18 to generate comparative data and assist government and agencies to see longer term trends and support effective decision making.







# All communities, all emergencies throughout the year

Victoria's all emergencies season in 2016-17 included shark sightings, heat events, flash flooding, storms, thunderstorm asthma, water safety, fires, cruise ship incidents and the tragic Bourke Street Tragedy and Essendon plane crash.

The range of events managed in Victoria showed the way we work together to protect the community is critical, while the community has demonstrated its readiness and resilience.

Water safety was a key issue with 61 confirmed shark sightings including 100 unconfirmed sightings on Boxing Day, leading to several beach closures. Life Saving Victoria volunteers were busy performing 519 rescues, undertaking training, providing 1,655 first aid treatments and sadly, there were 48 drowning deaths.

Widespread flooding and severe thunderstorms occurred state-wide in September 2016 and trapped people in floodwater, knocked over trees, damaged properties and agriculture, caused power outages, disrupted public transport and impacted water quality in Melbourne's bay areas.

There was a strong focus on community health and relief and recovery, particularly for thunderstorm asthma, the Bourke Street Tragedy and the Essendon plane crash. Agencies worked together to manage and mitigate impacts and provide information and community support with relief and recovery services to continue.

Heat emergencies were an emerging issue with several Heat Health Alerts issued. Our first State Controller - Heat operated alongside the State Response Controller to ensure appropriate arrangements were in place. The 2016-17 fire season began around December with several fires during the harvesting season across the State's north and continued through with grass fires being the focus and greatest risk.

Consecutive days of hot weather this season gave way to single days of extreme heat. This was reflected in the Fire Danger Ratings with only two Extreme days recorded – one in January in the North East and the other in February in the Wimmera.

The fire potential remained even with the milder weather and initial attack from the ground and air was very effective.

Emergency services attended 4,898 grass and scrub fires, with more than 18,000 hectares burnt. While this is a significant number, the ability to provide immediate response in the early stages was crucial.

Thanks to the quick response of emergency services and the ability of firefighters and aircraft to work together, there were no major fires.

Victoria's fleet of 48 aircraft played a critical role in minimising the impacts of bush and grass fires, with pre-determined dispatch integral to keeping small fires small.

Victoria supported NSW's Hunter region in a Code Red/Catastrophic Fire Danger conditions over a weekend in January. This included two Large Air Tankers (LATs) which operated from Dubbo and Richmond and worked alongside the NSW LAT and VLAT for a very effective aerial attack.

Victoria also pre-positioned aircraft along the NSW and Victorian border for effective deployment. We also sent support to South Australia in September following once in 50-year storms.

Victoria also sent 30 emergency personnel from CFA, VICSES, MFB, Forest Fire Management Victoria, DHHS and EMV to Queensland in March to assist with severe flooding and recovery work in the State's south east efforts, following ex-Cyclone Debbie.

The teams supported incident management, impact assessment and swift water rescue. About 35 Victorian Red Cross personnel were also deployed for relief and recovery.

Victoria's all emergencies summer season highlighted our changing climate and the need for a whole of community approach to how we prepare, respond to and recover from emergencies.

### 2016-17 aircraft capabilities

On 6 February 2017, Victoria marked the 50th anniversary of the earliest recorded firebombing operation in the country. Victorian firebombers paved the way for the national engagement of aerial firefighting and we continue to operate one of the world's best air firefighting operations.

Of the 48 specialist aircraft that make up Victoria's fleet, 31 are firebombing aircraft; the rest are reconnaissance, supervision and camera/sensory equipped aircraft. As in previous years, over 100 additional firefighting aircraft were available on a "call when needed" basis.

This year there was an expansion of the Pre-Determined Dispatch (PDD) program, which provides immediate response by water bombing aircraft, to include all Single Engine Air Tankers and Type 2 helicopters, and half of the Type 1 helicopter fleet (Colac and Mansfield).

PDD strategically positions aircraft across Victoria based on risk, to be dispatched to incidents as required, taking into account other concurrent or potential emergencies. PDD is well supported across the regions and contributes to aggressive and early initial attack. It has proven successful in keeping small fires small.

PDD operated from 19 airbases across the State, five more than the previous year's 14 - Ballarat, Olinda, Moorabbin, Ovens and Heyfield.

Under PDD, 27 firebombing aircraft responded, except four state strategic aircraft, two Large Air Tankers (LATs) and two Erickson Air Cranes. In support of the grain harvest in the Wimmera/Mallee area, some firebombing aircraft started earlier, operating under PDD from four additional locations. Ongoing requirements will correlate to the annual forecast of grain harvest volumes and associated risk.

Proving invaluable to the Victorian fleet, the LATs were used for the second year running in Victoria and can carry over 8,000 litres of fire suppressant or retardant. LATs were based primarily at Avalon and also operated extensively from Albury, supporting operations in Gippsland and southern NSW.

