ABSTRACT
With the effects of climate change, more communities are becoming susceptible to natural disasters. Whilst the consequences themselves cannot be entirely prevented, their implications for community sustainability can be influenced by developing community networks. These networks can provide the social infrastructure and connectedness required to develop and implement fully integrated and whole of community emergency management plans.

The challenge to achieving this is accepting the need for a shift in the current emergency management culture from supporting individuals during and after disasters to one that embraces community capacity building and resilience to achieve risk prevention, mitigation and effective management of disasters at the local and municipal level.

This paper looks at one method to achieving this by presenting a Community Development Model within the context of integrated emergency management to demonstrate the alliance between community strengthening and volunteerism to achieve individual and community self-reliance, reducing dependency on governments and increasing resilience.

INTRODUCTION
Global challenges from the effects of climate change and the constant threat of a terrorist attack will require a much greater emphasis on community focused integrated emergency management planning at all levels of Government.

It will also require acceptance that a critical component of the planning process requires greater levels of community engagement in order to strengthen participation, create effective partnerships and ensure inclusive decision-making. Only then will we see effective management of disasters at the local community and municipal levels.

Research has shown that local engagement and the supporting of community values, coupled with integrity and cultural sensitivity, will achieve risk reduction (Buckle 2001). Existing emergency management culture, agencies and Government policy and programs at all levels have traditionally focused on supporting individuals during and after disasters. This is most evident at the response phase, in which there is generally a top down management
style approach based on a ridged structure that is centralised and hierarchical, (Buckle 2001).

This paper will attempt to demonstrate that by fully integrating emergency management and local government policy development with community capacity building and strengthening, an alliance will be created which will achieve risk reduction and effective management of disasters at the local community and municipal levels.

To support this proposition, the paper will examine the status of emergency management in the context of community capacity building, volunteerism and its links to resilience development and vulnerability reduction. This will lead to the presentation of a Community Development Model within the context of integrated emergency management for consideration and discussion by the disaster and emergency management community.

THE CHALLENGE FOR EMERGENCY SERVICES

Traditionally the emergency service’s fundamental role is the protection of life, property and the environment. Fire services, particularly those with a significant bushfire risk have adopted a policy of building self-aware communities who are able to recognise and understand risk and are prepared to protect themselves and their property from the threat of bushfire. This approach is due to the fact that during major bushfire events, fire services have accepted they do not have the resources and capacity to protect every person and every property under threat.

Changes to health and safety legislation have also imposed strict requirements on emergency services to provide a safe and healthy work environment for their emergency services workers, consequently communities in heavily vegetated areas with significant fuel load’s and poor accessibility could prevent the fire service responding if considered unsafe. This was apparent during the Gippsland fires in 2007, when CFA and the then Department of Sustainability and Environment (DSE) applied the requirements of ‘reasonable precautions’ and ‘due diligence’ and therefore had no option but to withdraw from high bushfire risk communities ahead of severe fire fronts as it was considered an unacceptable risk to firefighters.

This shift in policy direction is mitigated by delivering a range of education programs and by engaging with communities, providing accurate and appropriate information and in turn working towards developing a greater understanding of communities at risk. Since the Black Saturday Bushfires of 2009, the Victorian Bushfire Royal Commission made recommendations to further strengthen this approach and emphasis the role of evacuation and refuge. This provided a new policy direction led by the then Victorian Fire Service
Commissioner. In response, the Bushfire Safety Policy Framework was introduced and included a new concept labelled Bushfire Safety Options.

This shift in policy recognised that there are different ways people may respond to the threat of bushfire and identifies the need for a range of options, both personal and communal, where people may seek to evacuate or shelter from the threat of bushfire. However to be successful, it will require a renewed commitment and greater investment to deliver a range of new and modified education programs through engaging with communities. A key focus must be to achieve a greater understanding of community warnings, evacuation and the range of different shelter option available, (i.e. defendable home/properties, Neighbourhood Safer Places, Community Fire Refuges, Private Bushfire Shelters).

One of the key challenges for emergency services influencing communities is best depicted in Figures 1 and 2 Volunteer Involvement, located later in the paper under the heading Volunteerism. Whilst many emergency services are community based and community dependent organisations providing education, training and youth development opportunities, some are achieving low volunteer involvement in comparison to other volunteer organisations. Many of them offer similar opportunities and programs however are experiencing a declining trend in volunteerism in comparison to population growth and community expectations. Whilst it is beyond the scope of this paper to present all the reasons for such low participation rates, one main contributing factor could be that many emergency service organisations are yet to understand the connection between community resilience and volunteerism.

