

EMA's Graduate Certificate in Emergency Management

In November 2008, EMA held its last graduation for the currently accredited Graduate Certificate in Emergency Management. The Graduate Certificate was first offered in May 2004 and 68 students have graduated to date.

This qualification was specifically designed to provide training for people working in the emergency management sector who required professional development at postgraduate level. Students examined their management skills especially managing relationships within the multi-agency context; were engaged in debate in relation to emergency management theory and practice; contributed to and analysed innovation and change in emergency management; and contributed to the national emergency management research agenda from a practice base. The Certificate comprised of four modules: Current issues and trends in emergency management, Relationships management in an emergency management context, Research methods and a Research project.

Abstracts from the students' research projects will be included in the next editions of AJEM.

Caravan Park Flood Evacuation Time Line Modelling

Daniela Heubusch

Senior Floodplain Engineer, Shoalhaven City Council, Bridge Road Nowra NSW 2541

Research Aim:

The purpose of this research was to develop a realistic flood evacuation time line model for caravan parks in order to determine the conditions, capacity limits and minimum staff resources required to safely evacuate a park during a flood event.

Modern planning strategies focus on hazard avoidance and mitigation by engineering design (DNR 2005) however, Councils around the State have inherited a large number of existing developments that require evacuation in order to save people's lives. Amongst these historical establishments, caravan parks in flood prone areas are some of the most vulnerable developments and pose significant risk to life and property if not carefully managed.

Flooding is a major hazard within the Shoalhaven area and it has been identified that there are more than 40 flood prone caravan parks within the municipality with some parks potentially being inundated by more than eight metres of fast flowing water. Damage to several caravan parks during flooding has occurred in the past and the problem becomes worse as caravans become older and less able to be moved after the receipt of a flood warning. Recent investment of many owners in semi-permanent vans and ancillary structures has risen significantly, which has increased the value of assets as well as the number of people who could potentially be at risk during flood events.

An issue that is often overlooked is that many caravan or mobile home owners live interstate. It is therefore highly likely that a flood event will happen in their absence leaving the park operators to save their belongings. Complicating the issue more is the fact that although regulations require vans to be moveable (Yeo 2006), many of them are not road worthy and have a high risk of breaking down and blocking access roads to caravan parks. It is therefore vital to develop a user friendly procedure to enable the assessment of evacuation needs for potentially fully occupied existing caravan parks.

To obtain a copy of the full report please contact: heubusch@shoalhaven.nsw.gov.au

Enhancing Tasmania SES Volunteer Recruitment and Retention

On a research report prepared by Andrew Lea
Director State Emergency Service Hobart, Tasmania
September 2008

Due to a history of declining volunteer numbers, Tasmania State Emergency Service (SES) initiated a research project to consider the research question:

What strategies can be translated from available research and then implemented by Tasmania SES to improve the recruitment and retention of its volunteers?

The analysis of available research literature revealed a number of valuable insights into motivational influences and other factors affecting volunteer recruitment and retention. This analysis informed a Delphi focus group workshop with current and future SES volunteer leaders that resulted in a range of proposed initiatives centred around the following strategies:

Implement Effective Volunteer Recruitment Campaigns:

- Annual blanket and targeted campaigns based on needs, supported by enhanced methods, resources and profile (see below). SES volunteers to have a key role locally.

Enhance Volunteer Recruitment Methods:

- Focus on volunteer word-of-mouth using contact cards and personalised invitations to local people considered suitable to attend unit visits, open days, demonstrations, displays, etc.
- Supported by profile building and greater publicity of volunteering opportunities via TV, radio and an enhanced website, identifying all opportunities including support roles. Feature the main motivating factors.

Enhance Volunteer Recruitment Resources:

- Produce or update/enhance printed recruitment guides and information such as brochures, posters and contact cards. Also, audio-visual recruitment information such as DVDs and CSAs that focus on the main motivators and broadly cover all gender, ages, backgrounds and volunteer roles.
- Implement properly resourced unit volunteer recruitment buddies or mentors for new members and create regional community relations groups of carefully selected and willing volunteers to support volunteer recruitment and retention activities.
- Provide and assess entry questionnaires for ongoing recruitment research.

Enhance Volunteer Retention by Enhancing SES Profile & Visibility:

- Provide general duties uniform for all volunteers at no cost.
- Continue to recognise long service and achievement and improve media engagement to publicise these achievements.

Enhance Volunteer Retention with Enhanced Management & Administrative Practices:

- Assist more with legitimate volunteer out-of-pocket expenses.
- Reintroduce exit questionnaires for ongoing research.
- Introduce a new Operational Support stream of volunteer for those who feel they are no longer suited to physical/heavy tasks (can do admin, training, maintenance, etc).
- Provide enhanced support and development for volunteer Unit Managers, such as annual Unit Management Workshops.
- Implement, in consultation with the units, additional combined unit training.