Victorian fire and emergency aviation aircraft were dispatched 1,235 times over 2016-17 for fire, flood, storms, landslides, land management and coastal observations.

### Working as one at the State Control Centre

The State Control Centre brings together stakeholders in emergency management to plan for, respond to and recover from major incidents.

It is where:

- · all strategic decisions are made
- · resources are prioritised
- control and readiness arrangements are put in place
- · intelligence is gathered
- public information and warnings are disseminated, and
- inter-agency communication happens.

It is supported by a network of Regional Control Centres (RCC) and Incident Control Centres (ICC) across the State, that are activated and expanded as needed.

During 2016-17, floods, storms, fires, heat events and a range of other emergencies activated the SCC for 223 days for:

- staff deployments to interstate and international emergencies
- planned burning
- extreme fire weather or high Fire Danger Ratings (Readiness)
- Essendon Airport plane crash
- · Bourke Street Tragedy, and
- state-wide flooding.

Unlike previous years, there were no ongoing major fires throughout 2016-17, but Victoria experienced a wide range of incidents. This year three new Chief Officers joined the sector, and occupied the role of the State Response Controller (SRC).

The SRC is appointed by the Emergency Management Commissioner (EMC) to lead and manage the response to emergencies such as fires, floods, rescue and hazmat, which are deemed as Class 1 emergencies.

The SRCs provide leadership and support to the Regional and Incident Controllers and across the emergency management sector before, during and after emergencies. The SRC also works with the EMC as part of the State Emergency Management Leadership Group, which is broad and reaches across all emergencies that Victoria will face.

The SRCs multi-agency approach means on any day it could be managing storms, fires, floods, rescue and hazmat, regardless of their agency badge.

In 2016-17, EMV began a strategic review of Victoria's Incident and Regional Control Centres, in consultation with agencies and emergency management organisations. The aim is to better manage the network of facilities at the incident and regional level when responding to future challenges with an "all communities, all emergencies" approach.

The project aligns with the "we work as one" approach to building safer and more resilient communities, enabling EMV to explore opportunities to improve the role and function of facilities with the sector.

The project will now move into engaging with stakeholders and socialisation of models for future implementation.

As the sector grows, so too does the need to expand and redevelop the State Control Centre. Work began on planning and designing the next generation SCC which will better meet Victoria's needs into the future.

### Case study - severe weather impacting communities

September 2016 was Victoria's second-wettest ever, with accompanying floods and storm. The coordinated approach of emergency services showed how well the sector has embraced the "all communities, all emergencies" philosophy.

In September and October 2016, relentless rain, flooding and a severe storm significantly damaged property and roads across 48 out of 51 local government areas.

There were 120 landslides along the Great Ocean Road, with the road between Lorne and Apollo Bay closed for over a week, isolating Wye River and Separation Creek. A severe storm on 9 October 2016 caused extensive damage to poles and wires from strong winds and falling trees, and the sheer scale of the storm led to power outages at 67,000 households. Impacted most was Dandenong and Yarra Ranges, Woori Yallock, Lilydale, Healesville and Belgrave in the State's south eastern suburbs.

At the same time, Victorian emergency management agencies deployed over 300 personnel to help our South Australian neighbours clean-up after their severe storm while maintaining the support needed for Victoria.

Victoria's north was the hardest hit by flooding including Charlton, Carisbrook and Casterton, causing significant damage to homes, business and sporting facilities. VICSES attended over 1,200 calls, 500 being flood-related during the first seven days.

At the height of the flood, over 250 roads were closed including the Great Ocean Road. The clean-up was ongoing as affected communities transitioned into recovery, with long term damage to infrastructure and property. Victorians shared the responsibility with emergency management agencies to be prepared

and ready to respond to such events.

VICSES, CFA, DELWP and MFB crews worked as one with government and industry to keep communities safe and minimise impacts.

Disaster assistance was activated for 48 local government areas through the jointly-funded Commonwealth-State Natural Disaster Relief and Recovery Arrangements (NDRRA).

#### Connecting communities

Keeping communities informed was crucial to public safety and good decision-making.

Predictive flood modelling was used to engage and inform impacted communities and alert them to potential flood peaks. Community meetings, community newsletters, relief and recovery messaging, online and social media, and media conferences along with emergency alerts and warnings kept communities informed.

Charlton, which experienced major flooding, was proactively engaged as it prepared for and responded to the flood and then transitioned into recovery. An Emergency Alert message sent out saw over 300 people attend the first community meeting, held 24 to 48 hours before initial impacts.

The Victorian community worked alongside emergency management agencies to prepare and respond. They shared the responsibility, heeded warnings and advice, and as a result minimised danger.