This would suggest that all emergency services should reassess their culture and values to ensure they promote a sense of community; a structure that is highly accessible and provides a meaningful role of opportunities and leadership that is inspiring, talented, shared, and committed to both the settings and to its members (Maton and Salem 1995).

This will also require citizens and individuals to volunteer their knowledge and capacity to shape their communities through participative and vibrant democracy, rather than hierarchal representative democracy, which exists within some emergency services. Currently this gap exists between what people can do and what emergency services encourage them to do.

The next section will explore these issues and hopefully promote discussion about volunteerism and its links to community capacity building and resilience within an emergency management context.
Community Capacity Building and Strengthening

Strong communities can be defined as:

‘those endowed with social, economic and environmental assets and organisational structures that work towards their sustainable use and equitable distribution’, (DVC 2004c).

Based on this definition, community capacity building and resilience is achieved when communities are built by members who are engaged, participate, feel capable of working through problems and are supported by strong networks (Lin 2001; Gilchrist 2004; DVC 2004c).

Within the context of integrated emergency management, community capacity building and resilience arises from the interplay of four features:

- The economic/natural/human/social capital assets a community is endowed with. For example, emergency service volunteers, self aware and self reliant communities, joint community partnership projects, community fire refuges;
- The knowledge within the community that allows for the sustainable use of assets, for example, how a community inter-relates with their brigade and understands and values prevention, readiness, response and recovery;
- The ability to collectively organise gatherings in order to work through issues, determine priorities and make the best use of resources, for example development of local community integrated emergency management plans;
- Local institutions that provide governance structures through which collective action can be organised, for example, partnership between community leaders and committee organisations, emergency services and local Government agencies, institutions and businesses jointly committed to risk and vulnerability reduction.

Each of these features are important parts of the foundation used to build a community development model which attempts to demonstrate how community resilience forms a critical part of modern day emergency management. Before presenting the model, we must first understand volunteerism and how it contributes to this alliance.

Volunteerism

‘Volunteerism’ may be defined as a strategy to build active, confident and resilient communities in Australia, (Volunteering Australia 2005). Volunteering is one of many forms of participation in community oriented organisations that create the local networks and connectedness. It fosters positive attitudes within communities, such as an acceptance of diversity, and positive behaviours, this can lead to positive results, i.e. reduced crime and unsocial behaviour (Sampson et al 1997).
There is also evidence to suggest that relatively simple forms of participation, such as volunteering at the most basic level, helps build the skills and confidence in people that prepare them to take on more complex forms of civic engagement and collective action (Perkins, Brown & Taylor 1996).

It is therefore evident that Volunteerism helps to draw more people into the policy arena than would other-wise get involved, increasing the chance that policies are adopted that take into account the full range of interests, hazards and risks within communities (Davis and Smith 2001).

In 2005 it was estimated that each year that more then 250 000 people volunteer with emergency services (predominantly rural fire volunteers) and contribute 21.5 million hours assisting the Australian community (National Inquiry on Bushfire Mitigation and Management 2005).

If volunteers were no longer available, Governments in Australia would face considerable increases in direct costs to provide comparable level of service to the community. A CFA report in Victoria in 2001, *(The value of the volunteer contribution)* found the estimated value of volunteer contribution during 2000-01 would have been at least $470 million. Today that figure is closer to $1 billion each year. *(http://www.vfbv.com.au).*

The National Emergency Management Volunteer Action Plan, 2012 estimates there were approximately 500,000 volunteers in Australia who are willingly providing their time and services to the emergency management sector. In 2010, the Australian Bureau of statistics estimated overall 6.1 million (36.2%) of people in Australia aged 18 years and over participated in formal volunteering. *(http://volunteeringvictoria.org.au).*

The Action Plan makes the following important point: ‘Australia’s capacity to respond to natural disasters has been based largely on a range of specialised volunteer-based organisations, each of which relies on a small cadre of paid (or career) staff and a much larger workforce of (unpaid) volunteers who are mobilised and deployed on the basis of need in response to a particular disaster or emergency incident.’

The Action Plan also concludes that ‘emergency management volunteers not only provide emergency response services but are active within their local communities delivering prevention, preparedness and recovery programs, cadet schemes and community education programs’. 
These findings indicate that if volunteer emergency services are to remain effective and viable, they need to have certain characteristics to be attractive, these include having a culture that is focused beyond individuals and that promotes a sense of community; a structure that is highly accessible and provides a meaningful role of opportunities; and leadership that is inspiring, talented, shared, and committed to both the settings and to members (Maton and Salem 1995). The key for emergency services and their leaders is: does their service provide a culture and values based on these desired characteristics?