Volunteer Recruitment and Retention to Remain a Strategic Priority for SES:

- Long term, well resourced and sustainable strategies and goals.

Further Volunteer Recruitment and Retention Research:

- Further research needed to fill knowledge gaps.

Central to many of the preferred options and strategies, is the finding that the best strategic approach a volunteer organisation can adopt is to ensure its volunteers are happy, motivated and able to give something back to, or to help their communities.

**To obtain a copy of the full report please contact:
Andrew.Lea@ses.tas.gov.au**

Community Education Programs & Vulnerable Groups

By Sally McCarron

A bushfire event is an ever present threat for the residents of Indigo Shire, which is located in north east Victoria, covering an area of 2,016 sq. km, with a population of approximately 15,000 people. Actual occurrence of fires, especially significant fires where the community as a whole is at risk, is, however, infrequent.

As with any community the Indigo Shire community is diverse and has some specific challenges in relation to being informed and prepared for bushfire events including high numbers of visitors during peak bushfire danger periods, proportionally higher numbers of older, frail residents, and a growing population, with people choosing to move into the Shire to live. The paper seeks to explore whether there are specific bushfire community education tools which are targeted to specific population groups which may be applied within the Indigo Shire.

Using a documentary research approach key data was collected to identify the specific characteristics of each of the selected population groups and to identify bushfire community education programs which are targeted to particular community sectors. It was important to explore how community education programs were delivered to the community and what were the preferred methods for each of the selected groups to receive information. In developing an approach to consider the relationship between the tool and the particular population group a matrix that could readily demonstrate the applicability of each type of tool to specific groups was utilised.

The research indicated that the more traditional methods of communication such as newspapers, printed information, radio and word of mouth are more successful in getting the intended message to the selected groups. Emergency response agencies are however increasingly using the internet as a method of communication. This potentially raises issues if other methods are not used in conjunction as key sections of the community are not engaged.

The research also indicated that most of the community education programs that are currently in use have more applicability to the general community than specific population groups who are vulnerable given certain circumstances. The apparent lack of

targeted programs for specific vulnerable groups highlights the need for emergency planners and responders to be aware of such shortcomings and take additional measures to ensure that such groups are supported. Some shortcomings include how newly arrived residents initially learn about the bushfire risk, what specific actions should be taken by short term visitors in bushfire events, and what particular risks are there for those who are more frail and rely on others to assist in emergencies.

The implication of these findings is that the generic bushfire community education programs are valuable for most of the community but there is a need for a variety of strategies to reach diverse audiences. More work is required to assist all sectors of the Indigo Shire community to be educated about and aware of the impact of bushfire events.

To obtain a copy of the full report please contact:

Sally McCarron
smccarron@indigoshire.vic.gov.au

What guidelines can be used to combine the emergency management, business continuity and security components within an organisation to give a unified approach to developing organisational resilience?

By Bill Shiel, submitted October 2008

This paper presents findings from research into aspects of organisational resilience and addresses the question of how to combine the activities of security, emergency management and business continuity into one autonomous entity to build organisational resilience.

My organisation, SA Water, presently has a well established emergency management program in place with well prepared EM plans and exercise schedules. Security plans are also in place and the business continuity program is in the final stages of implementation.

These programs are presently running as three independent entities. Our Security and Emergency Management Business Unit management team has concluded that they should be incorporated into one program to ensure a unified approach. The unification of these plans is referred to in the literature as Organisational Resilience.

I want to investigate this incorporation process to ensure that the integration of the programs is carried out in an efficient and effective manner. More importantly I wanted to research the trends and methods that have been used or recommended by others in order to build an efficient and effective

resilience program. It was my intention to create guidelines for building a resilient organisation. It is suggested that a united resilience program will be easier to oversee and manage and will also ensure that issues such as the incorporation of exercises from all three areas will occur, limiting the time that both Security and Emergency Management staff and Operational staff need to spend on exercising and testing the programs. This process is important to me because there is adequate evidence and data available to enable my organisation to establish a resilience program that should become the benchmark within South Australia, perhaps even within Australia.

To investigate the matter I followed two different research avenues. I conducted searches on the Internet and in text books related to the topic. I also investigated several Australian organisations that I believed had already built or were in the process of building an organisational resilience program. The paper concludes by suggesting what issues need to be addressed and what attributes need to be observed to ensure that a good organisational resilience program will be in place.