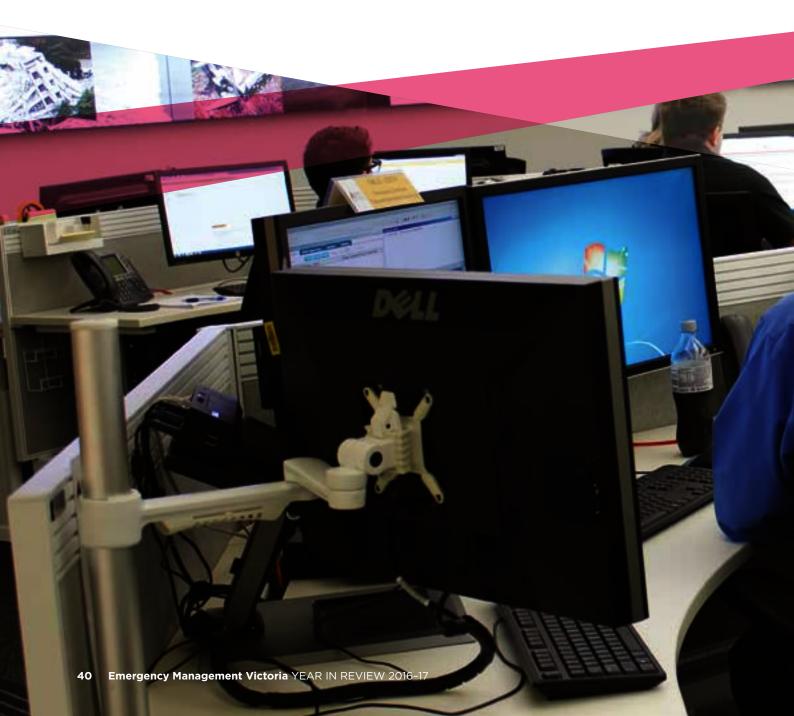
### **Dealing with extreme heat**

After the 2015-16 summer, Victoria Police asked the Emergency Management Commissioner to review the current control arrangements for extreme heat events (including heatwaves) and consider a more appropriate agency to lead responses. From 1 December 2016, this transitioned from Victoria Police to the Emergency Management Commissioner.

State plans were broadened from a focus on heat health to include the wider impacts and consequences on energy and transport infrastructure, education and animal health, including the effect of a single day of extreme temperature on infrastructure and services.

Extreme heat is a Class 2 Emergency with no primary incident to manage, and the traditional command and control structure is not the most effective process for consequence management. There is no specific control function at the regional tier; the role is coordination of agencies who have responsibilities for managing consequences associated with heat.

Generally, extreme heat events will be led at the state tier, with involvement of and in collaboration with the regional tier.



An Interim State Emergency Response Plan (SERP) Extreme Heat Sub-plan was issued by the Emergency Management Commissioner in January 2017, to ensure that there were arrangements in place for the summer period. The arrangements outlined in the Interim SERP Extreme Heat sub-plan were used during heatwave conditions in February 2017.

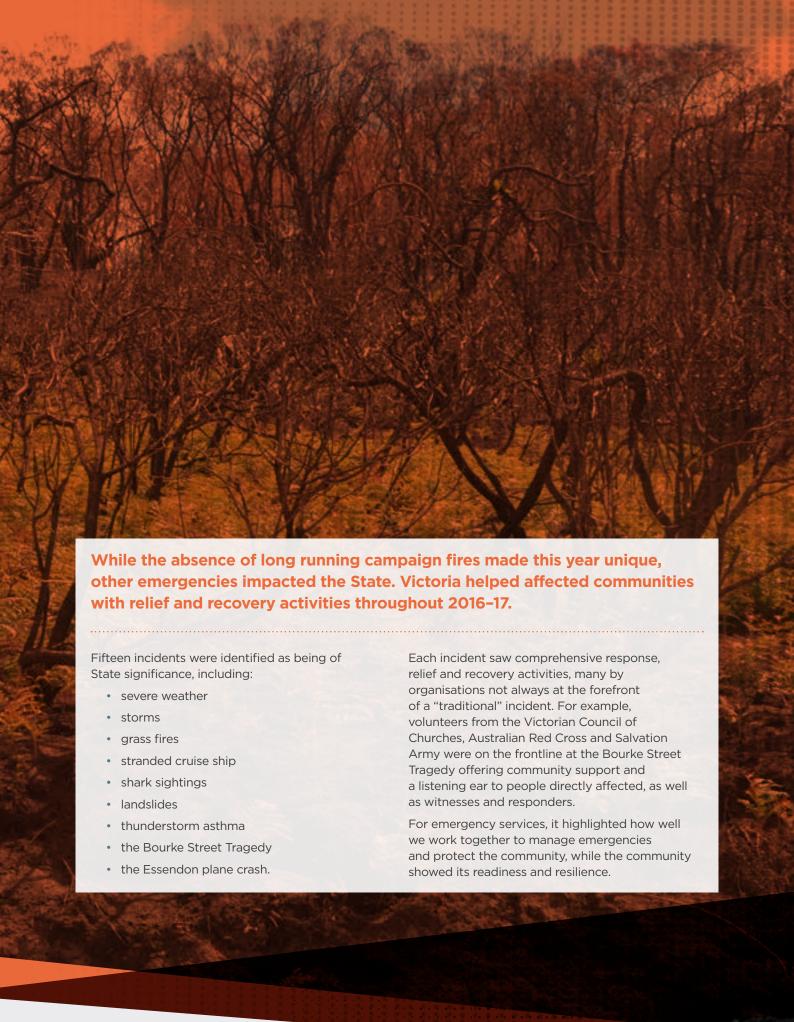
During March 2017, the interim arrangements were the subject of debriefs with key state level roles and each emergency management region. The feedback received from agencies was very supportive of the arrangements and based on the feedback