As is evident from Figures 1 and 2, Volunteer Involvement, the areas people are most likely to volunteer involve community and personal strengthening in terms of welfare, physical well being, education, training and youth development; the ABS statistics therefore concur Maton and Salem’s theory of what attracts volunteers.

![Figure 1 - 2000 Percentage of Volunteer Involvement](image-url)
Both Figures 1 and 2, which looks at percentage of volunteer involvement during 2000 and 2010 also shows Australian emergency services are poorly represented in comparison to other types of volunteer involvement. The above comparison should signal a warning to emergency services, particularly those who are experiencing a declining trend in the number of volunteers in terms of recruitment and retention. This is because people volunteering their time are choosing organisations which offer broader range of opportunities to support and assist others, and to obtain personal and professional satisfaction by gaining new skills and experience within a culture that is accepting, inclusive based on participatory democracy.

Delivery of emergency services in Australia, as in many other developed countries, relies heavily on the commitment of volunteers. Most emergency services have as their underpinning goal to look after the community and their welfare, using education, training and youth development as well as emergency response to achieve this. However, whilst many emergency services provide similar opportunities and programs to those with high volunteer involvement, Figures 1 and 2, show there is a distinctive gap in volunteer participation.

One reason for this gap could be due to the traditional Para-military culture which exists within many emergency services which is hierarchal and based on rank. This approach was acceptable and appropriate when first introduced in the early 1900’s. However, when we look at the characteristics espoused by Maton and Salem (1995), communities and individuals today are better educated, wealthier and have more sophisticated ideas, needs and...
expectations, and are therefore looking for organisations that ‘ensure Volunteering is a potent, dynamic and unifying social force for community benefit and accepting that it is a diverse and evolving activity’ (Volunteering Australia 2004). For some emergency services this may require a deliberate shift away from a representative democracy which sees the ‘good bloke’ voted in or out and decision making delegated to participatory democracy.

This shift will require emergency services to review their recruitment and retention processes to ensure they are designed to attract and retain volunteers who have a broad range of leadership skills and experience which create ideas and innovation, inspire change, encourage participation and ownership, and have a clear focus on people and community well being and connectedness.

During the first Emergency Management Volunteering Summit for emergency services volunteer leaders and managers held in Canberra in October 2001, the importance of volunteers feeling valued by their host organisation emerged as a major theme.

The summit identified that to achieve practical valuing of emergency services volunteers required three organisational practices:

1. providing opportunities for volunteers to express their opinions and views,
2. providing meaningful opportunities for volunteers personal and professional development; and
3. appropriately recognising volunteer contribution to organisation and the community.

Another way of looking at the spectrum of voluntary activity within emergency services is to emphasis and value the diverse ways in which different kinds of voluntary activities contribute to the development of skills and capabilities and to relationships built on trust. Capacities and trust can be understood as key components of sustainable, connected and empowered volunteer emergency services and the communities, which rely upon them. From this perspective, voluntary activity can be viewed as both a stepping stone to achieving collective goals, but also as a good or an outcome in itself at individual, community and governance levels (Bowen 2004).

This conceptual approach recognises a broad field of emergency management activities rather than a hierarchy of voluntary activities and doesn’t weigh the value of one kind of activity such as internal operational preparedness and response over other community values such as prevention and community preparedness.

One method of achieving this is to change current emergency management and local government policy to have a greater focus on promoting and enhancing voluntary activity as
a community resilience concept and promoting the relationship between community participation and building strong networks with vulnerability reduction and risk mitigation. One way of achieving this is proposed in the model for community strengthening and volunteerism.

COMMUNITY STRENGTHENING AND VOLUNTEERISM MODEL (Community Development Model)
Volunteerism provides a mechanism for people to participate in identifying and understanding hazards and risks which can make them vulnerable. As people participate they develop social and organisational connections and relationships. This in turn leads to the development of community networks. Community networks provide the social infrastructure and connectedness required to develop and implement a fully integrated and whole of community emergency management planning framework proposed within the following community strengthening and volunteerism model.
Policy Directions For Building Community Capacity & Networks

Observable Indicators / Evidence

~ Integrating Municipal & Local Emergency Management Planning
~ Self reliant, sustainable & resilient Communities
~ Shared vision & decision making
~ Community leadership & mentoring
~ Youth Development
~ Community Values - Tolerance of diversity
~ - Vibrant democracy
~ - empowerment

