Alan Marshall
Australian Institute of Emergency Services and St John Ambulance Australia Inc., (Victoria).
Victorian Bushfires – Change – Learning from Mistakes Preparedness and Response.
Victorian Bushfires – Change – learning from mistakes
Preparedness and Response

Alan Marshall

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What is an Emergency?

- An actual imminent occurrence of an event which in any way endangers or threatens to endanger the safety or health of any person or threatens to destroy property or an element of the environment.

- Be prepared for all types of Emergencies.
Fire - Black Saturday Feb 2009
This is an Emergency!
Introduction: Australian Institute of Emergency Services (AIES), St John Ambulance Australia (St John)

Preparation & Response, Change, 2009 Fire develops.

St John involvement in 2009 fires and the State Health Emergency Response Plan (SHERP).


What worked and what was the learning experiences.

Moving forward and the National Disaster Resilience.

Questions.
The Australian Institute of Emergency Services (AIES), formed in the late 1970’s to recognise officers and organisations experienced in emergency management.

Our AIM: To provide a professional body for the roles and functions of Emergency Services and Emergency Management organisations throughout Australia, and the promotion and advancement of professional standards in these associated services.

An independent forum where members can be heard and their opinions shared with others emergency service members.
St John

- St John Ambulance Australia Victoria Inc. (a volunteer organisation and not the Ambulance Service, in Victoria) is part of its National body of St John Australia. Is an emergency support agency under ‘response’ in the Victorian Emergency Management Act 1986.

- Part of the Medical sub-plan to provide first aid and communications in times of crisis, such as: bushfires, floods, and other mass-casualty emergencies.

- St John – First Aid For Life.
Volunteers

- Volunteers form the backbone of the Australian emergency management workforce. In Victoria, >100,000.

- They are essential to the safety and wellbeing of the Australian community.

- Encourage, support, maintain a positive structure for volunteers and embrace their knowledge.
Preparedness & Response

- Preparedness - the establishment of structures, development of systems and testing and evaluation by organisations of their capacity to perform their allotted roles.

- Response - the combating of emergencies and the provision of rescue and immediate relief services.
Change, Disaster Resilience, Plan

- Change - is a structured approach to shifting/transitioning individual, teams, and organisations from a current state to a desired future state.

- Disaster resilience - the communities ability to anticipate and respond to man-made and natural disasters.

- Plan, take action and change, prepare for disasters through an “all hazards, all agencies approach”.
Black Saturday Fires 7th Feb 2009
Black Saturday – Fire spreads and the temperature rises

Maximum Temperatures 23 degrees above the February average. In the city of Melbourne on 7th Feb 2009, Temp. 46.4. Highest since records began. Avalon Airport recorded 47.9

Winds North East at 20 km/h then gusting to >100 km/h with the change around to South Westerly direction late in the afternoon. Multiple fire across South Eastern Australia as recorded on this map of February 8th 2009.

18-4-2012-EM-USB
Kilmore East, Murrindini

Victorian Fires February 7th 2009
Black Saturday

Kilmore East 95 kms Nth of Melbourne
Murrindini area N.E.

159 Deaths in these two main fires, out of the total of 173

Transformer Fire started at approx 11am a on SEWR System
Kilmore fire spreads 7\textsuperscript{th} Feb 2009

- Pine plantation fire adjacent to Hume Highway at Wandong Victoria, 55 km Nth of Melbourne.

Fire moved in S. E. Direction
40 km in 2 hours
Media Maps on Kinglake Complex Fire
07:56 on the 8th Feb. Initial scan data!

Point at which it crossed the Hume Highway at approx 13:00 on 7th Feb

Fire Speed in excess n >100 klm/h at approx 17:00 on 7th Feb 09

Marysville Fire about to join up.

Fire Change of Direction SW wind at >100 km/h
Victoria – Emergency Structure

Victoria’s Emergency Management Operational Structure

- Premier Security and Emergencies Committee of Cabinet
- Minister for Police and Emergency Services (Co-ordinator in Chief)
- Emergency Services Commissioner
- Victoria Emergency Management Council
- VEMC Co-ordination Group
- Central Government Response Committee
- Response Co-ordination: VicPol
- Recovery Co-ordination: DHS
- S.C.C Health Cell
- DHS – Cord ASV St John

Emergency Management Response and Recovery Planning Committees
- State level
- Regional level
- Municipal level

State level operations
Regional / Area level operations
Municipal / Incident level operations
State Control Centre & Health Cell

DHS Health Room
State Planning Meetings, resources & Interstate authorisation
Size 3 x 4 Meters.