obtained, the extreme heat arrangements were revised and updated.

The State Crisis and Resilience Council endorsed the updated SERP Extreme Heat Sub-plan in May 2017, which superseded the Interim SERP Extreme Heat Subplan (January 2017) and the State Heat Plan (November 2014).







### Flood recovery

In 2016-17, widespread flooding across 48 local government areas significantly damaged state and local road networks and localised agriculture and community infrastructure.

VICSES, CFA, DELWP and MFB worked together to protect communities, keep residents informed and minimise damage. They sandbagged low-lying areas, door-knocked properties at risk and evacuated residents when needed.

Keeping communities informed was vital to public safety, good decision-making and community resilience. Predictive flood modelling helped engage and inform impacted communities and alert them to potential flood peaks. Community meetings, community newsletters, relief and recovery messaging, online and social media and media conferences kept them informed, along with emergency alerts and warnings.

EMV coordinated state-wide recovery efforts, including securing financial assistance for farmers in Mildura and for community infrastructure in Southern Grampians and Glenelg through the jointly-funded Commonwealth-State Natural Disaster Relief and Recovery Arrangements (NDRRA).

Floods and storm disaster assistance was activated for these 48 local government areas through the NDRRA.

As well as funding for the councils, relief payments were also available to eligible individuals. Eligible individuals received re-establishment grants of up to \$32,500 per household in the flood-affected Southern Grampians and Buloke Shire areas and storm-affected Yarra Ranges and Cardinia council areas.

Recovery efforts were also focused on Mildura when, in November, the town and wider Mallee region were impacted by damaging storms, with emergency services coming from across the State to help. Mildura, Merbein, Irymple and Red Cliffs were especially hard hit, with damaged homes and businesses and power outages.

There was an estimated \$77.6 million to \$156.8 million worth of damage to the local farming sector.

In recognition of the significant impact to the mostly stone-fruit growers of the region, the Commonwealth and State Governments established disaster relief and recovery arrangements, including \$25,000 recovery grants for impacted primary producers.

## Partnering with Bendigo Bank to provide local relief

Experience has shown that money donations
— more than material items or pre-loved
goods — best provide the flexibility needed
to meet relief and recovery needs. To this end,
EMV and Bendigo Bank have partnered to
support impacted communities and continue
Victorians long and generous history of
helping others affected by emergencies.

In conjunction with local government, the Bendigo Bank set up a Community Relief Fund to collect donations. This formal channel allows the public to directly donate to an affected community. By having Bendigo Bank link up with recovery committees, local councils, communities, and other local fundraising efforts to ensure donations go to where they're needed most.

While the Community Relief Fund is yet to be used, its existence encourages the community to play an integral role in determining their recovery needs as they — along with councils and the sector — are part of the fund distribution process.

"We see the partnership as vital. We see the role of our local branches is about building stronger communities. A business that has its roots in the community is a stronger business" – Bendigo Bank

### **Community story - Bourke Street Tragedy**

On 20 January 2017, a vehicle struck several pedestrians around Bourke and Queen Streets. Taking a multi-agency approach, EMV coordinated relief and recovery activities.

Tragically, six people died and over 30 went to hospital. The Victims of Crime Helpline received over 1,200 referrals and just over 1,200 people were referred to the Victim Assistance Program (VAP).

In the days and weeks following, the State worked with the Australian Red Cross, Victorian Council of Churches and the Salvation Army, providing personal support to people in the Bourke Street area.