To obtain a copy of the full report please contact:

Bill Shiel
Security Manager
South Australian Water Corporation
Contact: (08) 7424 1499
bill.shiel@sawater.com.au

Local Government/Local Community Disaster Recovery. Improvisation or Preparedness?

Lewis Winter. CRMT, MRMIA, MAIES

In the paradigm of PPRR (Prevention, Preparation, Response and Recovery), response has always been the high profile area in disaster management attracting funding and media attention. However in recent years the critical importance of assisting communities cope with the aftermath of disaster and return to routine life and sustain a socially healthy condition is taken up in the area of disaster recovery.

The drive for pre-planning for a disaster recovery is fostered by peak agencies and academics of EM, presumably as a flow on from the response perspective. However, in many recent disasters, including study cases, where recovery has been initiated, there has been a total absence of preplanning, yet the recovery effort has been administered effectively. So the question posed would be "is preplanning for disaster recovery really necessary?" Can improvisation on the day suffice for good disaster recovery management? Could there be some valuable lessons learnt that will change the way we prepare and engage in disaster recovery?

Another issue that arises from this study is that if preplanning for disaster recovery is important enough to legislate responsibility to local governments, (WA, EM Act 2005), why is it not occurring in the majority

of local government, local community areas? Could the perceived enormity of developing useful pre-plans be beyond the capacity of many local communities? Could the improvisation formulae for recovery offer a more practical application for local communities?

This research addresses these questions by interviewing 6 Local Government Recovery Coordinators who have led disaster recovery at recent disasters in Western Australia. These disasters significantly affected their communities through fatalities and extensive damage to private and public assets.

The research provided excellent insight into the above questions with the benefit of hindsight of people directly involved in disaster recovery at the local community level.

The research explores how understanding a community and how it inter-relates develops a critical pathway that will further embrace community concentric processes into emergency management.

To obtain a copy of the full report please contact:

winteractive@bigpond.com.
Phone 0438 808 913

Critical success Factors for Primary Industry Emergency Preparedness

Meredith Jenner
Emergency Management Planning Officer

Although rare, primary industry emergencies, such as an outbreak of an animal, plant or aquatic animal disease or a pest incursion, have the potential to cause enormous economic and social disruption in Australia. Primary industries agencies, at both national and state/territory level, therefore have a responsibility to ensure that they develop and maintain preparedness to mitigate against and respond to primary industry emergencies.

This paper aims to identify, and validate through research, the critical success factors (CSFs) for achieving a high level of primary industry emergency preparedness. The research focuses on South Australia and further aims to identify the factors that enable or disable primary industry emergency preparedness in this state. It is intended that the findings then be used to drive strategy and practice improvements to enhance primary industry emergency preparedness in the future.

To obtain a copy of the full report please contact:

Emergency Management Coordination Unit
Primary Industries & Resources SA
Level 9, 101 Grenfell St, Adelaide SA 5000
GPO Box 1671, Adelaide SA 5001
Phone: +61 8 8204 9298
Mobile: 0428 112 598
Fax: +61 8 8463 3366
Email: jenner.meredith@saugov.sa.gov.au

Fatigue Management in the Emergency Management Context

By Suzanne Robinson

In this project fatigue management has been evaluated in the emergency management context, particularly in relation to New South Wales Department of Primary Industries (NSW DPI) emergency management activities.

Fatigue is a significant problem in emergencies, and particularly long time frame emergencies like animal and plant pest and disease emergencies. However, much of the fatigue management research has been undertaken in areas other than emergency management, so it is not well known how well this fits into the emergency management context. To investigate this issue, fatigue management policies were accessed directly from emergency agencies across Australia. In the absence of sufficient of these, the focus was broadened to include other related industries whose guidelines were accessed from the web. A content analysis was undertaken to review the documents. The research revealed that the complex interactions between fatigue issues are not well understood and that fatigue management has been developed in other fields and not tested for its appropriateness in the complex emergency management context.

This study showed that a flexible risk management approach, rather than prescriptive management approach, is most appropriate to the often complex, multi-agency, long time framed emergencies that NSW DPI manages. The scarcity of information in the emergency management context highlights the need for future studies in better determining interrelationships and interactions between fatigue factors and testing fatigue management systems in emergencies to evaluate their effectiveness in the emergency management context.

To obtain a copy of the full report please contact:

Suzanne Robinson
Manager General Emergencies Preparedness & Response, and Deputy NSW Drought Coordinator and Deputy NSW Locust Commissioner
Emergencies, Weeds & Pest Animals Branch
NSW Department of Primary Industries
Locked Bag 21, ORANGE NSW 2800
T: (02) 6391 3680, M: 0427 014 200,
F: (02) 6391 3740
email: suzanne.robinson@dpi.nsw.gov.au
website: www.dpi.nsw.gov.au