9th Feb 09
Early morning
State - Health Sub Plan (SHERP)
Operation of the State Health Emergency Response Plan (SHERP)

- Sub Plan of the Victorian State Emergency Response Plan
- Pre-hospital emergency response plan for mass casualty emergencies
- Operates within the ICS framework
- Allows for the escalation & activation of other health agencies according to the need
- Coordination of health agencies is achieved by the formation of the health incident management team (HIMT)
Response - Health Commander

- Ambulance service shall coordinate first aid response

- Health commander shall determine the level of response required, and advise St John of all relevant information

- First Aid team leader/commander shall report to the health commander and become part of the H.I.M.T
Role - First Aid Agencies, Response

- Provide trained first aid officers to assist with triage, treatment, resuscitation
- Provide trained advanced first aid officers, capable of defibrillation, O\textsubscript{2}
- Provide portable first aid supplies, equipment that is easily transported
- Provide a comprehensive radio communications network, capable of stand alone operation
St John, Activities up to 7th Feb

Events
- 90 public events booked
- 2 major events – St Kilda Festival and Geelong Triathlon

Fires
- In the last two weeks attended continually one of the fires.
- Crews responded to 14 locations to provide first aid and pre-hospital care for members of the emergency services
- Medical team deployed to Whittlesea, 22 km North of Melbourne.
- St John Victorian Emergency Operations Centre 24 hour operation
- Liaison officers at the Integrated Emergency Coordination Centre
St John – National coordination role

- St John National Emergency Coordination Arrangements was cranked up on the afternoon of 7th February 2009.

- Command of the St John personnel was retained by St John Victoria

- The coordinated movement of interstate St John assets and personnel was undertaken by National Staff
St John Australian Response

Members Deployed to Victoria – St John

- Total 517
- ACT 1
- National 5
- NSW 58
- NT 5
- QLD 12
- SA 60
- Tasmania 12
- Victoria 364
St John - Stats on Response, Fires

- **Overview**
- Days in field: 49
- Locations: 30

- **Service Hours**
- In field: 18,000
- EOC: 2,576

- **Casualties**
- Total: 1,325
- Transported to Hospital: 39
Do we learn from History?

- Testimonies of the 1939, 1983 and 2009 fires, where major areas burnt and many people lost their lives, suggests that there is one thing that we never learn from History.

**Nature can overwhelm culture.**

- There is a dangerous mismatch between the nature of fire and the short term memory of communities. In 1939 were they prepared?
Weather influence on Fires

- **1939** - driest ever July-December period. On Jan 13th, 45.6°C (114.1°C) with winds in excess of 100 Klm/H. Relative Humidity very low, early warnings – fires.

- **1983** – Major dust storm on 8th Feb, 43.2°C. Another early warning following years of severe drought. On Wed. Feb 16th, 43.5°C, Winds again of 110 Klm/H, R.H. down to 6%, summer normal 43%. R.H.

- **2009** – Heat wave condition on 26th Jan, 374 Dead, heat wave that started 10 days earlier, and a record dry spell. Feb 7th, 46.4°C, Winds to 120 Klm/H, RH 6%
Black Friday 13th Jan 1939

- Bushfires from Dec. 1938 to Jan.39 – 73 Deaths
1939 - The Bush Communities

- Community was **not prepared**, the innocence of European immigrants in a land they did not understand.
- Diabolical Weather conditions. – weather reports, poor.
- The findings of the Royal Commission to increase fire awareness and prevention. These fires were large.
- State Fire Authority established, to zone fire risk areas.
- Forestry Act 1939 enforces the installation of fire-refuge dugouts & Clearing around Saw Mills.
- Additional Country Fire Authority established April 1945
- Education of adults & children in prevention/protection.
Ash Wed. Fires 16th Feb 1983

- Feb. 1983 - "Ash Wednesday" – 47 Deaths
1983 – Communication, the Issue

- Review of Issues – Communications Systems inadequate and a major review of Emergency Management arrangements – legislations from 1983-86
- An Emergency disaster plan was also legislated. Then the known as Displan. Later to become the Victorian Emergency Management Manual 1986.
- Appoint a Minister responsible for Police & Emergency Services and the setting up of Emergency Services Telecommunications Authority, known as ESTA (1993).
- A three-tiered framework, State, Regional & Municipal.
- Many additions & changes to Emergency Act, >15 years
Lead up conditions to 2009

- Severe and protracted drought in Australia’s southeast.
- No rain over majority of the State of Victoria.
- Heat wave conditions and high winds late in the day.
- 7 Feb. 2009 was the hottest day recorded in Melbourne 46.4°C. Above 40°C for last 3 days.
- 316 grass & bushfires reported Country Fire Authority and the Department of Sustainability & Energy 7th Feb.
Heat Wave and Scorched Earth

> 500 deaths
Early Planning - Health Services

The Department of Health and Services (DHS) calls meetings on 29th of January and 5th of February 2009, to discuss plans & resources. Concerns for heat & fires.

- Planning prior to Black Saturday February 7th 2009.
- All Emergency Services prepare for a heat wave.
- Interstate interface to be included in the planning.
From the Department of Sustainability and Environment (DSE), Country Fire Authority CFA & MFB on Friday, 6 February, 2009

AVOID ALL UNNECESSARY TRAVEL TOMORROW

Victoria’s emergency services are urging people to reconsider their travel plans this weekend due to the unprecedented fire danger forecast on Saturday.

CFA, DSE and MFB, in conjunction with Parks Victoria and VICSES, are warning Victorians to avoid all unnecessary travel tomorrow, particularly in bushland, parks, including coastal strips and other fire prone areas across the state.
Media articles - after the event.