The State Recovery Plan guided service providers, departments and agencies working together to achieve collective outcomes for those affected that aimed to:

 broaden the understanding of available services

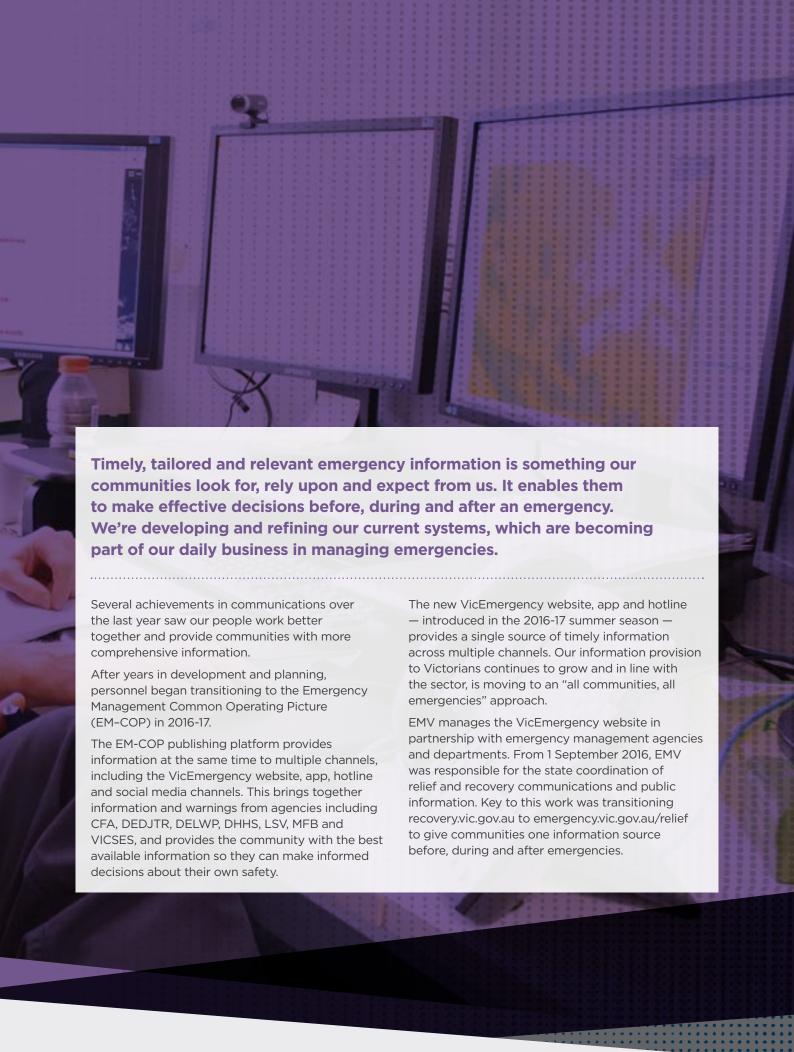
- ensure these were coordinated, connected and strengthened
- give people the chance to connect and express their grief.

The Victims Support Agency
(Department of Justice and Regulation),
WorkSafe Victoria, and Transport
Accident Commission, partnered
through a new approach alongside
departments and agencies,
to coordinate relief and recovery
services and community support.

The ongoing recovery for those affected continues. Along with the State Government we continue to support the City of Melbourne to ensure comprehensive and coordinated arrangements remain in place to support individuals and the broader community.







### **Emergency Management Common Operating Picture**

In November 2016, emergency management personnel began transitioning to the EM-COP platform. Its real time information allows for better decisions, better outcomes and safer communities. There are over 6,800 registered users of EM-COP from over 150 emergency management organisations in Victoria.

EM-COP has been used operationally for issuing public information and warnings and deploying personnel to South Australia's flood and storm emergency and to Canada. It also creates tools and combines process and information analysis for additional insights for decision makers.

The platform received a lot of positive feedback following the Victorian flood and storm emergencies. It connected incident, regional, and state control centres and personnel across a large geographical area in central and north-west Victoria, including Bendigo, Swan Hill and Mildura, along with water catchment authorities and health experts. Allowing all stakeholders access to the same information at the same time enabled them to make the best decisions for the community.

EM-COP brings together emergency information from all agencies and in 2017-18 will help manage storms, earthquakes, tsunamis, beach closures and shark sightings, and fires. Intelligence and information collected will help inform the community and EMV to provide warnings and incident notifications through the VicEmergency site, app, hotline and social media and to emergency broadcasters.

EM-COP is particularly useful with emergency management planning, response, and relief and recovery. As an event evolves, one of the most challenging issues is effective information sharing across disciplines and jurisdictions. Emergency managers need timely and actionable information for effective decision-making, to maintain awareness and to make strategic decisions about appropriate readiness, response or recovery.

### Key features include:

- multiple virtual collaboration rooms
- separate map per room with a variety of drawing tools
- base maps including Vicmap (cartographic and satellite), Google maps, and Melways
- data layers for incidents, boundaries, weather, tracking, and a very wide variety of other dynamic and static information layers
- measuring tools for distance and area
- room whiteboard
- private chat
- · document sharing
- permanent record of information.