~ Vibrant communities actively involved in decision making
~ Participatory Democracy and active citizenship
~ Increasing levels of Volunteering
~ Demographic Governance
~ Low level Vulnerability
~ Connected Communities
~ Economic / Natural / Human / Social capital growth

~ Decreased bureaucracy & network costs
~ Community engagement
~ Incentive to create networks
~ Shared / Co Locations
~ Corporate Volunteering
~ Risk Management Approach

~ Community Participation
~ Representative Democracy
~ Stable Levels of Volunteering
~ Vulnerable
~ Partnerships with other services
~ Social Participation
~ Sustained Population

~ Investing in Community Resources & Well Being
~ Organisation amalgamation
~ Linking individual & groups to emergency management networks
~ Technical Solutions i.e. residential sprinkler systems

~ Declining Social Isolation
~ Increase of Resources
~ Decline in Reducing Population & Volunteers
~ Active Aging Population
~ Investment in old Building Stock
~ Understanding of Highly Vulnerability

LEVEL OF COMMUNITY CAPACITY

LEVEL OF COMMUNITY ENGAGEMENT

LEVEL OF COMMUNITY CAPACITY

LEVEL OF COMMUNITY ENGAGEMENT

CLOSE PERSONAL NETWORKS
(Family & close Friends)

ASSOCIATIONAL & COMMUNITY NETWORKS

GOVERNANCE NETWORKS

COMMUNITY STRENGTHENING & VOLUNTEERISM
This kind of conceptual model provides for three types of networks: close personal networks, associated & community networks and governance networks (DVC Indicators of Community Strength June 2006). It summarises their potential benefits in terms of capacity building and vulnerability reduction, indicators for evidence of success and potential broad policy directions for emergency services and local Government to advocate to achieve risk and vulnerability reduction.

The first networks are isolated individuals who rely on close personal networks such as family and close friends for wellbeing rather than the broader community. This demographic are difficult to engage, can be socially and geographically isolated, may not have the capacity to be self reliant, creating low levels of resilience and therefore are vulnerable. Communities within this type of network may not have the capacity to sustain an emergency service which is the case in many isolated rural towns across Australia, are in decline or low levels of education, wealth and resources and therefore requires careful consideration during integrated emergency management planning at municipal and regional levels.

The second type of network, associational and community is the broader network established around a common interest or involvement in specific settings, such as a school, work place, interest groups or community organisations such as volunteer emergency service (Pope & Warr 2005).

These networks have close and personal relationships but at a wider pool and generate additional benefits for the broader community. Benefits could include a greater interest and incentive of becoming involved and taking action about matters that concern them. This leads to positive social attitudes such as tolerance of diversity, willingness to identify and understand community risk and vulnerability and to invest time and resources to strengthen their communities.

Associational and community networks tend to work as independent groups and whilst some people may be involved in multiple organisations, they tend to operate in isolation. A good example would be multiple volunteer emergency services such as surf life saving, fire brigade, SES and Ambulance service operating within one community at different locations with individual management structures, planning processes and resources. Whilst these networks have a degree of self reliance, sustainability and resilience, they can be vulnerable from many risks, particularly in terms of public administration and political influence.

The third type of network Governance, links close personal networks and associational and community networks to institutions and therefore power, resources and ideas (Woolcock 1998). It is through governance networks that communities can turn their knowledge, skills,
experience and resources into specific outcomes such as increased economic opportunities and improved community services and facilities (Browning & Cagney 2002).

Strong and inclusive governance allows a community to reach its full potential by allowing its citizens collectively and individually to use their knowledge and capacity to shape their lives and their communities. This ensures community vulnerability is minimised through integrated emergency management planning across the prevention, readiness, response and recovery continuum inclusive of the whole community. This network should be the goal of every emergency service and all levels of Government to achieve the social, economic and environmental well being. In an emergency management context, this could be considered utopia.

CONCLUSION
We are all mortal, and in some way vulnerable, whether it be due to where we live or holiday, our socio economic status, the world's changing climate, the increasing threat of terrorism, or an aging population. Irrespective of our vulnerability and the level of risk to which it exposes us, it is important emergency services at all levels, local, State and Federal Governments, place a strong emphasis on community based emergency management with a focus on individual or community vulnerability.

This will require a policy position in which Volunteerism is integral to community resilience and by encouraging a greater range of and diversity of volunteering opportunities to support risk reduction initiatives. It can achieved through community based integrated emergency management planning, ensuring individual and community risk and vulnerability can be reduced to a more acceptable level.
REFERENCES


CFA, 2006 draft policy, ‘Community Development’, Country Fire Authority, Victoria, Australia.