The Heat Wave prior to the Fires January 26th to Feb. 1st

- Article in the Australian 7th April 2009. HEALTH authorities revealed that the week-long heat wave in late January may have killed at least 374 Victorians,

The Fires 7th February onwards

- Australia revises fire death toll down, Mar 29, 2009 Australian, Newspaper. The death toll from wildfires that ripped through Australia's Victoria state has been revised down to 173 from 210

- Entire towns and more than 2,000 homes were razed by the worst wildfires in the nation's history,
Known, Fire History

- With populations at the rural–urban interface growing, the risks associated with bushfire are likely to increase.
- Rapid fire spread followed ignition, which responding crews could not contain.
- Fires crowned in forested areas, which made them impossible for ground crews to control.
- Powerful convection columns were generated above the fires. Power line failures added to the spread.
- Extensive forward spotting occurred as a result of the fuel type, the weather conditions and the topography.
- Late in the day a wind change altered the direction of fire spread and extended the forefront. History again!
Black Saturday Feb 7th 2009

- Map of the FEBRUARY 2009 FIRES – 173 Deaths
Coordination the Issue in 2009

- Royal Commission - Coordination of the emergency.
- Training, and facilities in the incident control centre's from which Incident Management Teams IMT’s operated were in some cases deficient.
- High-level state arrangements need reform.
- The roles of senior personnel were not clear.
- No single agency or individual in charge of the emergency.
- Systems of Electronic Data transfer were slow and not interchangeable including data from Social networks.
- Even when the right policies and systems are in operation, strong and effective leadership is essential.
Aerial View Vic.Pol. DVI

Marysville
95 Km
N E of Melbourne

Bakery and Coffee Shop

Police Station
Marysville Police Station, 3 Years on
Some, Recommendations 2009

- Royal Commission final report, 67 Recommendations.
- Revise Bushfire Safety Policy, adopt National, Prepare, Act, Survive, framework in Victoria, enhance warnings.
- Educate the community in bushfire safety.
- Comprehensive approach to evacuation/shelter options.
- Commonwealth to develop national bushfire awareness.
- DSE & CFA to amend procedures, provide training IMT.
- State to appoint a Fire Commissioner as an independent statutory officer as the senior firefighter responsible to the Minister. The detail is in the History, see the report.
Key Findings - Fires


- Commonwealth to develop national bushfire awareness, focus on serving all the community.
- Appoint a Fire Commissioner as an independent Statute Officer reporting directly to the Minister.
- “All hazards all agencies” a resilient community, shared within a complete review of E.M. arrangements.
- Educate Train and Equip Incident Management Teams.
- State Control Centre, daily reports, Information sharing, processing, early warning system on to Minister, for ES.
- Accountable cohesive and unambiguous Leadership.
What works – Manage for an “all hazards, all agencies”.

- **Educate**, understand the hazard, know the community shared responsibility, preparedness and response.
- **Early warning systems**, to be operational & coordinated with the best telecommunications, social networks.
- **Weather reporting**, predictions, accuracy, use the info.
- **Clear lines of accountability** and known capability.
- **Exercises** – team structure training, people, knowledge, system capabilities - Response, coordination & pre-plan.
- **Legislation**, confirm feedback against action plan.
What are the lessons?
We have been there before!

- Early departure when fires are unstoppable, saves lives.
- Education and fire awareness is not being retained through generations or shared across communities.
- Agencies as team players, still acting in isolation.
- Capability limits, not manage or understood.
- Clear focus of “all hazard all agencies” approach, not reaching all in the community, resilience not built in yet.
- Audit of accountability, on training, equip, exercises and team function not meeting standards nor legislation.
Life goes on . . .
Moving Forward

- 1939 to 1983 – 44 years, approx. Two generations of lost emergency management exposure and knowledge – 1939 Not Prepared? War involvement, Tree change


- Time to learn from history, apparently we still have not lived long enough nor want to share the information and the learning, or be accountable.

- We must build in resilience, legislate to change.
National Plan - Disaster Resilience

- Know your risk
- Learn from experience
- Get ready – then act
- Disasters will happen
- Disaster Resilience is your business
- Connected communities are Resilient communities, emergency management shared.

As quoted by Mr. Rodger Wilkins AO, Secretary Attorney-General’s Department
Are we Prepared for the Response and to share?

Questions?
Alan Marshall is retired from a background in Electrical / Electronic Engineering. He was employed by the Government of Victoria in Power Operations. He moved into Private Industry employment with an Automotive supply company as the Manager Body Electronics and Design.

Alan is a State Officer with St John Ambulance Victoria with over 35 years experience in Emergency Management as a volunteer. He was the Field Commander at Gisborne Victoria during Ash Wednesday fires of 1983 and in the Integrated Emergency Control Centre Melbourne (IECC) during the ‘Black Saturday’ Fires February 2009. He is a Commander in the Order of St John, the National President of the Australian Institute of Emergency Services was a Director of St John Council Victoria.

To talk about the impact of the February 2009 Victorian Bushfires and the emergency services response, Alan Marshall CStJ., FAIES.