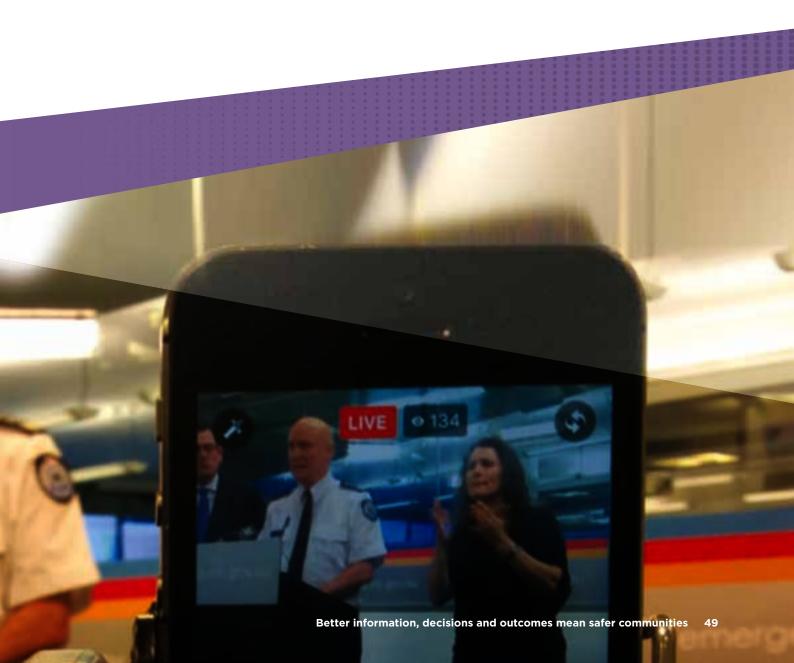


# Community notifications and warnings

A range of warnings and community notifications inform Victorians during emergencies. The type depends on urgency, potential impacts, and what the community needs to do to protect lives and property.

In 2016-17, 2,959 community alerts and warnings were issued with vital information during bushfires, grass fires, floods, storms and other emergencies.

For the first time, the ability to use EM-COP for public facing warnings and advice was used during all emergencies. As part of this change, EMV has trained almost 300 people across Victoria and created templates to issue warnings for more than 50 types of emergencies. So far feedback has been resoundingly positive.



### VicEmergency app

Launched on 16 November 2016, this provides Victorians with access to warnings and incidents for all emergencies including fires, floods, storms, earthquakes, and shark sightings. Replacing the outdated FireReady app, the new VicEmergency app aligns with EMV's all communities, all emergencies approach and works alongside the new VicEmergency website to provide timely information.

Under significant performance testing using critical scenarios, the app is capable of sending 1.2 million notifications per minute. It is also monitored 24/7 with disaster recovery capability set up within Australia and overseas.

Its new features, capabilities and design improvements include:

- incident and warning notifications for all emergencies
- user profile that enables simultaneous access to watch zones and emergency notifications across multiple devices
- creation of up to 20 watch zones tailored to individual locations and needs
- ability to edit watch zones and turn notifications on and off
- screen view rotation to view incident maps horizontally
- responsive design for iPads and tablets
- · change from Google Maps to Spatial Vision VicMaps Books
- · fire danger ratings display for current location and watch zones.

### VicEmergency social media channels

Social media is vital in reaching communities and for collecting intelligence and feed information systems to improve situational awareness during events.

2016-17 was very different to 2015-16, with a diverse range of state-wide incidents demanding a different array of online content. Video posts were a key focus, along with refining how to use photos to tell stories.

VicEmergency Facebook and Twitter experienced increased followers, engagement, shares and interactivity, with 1.6 million video views.

### VicEmergency hotline



As part of the transition of community facing channels to a consistent VicEmergency brand, the VicEmergency Hotline (1800 226 226) is a single hotline for information during the emergency response and recovery phase. This one number brings together the:

- Victorian Bushfire Information Line (VBIL)
- Victorian Emergency Relief Information Line (VERIL)
- VICSES Flood and Storm Information Line

### **Emergency broadcasters**

Emergency broadcasters provide critical information during emergencies to help people make important safety decisions.

Victoria's broadcast network pool includes
ABC local radio, Sky TV, 10 community stations
and 50 commercial radio stations. Gippsland FM,
3MGB Mallacoota and Light FM are the latest
community radio stations to become emergency
broadcasters, bringing the total to 62 stations
across Victoria. The three new stations broadcast
into the communities of Melbourne metropolitan,
Central Gippsland and the Latrobe Valley, Mallacoota,
Gypsy Point and Genoa. Emergency broadcasters
must meet a range of criteria to qualify and undertake
formal training.

The Victorian government has formal arrangements in place with media outlets to broadcast emergency warnings and information to the community.

## **Enabling the technology - Emergency Alert**

An Emergency Alert (EA) is another tool to push out messages during an emergency. It also informs communities about the impact and danger of impending emergencies (fire, flood, storm, etc.). EA was used 282 times in 2016–17 across Australia, sending out over 10 million messages to communities under threat.

EMV continued to manage the national fixed line and mobile telephone based warnings service on behalf of all states and territories.

### **Case study - drones**

Drones fitted with sensors to detect sharks along the Victorian coast were used during 2016-17 as part of an emergency management intelligence-gathering trial in partnership with Life Saving Victoria. This complements work already being done by helicopters and is a response to increased shark sightings.

The two-day trial tested the capability of drones to operate from the beach or elevated locations at Fairhaven, Anglesea and Eastern View and from a boat at Fairhaven and Seal Rock near Phillip Island.

The trial identified that water sensor technology gave more flexibility in shark patrolling and providing community information.

This forms part of a broader Victorian trial using drones to capture data and intelligence. Trials will continue this summer for floods, hazardous trees, beach safety and fire.



### **Public information campaigns**

Throughout 2016-17, several public information campaigns helped the community prepare and plan for emergencies. In line with a "summer" focus and covering more than just bushfire, the public information campaigns included:

- Play it safe by the water
- Crime Stoppers Bushfire arson and reckless fire
- Heat health
- Smoke health
- Never leave kids in cars
- Power outages
- · Insure it, it's worth it, and
- Planned burning.

While different departments were responsible for these campaigns, the roll out was supported through whole-of-government messaging, even during operations.

Fire Action Week -23 to 30 October - was brought forward to give Victorians more time to prepare. The plan and prepare messaging continued to the new year before conditions dictated communities be informed of appropriate local responses.

The 2016-17 Summer Fire campaign targeted communities on the CFA's Victorian Fire Risk Register at high, very high or extreme risk of bush and grass fire.

The "leave early" message continued in regional Victoria to help communities understand what they need to do and why this is the safest option.

The campaign began on 4 December 2016 and was extended until 31 March 2017 due to February's high fire risk. The campaign successfully:

 increased individual and community awareness of bush and grass fire risk (e.g. 74% of those who recalled the advertising were aware of their risk from bushfire, compared to 51% who did not recall the campaign) For communities in built up areas on Melbourne's outskirts and in large regional centres at risk of grass fire, the key message was "walk two streets back" from the fence line to stav safe. If residents already lived two or more streets away, the advice was "to stay where you are and monitor conditions", as grass fires were unlikely to spread into built up areas. These messages also deterred people from driving in low visibility and blocking emergency services with accidents.

- encouraged people to plan and prepare to make leaving early easier (e.g. approximately two in three people in high risk areas planned to leave early (63%) and had prepared their home (71%), while 56% had talked to their family about what they would do and where they would go)
- increased the understanding of fire danger ratings and warnings (e.g. 79% of those who recalled the campaign understood how to respond to a 'Code Red' rating, compared to 64% who did not recall the campaign, while understanding of warnings remained steady for all target audiences post campaign, compared to benchmarking results).

These results have influenced the 2017-18 summer campaign.

## Strategic communications in emergencies

On 25 May 2017, the State Crisis and Resilience Council endorsed the *Emergency Management State Communications Strategic Framework*. This Framework enables a unified shift towards an integrated, whole of community approach for a wide range of complex, multi-agency emergencies in the lead up to, during and after emergencies.

With its genesis in the Hazelwood Mine Fire Inquiry, it is also part of the push to expand the traditional incident mechanisms of Command, Control and Coordination, to include Consequence, Communication and Community Connection - or the six C's.

A key element of embedding strategic communications into the formal emergency management arrangements is developing a State Strategic Communications Cell in the State Control Centre.

In addition to the development of the final Framework, an evaluation of the Interim Relief and Recovery Public Information and Communications Framework also began.

The interim Framework was used over the 2016-17 summer season for a range of different emergencies involving a wide range of departments and agencies. This has provided an opportunity to gather feedback, evaluate the Framework and develop a long-term approach and operating model.

## **Emergency Management Operational Communications Program**

A series of discrete projects are delivering our long-term plan to transform the sector's operational communications capability. Key 2016-17 developments included:

- executing the Managed Device Service
   Agreement between the State and Telstra for
   the leasing, maintenance and support of over
   8,000 radios for emergency service agencies
- a market consultation to gain important insight into future technology trends and timeframes to inform planning beyond 2020
- completing a service delivery model analysis for Victoria's land mobile radio services
- continuity of the mobile data network until March 2019
- a request for quote to extend the metropolitan mobile radio (MMR) network beyond July 2018 and another to extend the emergency alerting service (EAS) network beyond November 2017
- completing proof of concept trials to remove partitions on the MMR network
- executing the Regional Mobile Radio (RMR)
   Amendment and Restatement Agreement
   between the State and Telstra to enable four
   additional emergency service agencies onto the
   State regional digital radio network and replace
   CFA's analogue radio network in outer metro
   with the digital network
- endorsing the Victorian Radio Network Capacity Management Framework to ensure efficient use of the RMR and MMR network as additional agencies transition onto it
- representing Victoria in national and international forums on public safety mobile broadband.





### Victorian Emergency Management Institute

In September 2016, the State Government established the Victorian Emergency Management Institute (VEMI) at the site of the former Australian Emergency Management Institute at Mount Macedon. VEMI will drive innovation, develop new ways of thinking and inspire the next generation of leaders.

This will include a focus on 'soft skills' development and support for the integration of participants into vocational education, employment and volunteerism.

Set on six and a half acres, the site includes a simulation centre and theatre and can accommodate almost 60 people. Throughout the year, the site was redeveloped to meet Victoria's emergency management training needs, with accommodation and technology upgrades.

During renovations, the facilities were used by groups across the State for meetings and engagements from not only the sector but also the community. This included EMV hosting the Catafalaque Party on Anzac Day before the Mount Macedon Cross Dawn Service. We plan to make this an annual event.

The site's iconic gardens remain a drawcard for the region.

### Learning management and EM-Share

In 2015-16, EMV released the *EM-LEARN Framework* to provide a shared understanding of what lessons management means for the Victorian emergency management sector, where it will take us and what we intend to do to get there.

The Framework applies to all agencies who contribute to emergency management and will build a learning culture at all levels. It will ensure emergency management personnel have access to a wealth of knowledge within an efficient, effective and continuously improving environment.

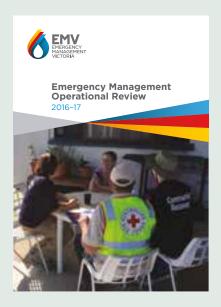
As a part of the implementation of the *EM-LEARN Framework* and in collaboration with the emergency management sector, EMV has been developing an IT system to support lessons management, called EM-Share.

EM-Share provides a platform for capturing, analysing and sharing lessons. It allows for broad data capture and robust analysis processes, aligned with the national model of lessons management (observations, insights, lessons). EM-Share will supersede the Observation Sharing Centre. It will be completed during 2017-18 with a staged roll out and the thorough evaluation of a pilot.

## **Emergency Management Operational Review**

The Operational Review summarises operational activities by Victoria's emergency management personnel across 2016-17. This report supports the continuous sector improvement by sharing lessons and is divided into three sections:

- section 1 provides an overview and narrative outlining the broad spectrum of emergency management activities across the sector before, during and after emergencies during 2016-17
- section 2 includes a selection of 2016-17 case studies, and shows the variety of incidents emergency management personnel manage
- section 3 updates the themes and insights identified during 2015-16 and highlights good practice, changes and improvements from 2016-17 as part of an ongoing cycle of learning improvement.



### Continuous improvement and reviews

EMV has been a significant contributor in preparing several inquiries, reviews and reports in 2016-17. We've taken steps to progress recommendations relevant to the emergency management sector, and in ensuring agencies take appropriate action.

This included coordinating the Government's response to the Fiskville Parliamentary Inquiry, tabled on 24 November 2016, and implementing the recommendations and associated actions of the Hazelwood Coal Mine Fire Inquiry and Fire Services Review.

Following the release of the Fire Services Review, the Government commissioned the Victorian Equal Opportunity and Human Rights Commission to review and examine discrimination, including bullying and sexual harassment claims within the CFA and MFB.

## Learning from our international colleagues

In August 2016, Craig Lapsley spent two weeks in the USA and Canada investigating new aviation technologies and sharing expertise and learnings with EMV's international counterparts.

Travelling to San Diego, San Francisco, Vancouver and Sacramento reaffirmed how aligned our management agencies, leaders and partners are with the USA and Canada.

EMV representatives shared information and learnings from international counterparts who demonstrated similar challenges and focus. For example, the British Columbia Emergency Management motto 'in it together', is similar to Victoria's vision of 'we work as one'.

Discussions with San Francisco Fire Department focussed on their diversity recruitment strategies and how to attract and retain a more diverse workforce. This included the challenges and opportunities in supporting more women in the fire services and better representing the community.

These international study tours provide valuable lessons and insights and improve our innovation, advance our systems and minimise threats, and help us grow well-connected networks.

### **Scholarships**

### **Mary Fran Myers Scholarship**

Lisa Jackson, Acting Manager, Standards and Review, received the Mary Fran Myers Scholarship to attend the 2017 Natural Hazards Workshop in Colorado, where she shared our experiences over the past three years.

The Scholarship recognises outstanding individuals who share Myers' commitment to disaster research and practice and have the potential to make a lasting contribution to reducing disaster vulnerability. At least one recipient a year receives financial support to attend the Annual Natural Hazards Research and Applications Workshop.

### **Emergency Services Foundation Scholarship**

Melanie Mills, Manager, Capability and Response Performance, was awarded an Emergency Services Foundation (ESF) Scholarship to further Victoria's understanding of The Federal Emergency Management Agency's (FEMA) approach to understanding emergency management capability and capacity.

The ESF Scholarship Scheme provides fellowships and grants to Victorian Emergency Services members for advanced studies in Australia or overseas. This includes formal courses, training, study or observation of other agencies and institutions.





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Working in conjunction with communities, government, agencies and business

